# CN1—2004

## 4 June 2004

2200—Flam crew arrives in the vicinity of where BL heard TC on two previous occasions while performing the flam roadside census on the N Cedar Mtn Road (census pt #3). We spread out in an approximately 200 m radius circle and attempt to elicit calling.

2207—SY arrives at position 100m W of cars on top of very small ridge, almost immediately, TC heard from SSW seemingly atop ridge directly to the S.

2214—From atop ridge directly S of road, SY hears TC continue in drainage approx. 250m S.

2220—Arriving at bottom of drainage SY hears 2 birds 1 very loud to the S with a distinct higher pitched note on the end of call. SY erroneously decides that this bird is not a flam. Original bird (CN\_1/CN\_2) is heard farther up slope to the N and farther W in a PIPO stand.

2224—SY songposts CN\_1/CN\_2 bird.

2240—Following KS’s request SY chases CN\_1/CN\_2 male to a tree upslope and N of KS’s songpost.

2320—JM hear’s C1 M give TC on the ridge SW of the cars.

2325—JM marks a general area song post for CN\_1 M up on the SW ridge.

2335—EP hears male calling from next drainage south of our parking area. EP marks CN\_1\_4 songpost in a large PIPO. Male returns to area four more times and giving incessant TCs, but moves quickly from tree to tree in a circle around EP until just after 2400.

## 11 June 2004

2215—JM hears M calling to SW of original starting point. EE follows to help.

2220—EE marks songpost on C1 M.

2243—EE marks general location of C1 M after M moves to SW following an encounter (both owls giving TECs) with purported C2 M.

2345—JM hears a male give TC to the west. She follows him over two ridges. He continued to call further West, but she was unable to pursue him to a tree.

## 18 June 2004

1540—EP finds CN\_1 nest in *POTR* about 45 feet off the ground in cavity facing SE. Female responded to tapping immediately and stayed at cavity for at least 10 minutes before we left vicinity. Tree located in aspen bottom where EP had marked songpost on 4 June 2004. Tree only 2 meters south of PIPO marked that evening as songpost number 4 for the CN\_1 male.

# CN1—2005

## 14 June 2005

2015—The Flam Crew arrives in the area of the CN1\_2004 nest to tap, peep, and enumerate *Potr* cavity trees in an attempt to find the CN1\_2005 nest.

2045-2120: We spread out along the *Potr* drainage in which the 2004 nest was located to listen for nesting vocalizations. Nothing heard.

2120—SY, MS, DF, and JMegler move S to the next *Potr* drainage (**SY/MS/DF entry**).

2120-2300: After leaving the lower and upper portions of the CN1\_2004 nest drainage, EE and BL move N to the *Potr* drainage along the Cedar Mtn Road to tap and listen. Nothing found.

# CN1—2006

# CN1—2007

## 8 June 2007

2110—BL arrives in CN1 territory to listen for nesting activity, have just left the CN2\_2007 nest.

2115—From my position approximately 75 m down drainage (W) from the CN1\_2004 nest, I hear a M giving LC on the N-facing slope to the S. I pursue, and hear F giving FSC from what seems to be the same general area as the M. At the time, I presume this is just the CN2 pair.

2121—After seeing/hearing a M giving LC above me on the S side of the *Potr* bottom, I watch a M fly to a *Potr* cavity and make a prey delivery to a F giving FSC inside. **This is the CN1\_2007 nest!** The nest is in a previously unenumerated/unflagged Potr, 26 cm dbh, and the nest cavity is ~ 7 m above the ground on the S side.

GPS Coordinates: (X) 480785; (Y): 4330240 +/- 5 m

2125—I leave for CN2 territory to retrieve the capture pole.

2140—I return.

2147—M makes a PD in the nest cavity—both M and F vocalize.

2202—Same.

2212—I capture the M after he makes a PD. **M is not banded—I give him band # 64579.**

82.0 g LWC: 134 mm

- 31.5 g LLP(#5): 97 mm

50.5 g LLP (#6): 103 mm

2220—I release M.

2224—I leave.

## 15 June 2007

2035—BL arrives at the CN1 nest to attempt capture of F. Mostly clear, slight breeze, approximately 20 C.

2038—Net raised.

2050—M calls off his roost approximately 50 m up the drainage (to E).

2053—F flushes the cavity, and escapes from the net as it is lowered.

2055—BL leaves for CN2 nest.

## 28 June 2007

2323—KB and EM arrive at the CN1 nest tree. F hears us and rises to cavity entrance. EM sets up net to attempt capture.

2326—F flushes. We peep and find 2 hatched eggs and one unhatched egg. One owlet is alert and responsive with eyes open, lacking an egg tooth, having grey juvenile plumage covering wings. The other owlet looks less developed, lacking any grey plumage. This smaller owlet was completely still with its head on the bottom of the cavity, eyes closed (could it be dead?)/

2330—we back away from nest and observe.

2333—M gives LCs and HECs at us. F responds with begs on the other side of the cavity, a few meters from the nest tree.

2339, 2340, 2341—Owl (unclear to whether it is M or F) approaches cavity and aborts cavity entrance.

2346—KB and EM leave site.

## 7 July 2007

2010—SY and Annie Whetzel arrive in CN1 territory to try to find the CN1\_2007 nest to attempt to capture the F. We fail to do all of the above and, thus, leave.

## 10 July 2007

2317—BL arrives at the CN1 nest.

2321—I see what later turns out to be the M perched in an adjacent *Psme* to the SE.

2325—M makes a PD in the nest cavity, giving a few LC as he approached, and I hear at least one owlet give begging calls as the transfer is made. Owlet(s) seem to be 14-17 days old, based on the sound of the vocalizations.

2327—Same. I leave.

## 13 July 2007

2029—EM and CB arrive at CN1 nest tree to try and capture M and F. 22C, cloudy, calm.

2030—CB has net in place to capture F.

2032-2039—Nestlings beg at cavity entrance. Cavity Ht. is 23 ft. 3 in, very unstable tree.

2040—we peep cavity, two nestlings that look like they will fledge within the next day or two. No F in cavity. M calls to W.

2044—M PD. Missed capture attempt. Nestlings raise to cavity entrance and beg.

2047— M PD. Missed capture attempt. Nestlings raise to cavity entrance and beg.

2049-- M PD.. Nestlings raise to cavity entrance and beg. **M caught.**

**M band# 64579 – We collect blood.** We hold on to M and attempt to capture F.

2103—F PD. Missed capture attempt.

2122—F PD. Missed capture attempt. (Nestlings still begging from cavity entrance)

2130—We release M.

2138—M in area flying around nest.

2150-2154—M and F around nest tree, each too skiddish to approach cavity.

2156—We leave site.

## 14 July 2007

2036—EM and SY arrive at CN1 nest tree to observe nestling activity and capture F. We peep and find 2 nestlings still in cavity.

2037—Nestling up in cavity.

2044—M calls to W.

2046—M makes PD.

2050— M makes PD.

2053-- M makes PD. SY sees him glean a moth from dead aspen W of cavity. He then gleans from an aspen S of the cavity.

2055— M makes PD.

2057— M makes PD. Missed capture attempt.

2059—M PD.

2100—F PD. Missed capture attempt. She then scolds several times at us. Nestling still up in cavity.

2104—M makes PD.

2105— M makes PD.

2107—F PD, missed capture attempt.

2108—M PD.

2112—M PD.

2115—F aborts an attempted PD.

2116—M PD.

2117—F aborts another PD.

2118—M makes a PD, F aborts another PD.

2119—M makes PD.

2130—M PD.

2132—M PD.

2138—M PD

2140—M PD.

2150—F PD, missed capture attempt.

2152—Unknown owl makes PD.

2153—We leave nest site.

## 16 July 2007

2049—BL arrives at the CN1 nest tree to attempt capture of F, and if possible, any fledglings. Clear, calm, ~ 24 C. As soon as I arrive, I hear a fledgling begging downstream from the nest.

2057—I locate one of the fledglings perched approximately 3 m above the ground in ~ 10 cm dbh *Pipu*, just above the creek, after the M (based on LC) delivers prey. The fledgling’s location was approximately 20 m W from the nest tree—it apparently fledged this evening before I arrived. **I proceed to band/bleed this fledgling** in the nest site, where I now hear another nestling begging from the cavity entrance.

Band #64595

83.5 g LP(#5): 69 mm

- 31.5 g LP(#6): 69 mm

52.0 g Rect: 27 mm

2120—I **complete the bleeding of the owlet** at this time. Over the past 10 min, the M has made 2-3 PD at the cavity entrance, where a nestling is begging loudly (he has been staying in the entrance, and at one time, he appeared to lurch out of the cavity—he’ll probably fledge tomorrow night).

2125-2150: I get into capture position at the nest, while holding on to the fledgling.

2200-2215: I set up the lure net, tethering the fledgling nearby, in attempt to capture the F. I then get in capture position at the nest tree (but no PDs are subsequently made).

2235—**I capture the M (band #64579) in the lure net**. I proceed to bleed him, mistakenly thinking he was not yet bled.

Band # 64579

81.5 g LP(#5): 102 mm

- 31.5 g LP(#6): 110 mm

50.0 g Rect: 67 mm

LWC: 136 mm

2253—I release the M.

2315—I break down the lure net, and release the fledgling near where I captured him early in the evening, and leave. **NOTE: F never seen nor heard. Only the M appeared to be tending both the nestling and the fledgling.**

## 17 July 2007

2002—KB and CB arrive at CN1 nest to attempt to observe fledging, capture Female and find third member of the brood.. Cloudy still 15C.

2025—The second nestling fledges, dropping roughly 3m to South of nest.

2036— Fledgling bled.

Band # 64571

76.0 g LP(#5): 63 mm

- 27.5 g LP(#6): 63 mm

48.5 g Rect: 25 mm

LWC: 88 mm

2107— Lure net set up with #**64571** to bring in adults.

2117— Fledgling # 64595 caught 20m West of cavity tree, identified by begging. It is dried and placed in an adjacent tree 20m to the North.

2120— Male caught and released.

2120-2320—We listen for third member of the brood who potentially fledged. Nothing is seen or heard. Also during this time no sign or sound of the female is observed.

2320— We leave.

# CN1—2008

## 5 June 2008

2025—SC and BL arrive on the ridge between CN1 and CN2 territories to set up lure net and listen for nesting activity. Rain showers most of day, but sky is now clearly and winds are calm. Temp approximately 9 C.

2058—We start playback.

2102—M flies into area giving TC—he appeared to arrive from the SE. M flies back and forth over the top of the net several times before we capture him.

2104—Capture M in the 2nd shelf from the top.

2107—Another M approaches the net, giving TC—this M appears to approach nest from the direction of CN1

2108—M is removed from net—**M was not banded**. We move ~ 50 m from net to process M.

2112—We hear 2nd male fly into net, and we proceed to extricate him from the top shelf of the net. **This M is banded—Band # 64599; he is he CN1\_2007 M**. We decide to process this male first.

**Band # 64579**

69.0 g LWC: 132 mm

- 15.0 g LLP(5): 95 mm

54.0 g LLP(6): 105 mm

Rect: 62 mm

Male was bled in 2007.

2127—We release M #64579.

2128—We proceed with processing the unbanded M that was 1st captured.

Band # 64632

69.5 g LWC: 130 mm

- 15.0 g LLP(5): 96 mm

54.5 g LLP(6): 104 mm

Rect: 62 mm

Male was bled.

2153—We release M # 64632.

2159—We check the nets, and discover we have captured another FLOW—probably a M, and he was not banded. M captured in 2nd shelf from top.

Band # 64633

69.5 g LWC: 134 mm

- 15.5 g LLP(5): 96 mm

54.0 g LLP(6): 110 mm

Rect: 66 mm

Male was bled.

2227—We release presumed M #64633.

2230—After checking the nets, we leave to tap cavity trees and listen for nesting behaviors in the CN2 drainage bottom. SC then stays to listen in the vicinity of the CN2\_2007 nest tree while BL leaves to check cavity trees in the CN1 drainage bottom. Nothing seen or heard (CN1\_2007 nest tree has fallen).

2255—SC hears M calling in vicinity of lure net, and leaves the CN2 bottom area to check nets.

2257—SC finds FLOW in net, 2nd shelf from bottom. This owl was not banded, and appeared to have a relatively well-defined incubation patch—probably a F.

Band # 64634

88.0 g

- 29.5 g

58.5 g

We forego measurements and bleeding.

2324—We release probable F, and proceed to break down lure net and leave.

## 13 June 2008

1605—Flam crew arrives in CN1 territory to peep/tap and initiate nest search.

1729—KB peeps a newly enumerated tree, CN1\_772, and finds a female flam in the cavity. **CN1\_772 is the CN1 2008 nest tree.** This tree is about 1 m SE of the CN1\_\_2007 nest tree. The cavity, approx 35 feet off the ground, faces to the north.

1733—BL receives a text message on his cell phone.

1738—Flam crew leaves CN1 and enters CN2 to peep.

2043—BL arrives at the CN1 nest to attempt capture of F and peep contents of nest. Clear, calm, approximately 15 C.

2045—I raise the capture net and female immediately flushes into the net, but she escapes through a hole in the bottom of the bag as the net is lowered**. NOTE: Height of capture pole was 30’ 8”.**

2046—I hear M give LC from his roost in the stand of conifers ~ 30 m upstream. M and F exchange LC and FSC in close proximity of each other over the next few minutes within 30 m of nest in dominant live *Pipo’s* to the N. **I peep cavity and find 2 eggs touching in the center of the cavity.**

2103—I finish repairing hole in net, and get in capture position at ~ 2130.

2150—I capture CN1 M after he delivers prey to F in nest. M is previously banded—Band # 64579; this is the CN1\_2007 M, and the same M we captured in the lure net during our last visit.

78.5 g

- 29.5 g

49.0 g

2100—I release M and leave.

**19 June 2008**

2012—BL arrives at the CN1 nest to attempt capture of F. PC, calm, 18 C.

2025—F rises to entrance as a pair of BTHU chase a red squirrel down the trunk of an adjacent *Potr*, down past the FLOW nest tree, and up the trunk of a *Pipo* approximately 15 m to the E. Female FLOW intently watches the whole event, and when the chasers/chased leave her field of view, she continues to peer down the trunk at the ground, apparently to watch for the possibility of squirrel racing up the nest tree.

2035—F finally descends in the cavity.

2046—I get into capture position, and raise the net over the cavity at this time. F immediately rises to the entrance but does not flush.

2048—M calls off his roost, ~ 60 m up the drainage.

2050—F flushes into net.

2054—I remove F from net—she is unbanded.

**Band #: 64642**

105.0 g

- 31.0 g

74.0 g No bleeding or measurements taken.

2059—I release F.

2102—I leave area.

## 10 July 2008

2140—BL arrives at CN1 nest to attempt bleeding of F.

2152—With nothing seen or heard since I arrived, **I attempt to peep cavity and F flushes as peeper reaches cavity entrance. Peeping reveals 2 owlets in white down, one of which has just a hint of juvenile plumage developing on wings, and this particular owlet’s eyes are wide open. I estimate the owlets’ ages at 5-6 days and 3-4 days.**

2158—F returns to cavity.

2159—M arrives in nest area giving LC. I get in capture position, but M exits nest area.

2232—M returns to nest area giving LC, and I lower net.

2234—M delivers prey in cavity.

2238—I leave. F has not left the nest cavity since she returned at 2158.

## 22 July 2008

2242—Flam Crew arrives at the CN1 nest to peep: 2 nestlings are present – very well developed – facial discs visible, all in dark gray juvenile plumage. We leave.

# CN1—2009

## 28 May 2009

2035—BL and SR arrive on ridge between CN\_1 and CN\_2 territories and set up lure net. Weather: ~30% cloud cover, calm, 8C. GPS: X=480711, Y=4330186, +/- 5 m.

2103—Playback started.

2106—TC from the W.

2107—TC move to the N and sounds closer. Possibly CN\_1 M.

2108—TC stops abruptly and BL leaves to checks net.

2130—BL leaves to tap cavities in the bottom of the CN1 drainage.

2145—TC close from the N briefly. Becomes fainter within a couple minutes.

2156—BL taps on the CN1\_2008 nest tree (**CN1\_772)** and F rises to the entrance—**this is the CN1\_2009 nest tree!** Nest cavity, which appears to be the same as last year, is approximately 13 m high and faces N—it is ~ 20 cm below a ~ 1-1.5 m area of no bark on the trunk, and is the upper of 2 cavities in this area. F stares down at me a couple of minutes before descending in the cavity.

2209—M arrives in nest area giving LC (F gives a few faint FSC in response), and M makes PD in nest cavity. M stays in cavity 2-3 min, giving 4-note LC, before flushing.

2206—Back at the lure net, Faint LC from the N.

2215—BL moves into the CN2 drainage.

2222—TC from the N.

2241—FLOW snagged in net, W facing side, 3rd shelf from bottom. No TC beforehand.

2249—FLOW freed from net.

**Band # 64632 This bird is the CN\_2\_2008 M, that SC and BL captured/banded in the lure net last year.**

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83.5 g LWC: 130 mm

- 29.5 g LLP(5): 95 mm

54.0 g LLP(6): 103 mm

Rect: 59 mm

2317—FLOW released.

2343—We leave to listen in creek bottom in CN\_2 territory S of lure net.

2355—We hear LC and FSC and find M and F in same tree on opposite slope of creek bottom. **M and F copulate**. F probably not incubating, still finishing clutch. We see band on M but not F.

2430—We leave.

## 4 June 2009

2028—LT, SC and BL arrive CN1 nest area to capture female. Female is down.

2029—M calls off roost.

2038—Capture pole is in position. F comes up.

2039—F flushes and is caught. **She is a previously banded FLOW—Band #64642**. **This is the CN1 2008 F.** We mass her, but still need to get blood and measurements on a subsequent visit.

95.0g

20.5g

74.5g

While we have her, M LC and F begs.

2045—Bird released.

2046—We finish peeping. **There are 3 eggs center touching**. We leave nest area to set up lure net on ridge between CN1 and CN2 in hopes of catching the CN1 M.

2126—We set up lure net ~100m east of lure net from last week on the ridge between CN1 and CN2 territories. We start playback and this time.

2127—We hear M TCs from just north of the lure net.

2129—Bird caught.

2131—Bird out of net—it is previously banded; band # 64632. This is the CN2 2008 M. Refer to CN2 notes for 6/4/09.

## 11 June 2009

2205—SC and BL arrive at the CN1\_2009 nest to attempt capture of M. SC immediately proceeds to get the capture net in position, as the M is giving TC and LC from a group of conifers 20 m to the SE.

2248—BL takes the capture pole. M attemps prey delivery but aborts. SC gives light too soon. M actually landed in the cavity entrance on 8 occasions over the next hour and 10 minutes (generally 10-20 min between occasions), but apparently never actually made any PDs, and also made several additional fly-by flights. Twice M flies in nest area and gives TC’s, then flies off to the SE. F gave FSC on several of his approaches in the first ~ 45 min, but remained mostly quiet thereafter.

2357—We lower capture net and leave the area.

Listening effort on N end of CN1:

2320—QB and SR arrive to listen in drainage which runs along road to the N of CN1. We listen, tap cavity trees, and give calls, but hear nothing.

## 18 June 2009

2135—SY and SC arrive at the CN1 nest to attempt to capture the M. F is in entrance when we arrive. Light rain beginning to fall.

2140—M makes aborted PD – gives LCs. F gives FSCs.

2202—After waiting out brief rain, SC has net in capture position.

2219—PD, capture attempt.

2245—Aborted PD.

2340—We bring down net and leave.

## 30 June 2009

2104—Arrive CN1 nest to evaluate whether we can double capture M and F.

On arrival, Bird gives 2 PD’s. F is off cavity and appears to be giving PD’s.

2106—**We peep. There are 3 nestlings. All have grey feathers and eyes open. The runt looks similar to runt at A2 and the other two are a little older. No facial discs.**

2108—F gives PD then M gives PD. Nestlings are begging.

2109—Bird gives PD.

2111—Bird gives PD. Capture pole is in position. BR on capture. Pole is 30 ft even.

2113—M aborts PD.

2119—F begs from nearby tree.

2120—F gives PD.

2128—M gives PD. We get net around him but he doesn’t drop into the bag. He flies away. F aborts PD.

2130—F gives PD. We get net around her, but bag is turned inside out. She escapes. We lower net to check it.

2131—M aborts PD and gives TECs.

2134—We catch F on PD. She still has prey in her mouth.

**Band # 64642** This bird is the CN\_1\_2008 F. We mass her and take blood, but do not get measurements for the sake of time. KB on bleeding.

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77.5 g Right wing bled. Large hematoma.

- 20.0 g

57.5 g

2138—M PD. Capture pole back up. BR on net.

2139—M PD.

2146—M PD.

2150—M PD.

2151—While we have the F in hand, we hear M TC’s and possibly another F begging.

2154—F released.

2154—Catch M on PD.

**Band # 64579** **This bird is the CN\_1\_2007 M**. LP5 is broken. He has low mass, so we double mass him.

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66.5 g LWC: 133 mm

- 20.5 g LLP(5): 99 mm

45.5 g LLP(6): 108 mm

Rect: 65 mm

2209—Release M. We leave to lure net on Ridge NW of the CN1 nest.

2257—BR, SC, and KB set up lure net and start playback on Ridge NW of CN1 nest.

2259—M TC’s around net. Bird comes from the north.

2204—We hear two birds. Higher pitched call to the south.

2308—Net checked. Net empty. Bird to the south goes quiet.

2310—Bird around the net stops calling and leaves net area.

2312—M call around net.

2314—M stops calling.

2316—Net checked. Net empty.

2325—Stop playback, collapse net and leave.

## 10 July 2009

1650—DH, QB, and KB approach the CN1 nest tree to peep and check the status of the owlets.

1651—We peep and find the cavity empty.

1653—We leave. Owlets likely all fledged already.

# CN1—2010

## 28 May 2010

2030—BL, KB, JV & DW arrive on the ridge between CN1 and CN2 and begin to set up the lure net. We will attempt to capture on the ridge and listen for nesting vocalizations in the drainages in CN1 and CN2.

Mild windy, clear, 19C

Mature Psme/Pipo

X: 480689

Y: 4330134 +/- 3 m

2053—JV begins the playback.

2054—MP3 player not charged and battery dies. BL goes to get another player

2057—DW taps CN2\_2009 nest tree and nothing happens. DW stays to listen in CN2.

2113—JV and KB begin to tap trees and listen in CN1. CN1\_2009 nest tree is down.

2120—JV and KB start to listen for calls in CN1 drainage.

~2120—DW hears 4-5 TCs down drainage from CN2 2009 nest tree.

2122—KB hears FSCs to the south in the drainage, south of CN1\_2009 nest tree.

2131—JV hears M LCs and TCs from up on the eastern ridge of CN1, JV and KB see the M fly over, heading north, up drainage. KB heads that way to listen.

2146—BL starts playback and M TECs are heard from close to the net.

2156—Bat captured in lure net, released by BL.

2200—KB hears a M giving both TCs/LCs just up drainage of the old nest tree. Soon both the M and F are spotted, giving LCs, FSCs, and occasional TCs at KB. They begin moving up and down the drainage, interacting with calls. KB and JV follow them for the rest of the night.

~2205—**Unbanded M. caught in lure net.** TCs prior to capture. Second shelf, W. side.

~2213—Bird extricated from net, measured and bled by BL and DW. **Banded with 1593-64759.**

Band # 64759:

54. 0 g LWC: 131 mm

LLP5: 100 mm

LLP6: 108 mm

Rect: 59 mm

2241—Bird released, strong flight.

2247—New unbanded bird captured and extricated from net. No vocalizations prior to capture. First shelf, S. side. Sex unknown, decide for expedited release after measurements. Banded with 1593-64760.

2249—M is observed giving a PD to the F in a potr, near the cavity tree CN1\_777.

2251—Another PD in the same tree. After this PD they go silent.

2259—KB and JV hear both the M and F after a brief lull.

2259—Unknown sex bird released by DW and BL.

2302—Playback stops, net taken down.

2326—We leave the territory.

## 11 June 2010

2039—JV & SY arrive at CN1\_2009 nest tree at the east end of the CN1 drainage and hear M call off roost

Weather: cloudy with no wind

14C

2045—M moves from west to east (up drainage) giving LCs

2050—JV hears 2 LCs in a small potr stand—we sit to silhouette the trees and listen

2107—Hear TCs to the west northwest

2114—SY moves west down drainage to listen

2116—**SY finds CN1\_2010 nest tree – F rises to entrance as I approach. CN1\_777 is the 2010 nest tree. Cavity is less than 20ft up and cavity faces south southwest.**

Cavity is S facing ~15 ft. up a live (?) potr. Tree is located in main CN1 drainage bottom just at the base of the ridge bounding drainage to the S. Site is fairly dense with several large live pipus. Tree is ~150-200m upstream of the 2009 nest.

2119—M gives LC from the southwest.

2126—M makes PD.

2130—SY puts up the capture net.

2133—F flushes and we back away.

2134—F goes back on.

2153—SY puts the net back up.

~2206—M comes in giving TECs at SY and F gives FSCs.

2212—M leaves.

2242—Weather begins to worsen and SY takes down the net.

2244—M gives TCs but we leave due to weather.

## 18 June 2010

2036—DW and SY arrive at the CN1 nest to attempt to capture the F.

Weather: 18C, calm, mostly clear

2040—M calls off roost to the S.

2043—Net in position, F flushes and is captured.

2044—F out of the net.

She is previously unbanded, **New** **Band # 1593-64746**

2047—Release – strong flight W. M is giving TCs to the SW. We leave and head to CN2.

## 29 June 2010

2218—SY and JV arrive at the CN1 2010 nest tree to attempt capture of M. The F is up at the cavity entrance.

2222—F is still up at the entrance and M comes in silently to make a PD.

2227—After 2 PD abortions, M makes a PD to the F in the cavity.

2228—SY tries to move toward the nest tree and F comes up to the entrance.

2233—F is down, SY tries to walk to the nest tree but F comes up to the entrance once again, so we back away from the cavity.

2237—M starts giving TCs just northwest of the nest tree and moves to give TCs at us 30 or 40 meters away from the nest tree.

Weather: 14C, clear and calm

2243—M goes quiet.

2246—We walk back to the nest tree and the F is up at the entrance.

~2250—F flushes apparently on her own. M comes in giving LCs and makes a PD while she is still off of the cavity.

\*Note: There is a probable UFO in the nest site ~2250. A silent bird flies overhead and then the territorial M gives HECs and TECs in flight moving south to north across drainage.

2254—F goes back onto the cavity.

2255—M makes a PD.

2259—SY gets the net up to a good height and the F flushes.

2301—F goes back on the cavity but doesn’t enter and leaves again.

2303—F goes back on.

2305—SY gets the net back up.

2311—CN1 male is caught in the net bag. **M is previously banded with Band # 64579—this is the CN1\_2007 M.**

**Band # 1593-64579 (on left leg)**

85.0 g

- 29.5 g

55.5 g

Fixed M with radio telemetry tag # 164.902.

2335—Release him and he flies away with a strong flight. We watch him for 7 minutes and he pulls himself over backwards twice but then makes a few short flights and appears to be fine so we leave.

## 5 July 2010

2028—JG and SY begin searching for CN1 M’s roost.

2100—It’s apparent that the M has left his roost and is actively foraging. We stop tracking and leave.

**Note:** The M’s roost was somewhere on the ridge that runs between CN1 and CN2 ~200m W of the nest site – we did not get close enough to fix a G.A. post. When the M began moving he moved E along the ridgetop – again we did not get close enough for a G.A. post but the M was approximately parallel with the CN2 nest site on the R top. At ~2255 the M seemed to be in the general vicinity of the nest site – possible PD? As we shut down the tracking equipment, the M seemed to be on the W end of the ridge that runs along the N side of the CN1 drainage.

Radio is tracking best on 164.9016 or .9017.

## 6 July 2010

1515—SY and JG arrive in CN1 to attempt to find the male’s roost using radiotelemetry.

1606—We find **the male’s roost and mark it as CN1\_1**. He is located in a live Psme facing SE right next to the trunk. The tree is about 5 m SW of the nest tree and located in the bottom of a moderately burned drainage.

Species: Psme

DBH: 26.5

X: 480847

Y: 4330231

+/-: 8 m

1617—SY taps the nest tree and the F rises to the cavity entrance.

1618—F backs down, we leave.

2053—SY, JG, and JV arrive in CN1 territory to radiotrack the CN1 M and observe the nest.

2055—JV arrives at CN1 nest tree to peep and observe the nest while JG and SY radio track the M.

2056—JG goes off to radio track the CN1 M.

2057—JV taps the nest tree and the F does not come to the entrance. JV peeps the nest and there are two nestlings that have their eyes open. They still have a significant amount of white natal down but there is some gray coming in on their heads and wings. The F is not in the nest cavity.

2058—JV backs away to observe the nest.

2059—SY marks CN1\_2 as a singing post.

Species: live Pipo

DBH: 28.5

X: 480912

Y: 4330243

+/-: 5 m

2100—F comes into the nest site giving FSCs. M comes into the nest site in a direct flight for radio track post CN1\_3.

2101—M makes a PD of a moth to the F off of the cavity.

2102—SY marks **CN1\_3** as a singing post.

X: 480925

Y: 4330255

+/- 6m

Live psme, dbh: 51.5cm. Perched ~30ft up singing.

2103—F makes a PD to the nestlings and leaves the cavity making FSCs.

2104—M makes PD to the nestlings.

2105—M goes quiet.

2112—M comes into the nest site straight from down drainage and makes a PD to the F off cavity.

2113—M aborts a PD.

2115—PD to nestlings. Unsure if it is M or F.

2116—PD to nestlings. Unsure if it is M or F.

2117—M comes into the nest site.

2118—M makes a PD of a moth to the nestlings.

2123—M makes a PD to the nestlings and then goes off to the east.

2131—M comes in from the west giving LCs.

2132—F comes in from the east giving FSCs and LCs.

2133—F makes a PD to the nestlings.

2134—M stays around the nest tree apparently eating.

2137—M leaves the nest site.

2146—F comes into the nest site.

2147—F makes a PD to the nestlings.

2153—SY marks **CN1\_4** as a possible forage.

X: 480672

Y: 4330247

+/- 5m

M perched ~25ft. up on N side of tree – lost sight of him before departure.

2200—JV leaves the nest site to go radio track. JG comes into the nest site to observe.

2217—SY mark\s general area post **CN1\_5**

X: 480670

Y: 4330135

+/- 4m

Mostly pipo on ridgetop. M flies towards nest site.

M comes into the nest area, gives LC from full snag Potr, live Psme (roost tree), and another live Psme.

2223—M PD to nestlings.

2230—SY marks post **CN1\_6** as behavior unknown

X: 480844

Y: 4330276

+/- 6m

Live pipo, dbh: 52.5, ~12m N of nest. Perched in tree for 1-2 min.

2240—SY marks **CN1\_7** as a general area w/I 15m

X: 480796

Y: 4330322

+/- 5m

Sm. to med. pipo on S facing slope.

2246—F PD to nestlings following begging from nestlings.

2249—JV posts **CN1\_8 general area as a probable forage**. 1 of 2 live pipos about 3 m from each other.

X: 480726

Y: 4330317

+/- 5m

2250—SY marks **CN1\_9** as a forage.

X: 480739

Y: 4330302

+/- 5m

Wing flaps heard – forage. Probable direct flight from CN1\_8. Live pipo, dbh: 41.5

2253—We stop tracking having acquired 8 fixes on the M this evening (in addition to the roost found during the afternoon). M generally was active in close proximity to the drainage, used low slopes on both sides of the creek as well as pine stands in main drainage bottom and dry side drainages. Mainly was located W of the nest but occasionally used areas E of nest (especially early in night). See Telemetry Data File for details on specific posts.

## 12 July 2010

2030—BG, SY, JG and JV arrive in CN1 to search for M’s roost, attempt to capture F and to radio track M.

2044—SY locates M’s roost to within 5m when he sees M departing the area to the S. The M was on the ridgetop w/I 5m of the fix. Likely in a group of sm. Psme.

CN1\_1 – General Area roost w/i 5m

X: 480896

Y:4330182 +/-4m

2048—As SY is walking back to the nest, he spots M perched ~2m up a live psme. Use radio receiver to confirm that this is the CN1 M. M is perched below crown on a small dead limb looking at ground to the N. The m makes a ground forage ~3m from tree to the N on the slope. Immediately flies to CN1\_3, then the nest.

CN1\_2 – Ground forage.

X: 480888

Y: 4330229 +/-5m

2049—M perches in psme after ground forage. This is CN1\_3. M then flies directly to nest.

CN1\_3 – Perch.

X: 480881

Y: 4330240 +/- 8m

2053—M goes to psme after PD. This is CN1\_4. M gives TCs, then makes ground forage about 2m upslope from tree.

CN1\_4 – Ground Forage.

X: 480883

Y: 4330228 +/- 9m

2054—M perches in psme directly after ground forage, about 3m up in tree. This is CN1\_5.

CN1\_5 – Perch.

X: 480893

Y:4330233 +/- 10m

2338—BG and SY begin radio tracking CN1 M.

2400—SY marks CN1\_6 as a General Area fix w/i 15m.

CN1 M was apparently silent – CN2 M can be heard giving TCs ~75m SW in the CN2 drainage. NOTE: CN1 M was just barely on the S side of the ridgetop dividing CN1 and CN2.

X: 480990

Y: 4330140 +/-5m

We stop tracking and leave.

2044—JV and JG arrive at the CN1\_2010 nest in an attempt to capture the F and the F is up at the entrance of the cavity.

Weather: clear, calm, 16C

2053—JV has net set up.

2054—JG taps the nest tree and a nestling flies/falls out of the cavity in the capture bag.

2056—Have the nestling out of the net and SY leaves to go get climbing hooks.

2113—M makes a PD to the nest.

2134—M comes into the nest site giving TECs.

2136—M makes a PD to the nest.

2145—F makes PD to the nest.

2150—M and F come into the nest site. F is giving FSCs and M giving TECs.

2151—F makes PD to the nest.

2153—F and M are still both in the nest site as an UFO is sighted.

2155—F aborts PD.

2156—F makes a PD to the nest.

2157—M aborts PD. As this is happening the UFO is flying around the nest tree and the CN1 M does not seem to be very aggressive with the new bird. The UFO lands in the same tree at the M and is about 3ft away from him and the M does not act at all aggressive towards him.

2209—Nestling is banded.

Band # 1593-64744 (on left leg)

LLP(5): 41 mm (21 mm in shaft)

Mass: 45.0 g LLP(6): 41 mm (23 mm in shaft)

2210—SY returns with the climbing hooks.

2213—SY begins climbing the nest tree.

2215—The 2nd nestling in the cavity jumps out of the tree.

2217—SY has both nestlings back in the cavity.

\*Note: During the time that we have the nestling out of the cavity we feed it 8 moths.

2221—SY is down from the tree.

2230—We leave.

## 14 July 2010

1650—SY, DW, JV and BG arrive at CN1 nest to process nestlings. JG and JSG attempt to find CN1 M roost.

1651—JSG and JG begin radiotracking the CN1 male to find his roost.

Weather: Calm, cloudy, ~17 C

1652—Net up to capture F. After ladder goes up we determine F is not on cavity.

~1700—Cavity enlargement begins.

1716—Nestlings out of cavity.

Owlet

52.5 g

P#5: 48 mm (19 in shaft)

P#6: 53 mm (20 in shaft)

Rect: 19 mm (10 in shaft)

Band#: 1593-64744

Notes: Very active, jumping, running, flapping.

Owlet

45.2 g

P#5: 46 mm (23 in shaft)

P#6: 45 mm (23 in shaft)

Rect: 18 mm (8 in shaft)

Band#: 1593-64755

Notes:

1734—After searching the suspected roost tree for approximately 25 minutes, we find the male’s roost. **CN1\_1**

X:480844

Y: 4330191

+/-: 6m

Fully Live Pipo, DBH: 31.0. This tree is approximately 50 m up slope from the nest tree on the N-facing slope in CN1. The male is perched on a live branch directly next to the trunk of the tree about 35 feet high and ~E-facing. The tree is situated in a moderately burned area within mixed-age Pipo/Psme and ~mid-slope.

1738—Owlets back in cavity after banding and bleeding.

1740—We leave.

# CN1—2011

## 3 June 2011

2105—After setting up lure net on ridgetop between CN1 and CN2, SY begins tapping and listening in CN1 drainage. AW begins tapping and listening in CN2 drainage.

2112—Playback started. PS remains at lure net.

2120-2138—SY taps on and observes the CN1\_2010 nest – no activity.

2155—SY returns to ridgetop to assist with net, no activity heard in CN1 drainage.

2127-2225—TECs and HECs heard from all directions around net. M seemed to be favoring the CN2 side of ridgetop.

2145—Possible 2nd M heard. Goes quiet within 1 minute.

2146—AW hears 1 TC in CN2 drainage SE direction on slope.

2205—AW returns to net.

2214—M Great Horned Owl approaches net. F Great Horned Owl responds shortly thereafter.

2225—M FLOW caught in 2nd shelf as it moved from SW direction moving NW.

2229—AW and SY hear Tcs from W of net down ridgeline.

2242—PS releases bird strong ascending flight towards CN2 territory.

2255—TCs and TECs heard at net again most likely from M that was just banded.

2300—Playback stopped, break down net and leave territory.

**Band # 1593-64854 (on left leg)**

71.0 g LWC: 133 mm

- 15.0 g LLP(5): 96 mm

56.0 g LLP(6): 103 mm

Rect: 64 mm

Vegetation: Doug Fir and Ponderosa Pine Forest

Weather: Calm wind, Clear sky, Temp: 5C

X: 480703

Y: 4330149

+/- 5m

## 10 June 2011

~1600—Begin peeping in CN1, looking for 2011 nest.

1655—**BG peeps CN1\_771 and finds F incubating! This is CN1\_2011 nest.** **Cavity height is 20’1’’,** NOFL cavity facing due West. F looks up at peeper camera but does not flush, looks unconcerned even when BG takes short video with fajita/flora (new peeper #4). Nest tree is 20m NW of CN1\_2009, 08 nest tree, just before major conifer patch in CN1 drainage.

~1740—Leave CN1 territory and go over ridge to help with peeping CN2 cavity trees.

2110—SY, BG, and AW arrive at CN1\_2011 nest attempting to capture M. BG raises the capture net. Cavity height=21’1”.

2124—F returns to nest. BG sees bird in nest area. No vocalizations were made.

2126—M flies into nest area and gives TCs from SW of nest.

2132—M gives LCs then perches on potr approximately 2-3 m E of cavity.

2133—M leaves perch.

2135—M makes PD.

2137—M gives TCs from SE of nest.

2138—M perches on same potr for approximately 1 minute and gives a few LCs.

2139—M flies to psme N of nest and perches.

2140—M returns to potr, then makes a PD.

2142—M returns to potr then flies to cavity tree and perches about 3 m above the nest cavity.

No PD is made.

2144—M gives TCs from E-SE of nest.

2145—A 2nd M flies into the nest area and perches in a psme N of nest. No vocalizations are

made by the 2nd M.

2146—M gives TC/TECs from SE of nest for approximately 1 minute.

2150—BG lowers the capture net. AW, BG, and SY leave nest area to attempt lure netting.

2212—AW, BG, and SY set up a lure net on a low slope approximately 75 m N of CN1\_2011

nest. We forget the playback, so BG and AW give TC/TECs while SY runs back to the

vehicle to grab the playback.

2232—Playback begins.

Vegatation: Mixed aged psme/pipo.

Weather: Calm, clear, 16C.

X: 0480768

Y: 4330300

+/- 7m

2239—BG and SY hear a few responses in the vicinity of the net. BG and SY leave for the

CN1\_2011 nest attempting to capture M during a PD. AW stays at lure net.

2246—BG and SY at CN1 nest, SY has net up to attempt capture of M.

2250—AW hears TCs from S of net. Simultaneously BG and SY hear begs from nest tree.

2253—A 2nd M comes into lure net area from the N-NE and gives TCs. First M moves in closer

and gives TC/TECs from about 25 m S of net.

2255—Both Ms are less than 25 m from net. Both Ms give TC/TECs.

2259—AW stops hearing 2nd M. M gives regular TC/TECs from approximately 5-10 m

from net.

2300—BG and SY are hearing nothing at nest tree but hear faint TCs from direction of net,

abandon nest capture effort and return to net to assist AW.

2301—AW stops hearing M vocalize.

2302—Capture time. M is caught in 3rd shelve on the W side of net. We do not take any wing

measurements (see 03 June 2011 entry for measurements). BG bleeds M.

**Band # 1593-64854 (on left leg)**

74.0 g

- 16.0 g

58.0 g

2323—M is released with a slight dip in followed by strong, ascending flight to the W.

## 17 June 2011

2055—SY, AW, and BG arrive at CN1\_2011 nest attempting to capture either the M or the F at the nest. Weather: 12C, mostly clear, less than 5 mph wind.

2059—BG raises the net into capture position. F flushes out and escapes through hole in capture net. **AW peeps nest and finds 3 eggs touching in the center.**

2120—After F doesn’t return from flush within 20 minutes, we back off.

2138—BG raises the net into capture position. M gives TCs in vicinity of nest.

2144—M flies into a small potr about 3m W of nest and perches for approximately a minute and a half. M gives a few LCs and then takes off.

2146—M gives TCs approximately 30m SW of nest.

2150—M flies into same potr and perches for approximately 2 minutes before taking off.

2152—BG takes down capture net.

2213—AW, SY, and BG start playback on the ridge between CN1 and CN3. While setting up,

we hear a M giving TCs approximately 30m NE of the lure net. M comes in to the

vicinity of the net as soon as playback starts.

Weather: Calm, clear, 14C.

Vegetation: Mature psme/pipo with scattered young trees.

X: 480695

Y: 4330455

+/- 3m

2224—CN1 M starts responding to the playback.

2225—Both Ms give TECs.

2226—CN3 M retreats from net area to the NE. **CN1 M is caught in the 3rd shelve and flew in from the E. *\*Note—SY watches CN1 M leave a psme and fly into the net.* We do not take any measurements because the CN1 M was captured the prior week on 10 June 2011.**

**Band # 1593-64854 (on left leg)**

93.0 g

- 33.5 g

59.5 g

Molt notes: P1-P8 fluoresce very strongly. P9 has fluoresces moderately. P10 has light fluorescence. Secondaries have strong and consistent fluorescence. *\*Note—Very little fluorescence at the base of the rectrices. Wings display symmetrical fluorescence.*

2239—M is released with strong flight to the SE.

2243—We hear the CN3 M approach the lure net and retreat to the NE.

2300—End playback.

## 24 June 2011

2041—BG, AW, and EE arrive at CN1\_2011 nest area to attempt to capture F.

2043—AW has capture net up, F comes up to cavity entrance.

2045—F flushes into capture net. She is unbanded. We attempt to weigh F but she maxes out

100.0 g scale with a 33.0 g bag. This means she weighs over 67.0 g.

**BG bands with #1593-64831** (left leg).

2050—Release F, strong flight to W (down drainage).

2053—**We peep, 3 eggs center and touching.**

2055—We leave to lure net for CN3 M.

2112—As AW, EE, and BG are setting up the lure net on a spur off of the ridge between CN1

and CN3, we hear a M giving TCs to the W.

2119—Silent bird flies into vicinity of the lure net and perches in small psme.

2123—Silent bird flies into vicinity of lure net and perches while a territorial M is giving TCs

further down the spur to the W.

2126—AW, BG, and EE start playback on a spur off the ridge between CN1 and CN3. Net is

positioned on the top of the ridge. Territorial M continues to give TCs.

Vegetation: Mixed aged psme/pipo, minimal ground cover.

Weather: Calm, clear, 16C.

X: 480875

Y: 4330528

+/- 8m

2136—M is captured. M is previously banded and is a CN2 floater from 2008. He flew in from

the N and was caught in the 2nd shelve from the bottom. We believe this to be the CN3

M. BG bleeds left wing for smear.

**Band # 1593-64633**

94.5 g LWC: 135 mm

- 33.5 g LLP(5): 94 mm

61.0 g LLP(6): 103 mm

Rect: 66 mm

2136—We catch bat, after freeing him from lure net he flies into other side of net. We release again.

2205—M is released, strong flight to the NE.

2211—We stop playback and break down net. AW, BG, and EE leave to walk down into the CN3 drainage to listen for nesting vocalizations.

2255—We leave, having heard and seen no signs of flams.

## 8 July 2011

1555—JG arrives at the CN1\_2011 nest to peep and assess the status of the nestlings. I tap the tree, but the F does not flush. **I peep the nest and see the F incubating/brooding. I cannot see any sign of nestlings.**

1558—I leave.

## 14 July 2011

2258—SY, PS, and JV arrive at CN1\_2011 nest in order to attempt a capture of the F and M for blood.

2259—**PS has net in position and captures the F (she was banded previously).**

**Band # 1593-64831**

JV bleeds her right wing for genetics and parasite smear.

Blacklight both wings.

2300—**SY peeps the cavity. There is one nestling. It is all grey, just barely getting a facial disc, possibly 10 days from fledging. There was probably brood reduction.**

2320—Release F. She has strong flight to the S. SY takes down the capture net.

2333—M comes silently into the nest site.

2334—M perches next to the tree giving HCs and HECs then flies W giving TCs.

2343—We leave because F has not come back on yet.

## 15 July 2011

2045—BL arrives at the CN1\_2011 nest to attempt capture of M (he was previously captured in nearby lure net, but not at the nest). **I tap the nest tree, but no response—peeping reveals the F is still in the cavity (no view of owlets possible).**

Weather: Partly cloudy, calm, ~ 19 C (the first dry night/day in over a week).

2051—M calls off roost approximately 50 m down drainage.

2107—M makes first PD after approaching with LC. M goes all the way in the cavity, and when he flushes ~ 30 sec later, the F follows him. **I peep again—one owlet visible in dark juvenile plumage (new peeper), actively looking up toward peeper.**

2120—First audible begging from owlet heard. Only sporadically heard hereafter.

2132—F returns to cavity (prey laden??).

2134—M finally returns and makes a PD (he hovers at cavity entrance). I get in capture position.

2152—M makes PD, pausing very briefly at the cavity entrance.

2200—**M makes PD at cavity entrance, and I capture him as he flushes. M is previously banded; he is banded with # 64854, and is the same M captured in the lure net on 17 June 2011.**

**Band # 1593-64854**

87.0 g L Wing: P2 is molting (currently about ½ full length)

- 30.0 g R Wing: P2 and P3 are molting (about ½ full length)

57.0 g

I bleed L wing for parasite smear.

2219—M is released. He shows strong ascending flight to the S.

2222—As I gather my equipment, I hear the F giving FSC off nest.

2224—I leave.

## 20 July 2011

1430—Flam Crew arrives at CN1\_2011 nest to band and bleed the N. **We peep: 1 N, F not present.**

1445—Begin enlarging cavity.

Cavity measurements:

Ent. Dimensions (HxV): 4.0 x 3.5 cm

DOH: 22.0cm

H Depth: 12.0cm

V Depth: 23.0cm

Ent. Thickness: 50mm

1506—N out of cavity.

**New Band # 1593-64801** (on L leg)

79.0 g LWC: n/a

- 15.0 g LLP(5): 64mm (20.5mm in shaft)

64.0 g LLP(6): 65mm (20.5mm in shaft)

Rect: 38mm

We bleed N’s L wing (DNA & parasite smear).

~1545—N returned to cavity.

# CN1\_2012

## 30 May 2012

2035—CC, JR, PPS, and BL arrive on the ridge separating the CN1 and CN2 territories to set up lure net and to listen for nesting activity. We set up the lure net just over the S-facing crest of the ridge in the vicinity of the saddle. Weather: mostly clear, mostly calm, ½ moon in near middle of sky, 12 C.

X: 480702

Y: 4330150 +/- 3 m

2051—Lure net set-up is complete.

2057—We hear M start to give TC several hundred meters to the N—CN1 or CN3? A couple of minutes later, we then hear a higher-pitched M giving TC to the SW approximately 150 m distant. Both Ms sing for 5-7 minutes.

2100—We start playback.

2107—M starts giving HECs from ~ 20 m S of the net. He continues calling, and passing back and forth over the net, for the next ~ 20 min.

2123—Higher-pitched M starts giving TCs again to the SSW.

2125—PPS and BL leave the net area to go listen for nesting activity in the CN1 drainage.

2127 – M starts giving TCs and TECs from the CN1 drainage.

2133 – M went silent

2140 – M gives more TCs.

2143 – M gives HECs towards CN1 drainage.

2209 – TCs and HECs towards CN2 drainage.

2214 – **CN1\_2011 M caught**; 2nd shelf flew in from the S.

2217 – Playback turned off.

**Band # 1593-64854** (on L leg)

**(NOTE: The band number in this entry was previously listed as 1593-65854 but we believe this is a typo. ON 7/30/2018)**

90.0 g LWC: 133 mm

- 29.0 g LLP(5): 95 mm

61.0 g LLP(6): 105 mm

Rect: 62 mm

JR bled left wing – small hematoma.

Blacklight: P1-5 pinkest, P6 very little, P7-10 some pink. Photos taken.

2251 – M released; strong ascending flight towards CN1.

2253 – Playback started.

2317 – **Silent unbanded male caught**; 4th shelf; flew in from the S.

**Band # 1593 – 64877** (on R leg)

86.0g LWC: 135 mm

- 29.0g LLP(5): 96 mm

57.0g LLP(6): 105 mm

Rect: 60 mm

JR bled right wing, after trying left.

Blacklight: P1-4 pinkest, P6-10 some.

2350 – BL hears F vocalizations in the area of the net; LCs first followed by FECs. Both were of short duration – 15 seconds or so. (GHOW in background to the S.)

2400 – FEC heard again.

2401 – M released, strong ascending flight towards CN1.

2420 – Turn playback off, break down net, and leave.

## 05 June 2012

1500—Crew arrives to peep CN1/CN2. Splits into two groups, one goes into CN1 while the other goes into CN2. All trees were peeped.

1715—All crew members leave area.

# CN1—2013

## 30 May 2013

2122—AW, NS, and RC start playback at net site between CN1 and CN2. We are on the eastern end of the ridgetop that divides CN1 and CN2.

Vegetation: Mixed psme/pipo, open.

Weather: Mostly clear, calm, 8°C.

X: 481020

Y: 4330190

+/- 3m

2141—As AW and RC prepare to listen in CN1/2, we find **unbanded silent M in 3rd shelf of net, coming from the NE.** We band, bleed, and blacklight the bird. Blood sample was taken on L wing; medium hematoma present after bleeding stopped. NS has blacklight photos.

**Band # 1593-64887 (on L leg)**

81.0 g LWC: 127 mm

- 28.5 g LLP(5): 95 mm

53.5 g LLP(6): 105 mm

Rect: 58 mm

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Blacklight, R wing, 0-3 | Blacklight, R wing, 0-5 | Wear, L wing, 1-3 | Wear, L wing, 1-3 |
| 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| 2 | 1 | 1 | 1 | 1 | 2 | 2 |
| 3 | 1 | 1 | 1 | 1 | 2 | 2 |
| 4 | 2 | 3 | 2 | 3 | 2 | 2 |
| 5 | 2 | 3 | 2 | 3 | 1 | 1 |
| 6 | 3 | 4 | 3 | 4 | 1 | 1 |
| 7 | 3 | 4 | 3 | 4 | 1 | 1 |
| 8 | 3 | 4 | 3 | 4 | 1 | 1 |
| 9 | 3 | 4 | 3 | 4 | 1 | 1 |
| 10 | 3 | 4 | 3 | 4 | 1 | 1 |

2145—As we process silent bird, TCs begin from E of net. Bird seems to be coming from CN1. TCs move close to net, then stop after ~10 min.

2217—AW and RC leave net site to listen along ridgetop while NS remains at net site. AW and RC listen for ~40 min in CN1, then ~20 min in CN2 without hearing anything.

2321—After hearing nothing, AW and RC return to net and stop playback.

2333—After net is broken down, AW, NS, and RC move upslope to listen in direction that M

was previously calling.

2345—AW and RC continue into CN3 to attempt to spot map the territory.

2445—AW and RC leave CN3 without hearing anything.

## 11 June 2013

~2330—AW, CK, and BDG arrive in CN1 intending to set up a lure net and to listen in the CN1 drainage bottom for nesting vocalizations.

2336—While we are setting up lure net, we hear a M begin to give TCs from about 25 m to our NE (possibly from on top of the CN1/CN3 ridge).

2347—Begin playback. Net is located on the upper slope of the promontory on the far W of the ridgeline between CN1 and CN3. Net faces E-SE.

Vegetation: mixed aged pipo/psme; young potr; open.

Weather: calm, clear, 10.5C

X: 480711

Y: 4330385

+/- 3m

2351—M approaches net from SE giving soft TC/TECs. He is most likely the CN1 territorial M. Between 2351-2412, M gives a mix of TC/TEC/HEC from the net vicinity. He appears to be low, but does not get captured.

2412—AW decides to move playback N (upslope) of our net because M seems to be favoring the S (downslope) side. M heard giving HECs at this time, then goes silent once playback is moved.

~2418—AW and CK leave to listen in the CN1 drainage bottom. As soon as we reach the drainage, BDG captures a bird at the net.

2424—**A silent, previously banded bird is captured in the 2nd shelve. He is the silent bird captured on 30 May 2013 by AW, NS, and RC at a lure net set up on the saddle between the CN1 and CN2 drainages. He is a CN1 Floater.** *Note: both times we have captured the CN1 Floater, the CN1 territorial M has been at the net site. This time, the territorial M was present at the net just prior to capturing the floater and on 30 May 2013 the territorial M was present just after we captured the floater.* We do not bleed or blacklight due to previous capture this year.

**Band # 1593-64887 (on L leg)**

75.5 g LWC: 126 mm

- 21.5 g LLP(5): 96 mm

54.0 g LLP(6): 105 mm

Rect: 56 mm

2445—M released with strong, ascending flight to S. We end playback and start to break down net at this time. While we are breaking down net, territorial CN1 M approaches net site and gives TCs. He lands in a psme snag just S of one of the lure net poles, then flies ~15 m S and continues to give TCs. We leave after lure net is disassembled.

## 19 June 2013

Afternoon—Flam Crew peeps in CN1.

# CN1—2014

## 5 June 2014

~2045—AW, MC, and ER arrive at the CN1/CN2 parking spot with intention of listening for nesting vocalizations in CN1 and luring for CN1/CN2 Ms. We begin hiking into CN1 and it begins to hail, so we seek shelter to wait out storm cycle.

2133—After storm passes, we begin listening in CN1 drainage with AW furthest E, MC furthest W, and ER in between.

Weather: cloudy, relatively calm, 15C

~2205—No vocalizations heard. We leave drainage bottom to set up lure net on ridge between CN1 and CN2.

2215—Start playback. Lure net is located on ridge between CN1 and CN2 towards eastern end of territory.

Vegetation: open, young-old pipo/psme

Weather: calm, cloudy, 12C

X: 480911

Y: 4330172

+/- 8m

~2218—Just after playback begins, we hear single TC to our NW (from CN1 drainage bottom).

M gives another TC <50 m from net to the N.

2224—**M goes silent and MC checks net to find a FLOW in the bottom shelf***.* **FLOW is**

**previously banded.** *He was captured twice by AW in 2013 as a silent floater in CN1. Both times M was captured in 2013, a second, territorial M was heard in the vicinity of the net site but was never captured. During one instance, the territorial M was giving TCs in the net site while the CN1\_2013 floater was in hand. It appears this M may now be the territory holder in CN1 and this represents another instance of a floater becoming a territory holder in a subsequent year.*M flew in from the N. Blood was obtained in 2013 so no sample was taken.

**Band # 1593-64887 (on L leg)**

81.5 g LWC: 129 mm

- 28.0 g LLP(5): 95 mm

53.5 g LLP(6): 105 mm

Rect: 58 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2.5 | 2.5 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1.5 | 1.5 |

2245—M released.

2252—We decide to end playback and break down net due to increased lightening. We begin listening in CN1 drainage bottom to wait out storm.

2308—TCs heard from drainage bottom, near eastern edge of potr cavity trees.

2315—M continues to give TCs, this time further to E, up drainage.

2322—We pursue and M continues to give TCs from vicinity of upper clump of potr cavity trees.

2330—M responds to AW hoots from large pipo in drainage bottom located in upper clump of cavity trees.

2347—M moves to psme <25 m S and continues to give TCs.

2354—M goes silent.

2412—We hear nothing else and leave CN1 to listen in CN3.

2418—AW gives hoots from ridge between CN1 and CN3. ~2 minutes later, M responds to hoots from the ridgeline to our NW.

~2420-2446—M continues to call and respond to AW’s hoots. We follow him as he moves N, down slope towards CN3 drainage bottom. We obtain CN3\_1 songpost on him near the ridgetop from a live psme. No DBH is taken.

X: 480795

Y: 4330533

+/- 6m

2246—We obtain a general area songpost on CN3 M in group of psme on a low slope near the drainage bottom. **This confirms presence of a CN3\_2014 M.**

X: 480709

Y: 4330551

+/- 5m

2248—We end observation and leave for vehicles.

## 20 June 2014

Afternoon—Flam crew peeps CN1 CN2 and CN3. We peep out the majority of the trees and do not find any nests.

# CN1—2015

## 12 June 2015

~2130—DL, BL, and MC arrive in CN1 territory and begin to tap and listen, attempting to find a potential CN1\_2015 nest. We hear and see nothing.

2205—We arrive on the CN1/CN2 saddle to set up a lure net. Before we set up our net, BL gives a few hoots and a M to the N responds with TCs and TECs—this is probably CN1 M.

2217—We begin PB.

Vegetation: young-mature pipo/psme

Weather: clear, calm, 11C

X: 480704

Y: 4330146

+/- 3

2227—**Capture a silent, banded bird in the 2nd shelf from the W—Band # 1593-64887; this M was banded as a CN1\_2013 floater**

NOTE*: While banded as a ‘floater’, this likely just reflected he was silent coming into the net. He may very well have been the CN1\_2013 territorial M, but since we never found a CN1\_2013 nest, we never captured him anywhere else that year.*

**Band # 1593-64887 (on L leg)**

63.0 g LWC: 128 mm

- 7.0 g LLP(5): 96 mm

56.0 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2 | 2 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | .5 |
| P2 | 0 | .5 |
| P3 | 0 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2249—M is released. He has strong ascending flight to the NW. While we processed this bird we also had another M giving TCs from the S (possibly CN2 M?).

2252—BL and MC leave to go listen. BL goes to CN1 territory and MC goes to CN2 territory.

2300—MC hears a M giving HECs immediately S of the net in the bottom of the CN2 drainage. As MC approaches the M flies into an overhead tree giving HECs.

2330—Multiple birds have been calling, so DL switches the playback to the *Megascops* call on PB #3. The presumed CN2 M quickly comes into the net site giving HECs. This is in the vicinity of a couple cavity trees near tree #1526, he then flies up drainage.

2306—A second M begins calling up drainage to the E (CN6 M?) from the presumed CN2 M. The first male begins giving HECs, **MC hangs songpost CN2\_1.** The upper drainage M makes a short flight closer giving one encounter call then flies back up drainage.

2318—MC now chases the upper bird further up the drainage. **I hang songpost CN2\_2.**

2333—**While the presumed CN2 is calling ~ 20 m to the SE of the lure net, we capture a silent, unbanded bird—we refer to him as a CN1 floater at the time. He came in from the W and was in the 3rd shelf.**

**Band # 1833-03242 (on L leg)**

61.5 g LWC: 134 mm

- 7.0 g LLP(5): 102 mm

54.5 g LLP(6): 112 mm

Rect: 67 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2.5 |
| P2 | 2 | 1 |
| P3 | 2 | 1 |
| P4 | 2.5 | 1 |
| P5 | 2 | 1 |
| P6 | 1.5 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1.5 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

Note—We took a genetic blood sample and M had a moderate L wing hematoma.

2343—Recapture #**1593-64887**. CN2 M is still giving HECs at the net.

2346—Stop playback.

2352—M is released, strong ascending flight to the W. We take down the net and leave.

## 19 June 2015

Afternoon—Flam Crew peeps cavity trees in CN1, fairly thorough coverage. Crew crosses S ridge and peeps a few CN2 trees. No nests found.

## 26 June 2015

2040—SY and LP arrive to top of R between CN1 and CN2 with intent to lure CN1 and/or CN2 territorial M.

2048—Lure net set up. PB started. Net opens N/S.

Vegetation: young-medium psme, medium-mature pipo. Fairly open.

Weather: calm, overcast, 17C

X: 480958

Y: 4330175

+/- 9m

2051—M giving TCs and TECs comes into net area from CN1 drainage (N of net) ~60 m away. He continues to vocalize until ~2059.

2100—SY leaves net area and goes E up R to listen and tap.

2110—TCs heard again in CN1 drainage in similar location to when he was heard at 2051, except this time he seems to be a bit further E than before. He comes into net area at this time from NE. Gives some HECs too.

2117—**Banded M in net from S. 2nd shelf. He gives TCs and TECs prior to hitting net.** LP sees bird fly from mature pipo (~10m S of net) into net. **This is the previously caught CN1\_2015 M.**

\*Note: *Only measurement taken is mass because this M was caught earlier in season*.

**Band # 1593-64887 (on x leg)**

80.0 g

- 29.0 g

51.0 g

2118—SY returns to net site.

2123—#**1593-64887** is released with strong ascending flight to the S.

2125—M giving TCs in net area. This is assumed to be the CN1 M that was just captured. This M continues to vocalize with TCs and TECs in net area for the remainder of the time that the PB is on.

2135-2158—SY does a loop through lower CN6/upper CN2 listening and tapping. Nothing heard.

2202—PB off. Lure net is taken down.

2208—TECs heard on upper slope ~30 m SW of net location as we finish taking down net. We hear simultaneous TCs from low in the CN1 drainage meaning this is most likely the CN2 M. We leave area at this time to drive to CNG1.

# CN1—2016

## 7 June 2016

~2030—KM, ER, and MC begin listening in the C1/C2 territories. KM stays in the NE drainage and listens for calls. MC and KM hear PYOW and GROW and a handful of planes for the first ten minutes.

2038—ER starts listening for nesting vocalizations in the CN2 drainage below the doghair aspen thicket around the first cavity trees. Between planes, domesticated dogs, and coyotes, the listening conditions are very poor.

2040—KM hears two TCs in the C1 drainage N of the 6/2/16 lure net site. The FLOW goes silent. KM taps the cav trees in the vicinity of the calls but does not see or hear any FLOWs.

2048—ER hears the CN2\_M give TCs on the S-facing slope at the W end of the drainage below the aspen. I follow. The M continues moving E up drainage on the S-facing slope. TCs for ~3 min.

2111—As MC is walking along the CN1/CN2, near the saddle point where we lure net and cavity tree #3010 he hears a M LC ~30m N down slope. He gives chase. The M gives more LCs and a F responds with LCs. Then, a series of planes and coyote calls obscure the FLOW calls and I lose the pair.

2125—After not hearing more from the CN2\_M and tapping nearly every cavity tree in the drainage, ER gives a couple hoots. The CN2\_M picks back up with TCs from the N-facing slope, at the W end of the aspen thicket. I pursue, but don’t pick anything else up.

2155—KM, MC, and ER meet on the saddle between CN1 and CN2 to set up a lure net to target both territorial males and any possible floaters. The net opens in an N/S direction.

Vegetation: Mixed age pipo and some psme

Weather: Mostly clear, calm, 7C

X: 480683

Y: 4330128

+/- 13m

2158—A M gives TCs/TECs/HECs coming in from the CN2 drainage and ends about 40m S of the net.

2201—M gives TCs/TECs about 20m N of net.

2203—M gives a few TCs from the E, flies over net.

2205—**M hits net from S in the 3rd shelf. He is banded as the CN1\_2013 floater and CN1\_2015 territorial M.**

**Band # 1593-64887 (on L leg)**

83.0 g LWC: 132 mm

- 29.5 g LLP(5): 96 mm

53.5 g LLP(6): 106 mm

Rect: 62 mm

**Notes:** Bleed L Wing.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 3 |
| P4 | 3 | 3 |
| P5 | 3 | 3 |
| P6 | 2 | 2 |
| P7 | 2 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1 |
| P10 | 1 | 1.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1.5 | 1.5 |
| P10 | 2 | 2 |

2224—**Silent unbanded M caught in net from S in the 3rd shelf while we still have the CN1\_M in hand.** Most likely a CN1/CN2 floater.

**Band # 1833-03390 (on L leg)**

90.0 g LWC: 128 mm

- 30.0 g LLP(5): 94 mm

60.0 g LLP(6): 103 mm

Rect: 62 mm

**Notes:** Bleed L wing, small hematoma.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 1.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1 | 1 |
| P6 | 0.5 | 0.5 |
| P7 | 0.5 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 2 | 2 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 2.5 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

2232—M gives a few TCs W while we have the CN1\_M and floater in hand.

2233—M gives a few TCs from the CN1 drainage about 40m N of the net.

2240—M goes quiet.

2245—Release the CN1\_2016 M (**1593-64887**) with a SAF W.

2304—M gives TCs/TECs about 40m N of the net.

2307—Release the floater (**1833-03390**) with a SHF N.

~2315-2345—M gives occasional TCs from the CN2 drainage isolated to the main patch of cavity trees. MC and ER alternate trying to walk the PB down the slope to draw him in. When MC has the PB under his tree, he begins responding with HECs, but never budges. We decide to move the net to target the CN2\_M.

2355—PB off. We break down.

2402—We set up a net in the drainage bottom in a thicket of aspen about 20m N of the tree that the M was singing in, about 20m E of the start of the aspens.

Vegetation: Young potr, dense.

Weather: Mostly clear, calm, 6C

X: 480747

Y: 4330188

+/- 16m

~2435—After too long of silence, the M picks up around his original perch about 20m S of the net. We try to hoot him in to the net, to no avail.

2445—PB off. We leave.

## 17 June 2016

Afternoon—Flam Crew does a thorough peep of cavity trees in CN1 and CN2 in hopes of finding a nest.

1652—MC peeps an un-enumerated tree and finds a FLOW in the cavity. **This is the CN1\_2016 nest tree! The tree is located just on the N side of the ridge at the saddle between CN1 and CN2.**

**X: 480667**

**Y: 4330160**

**+/- 13m**

**The tree is a full, live, pipo ~30cm DBH. There is an old and dead terminal growth in the tree and the cavity is a NOFL excavation just at the bottom of the dead trunk. The cavity is ~20 ft. high and faces due N. MC tags the tree with tag #1322, as the F shows no sign of waking up.**

## 1 July 2016

2105—MC and DL arrive at CN1\_2016 to attempt a M capture. We tap the tree and no F is on the cavity. **Peep reveals no F on cavity and one nestling ~14 days old with grey all over and prominent on the face.** We back off to observe.

2110—A bird makes a PD to the cavity with no vocalizations.

2118—We see another PD.

2120—We observe another PD. Due to nestling age and no apparent F in the area DL moves in to get the capture pole up.

2129—The M comes in to the site giving HECs and aborts 3 PDs.

2131—The M makes a successful PD, DL swings but misses, as the M is supah fast.

2135—The M comes back in to the site giving more HECs. This time he doesn’t approach the nest.

2150—We decide to switch strategies and take the net down.

2210—We move back in to the site with A mist net set up on five poles on the uphill (S) side of the cavity attached to a hastings pole at 20ft. on the N side of the tree. We lay in wait.

2225—A bird hits the net in the third shelf from the E. **This is the CN1\_2016 M and the CN1\_2013 floater!**

**Band # 1593-64887 (on X leg)**

69.0 g LWC: XXX mm

- 20.0 g LLP(5): XX mm

49.0 g LLP(6): XXX mm

Rect: XX mm

**Notes: This M was captured earlier this year, and along with a time crunch we forego other measurements.**

## 8 July 2016

1555—BH, ER, and DL arrive at CN1\_2016 nest tree to band and bleed N and attempt F capture. BH approaches nest tree with capture net, and sets net over cavity. **After no sign of the F, we peep to find the cavity empty. Based on the advanced status of the nest observed by MC on 7/1/16, we suspect that fledging has already occurred.** We spread out in the area and search for the Fl in nearby branches and low limbs.

~1420—After no sign of Fl, we return to the nest tree to take cavity dimensions.

**Cavity Dimensions**

50 x 50

Horizontal Depth: 95 mm

Vertical Depth: 170 mm

Entrance Thickness: 20 mm

D.O.H: 39, 15.5

Cavity Height: 17’2”

1626—We leave CN1\_2016 nest to peep trees on ridgetop and tap around in CN2 dr.

~1705—We leave CN2 dr. after finding no FLOW nest.

# CN1—2017

## 6 June 2017

Afternoon—Flam crew cherry peeps in territory. We hit all known past nests and any good cavities that we saw along the way.

1630—**BL peeps the POTR full snag cavity tree (#1508), and observes a FLOW in the bottom of the cavity—this is the CN1\_2017 nest tree! Nest cavity is NOFL excavated, 40’0” from the N side of the tree (~41+’ from down-drainage side), and cavity faces 300 deg. F did not respond to a tap, and stayed down when the camera was removed. Nest tree is the farthest up-drainage (to the E) of any POTR cavity tree in the CN1 drainage, and is located in the bottom of the drainage, which bifurcates at this point at the base of an intervening ridge. Nest tree is also ~ 60 m up-drainage of the E-most POTR cavities of the past (which are now on the ground).**

2030—BL and JE park at the CN1/CN2 parking spot and begin walking towards the CN1\_2017 nest.

2043—BL and JE arrive at CN1\_2017 nest and silhouette the tree from ~16m NW. F is down.

2107—JE sees F flush nest towards the W, down drainage.

2111—**BL peeps the nest to find a full clutch size of 3 eggs in the center of the cavity!**

2112—F almost immediately returns to nest area and perches on the N limb on lowest branch directly above the nest cavity.

2113—JE sees F flush S, out of the area of the nest cavity.

2122—BL and JE leave to set up lure net—F had not yet returned to the nest at this time. Throughout the time spent observing, no vocalizations were heard from either a M or the F. No PDs were observed.

2200—Lure net is set up on the middle ridge between CN1 and CN2, adjacent to the saddle. At this time, the PB of T42 begins.

Vegetation: Mature pipo/psme with net flanked by sub-mature psme.

Weather: mostly cloudy, slight breeze, 12C.

X: 480718

Y: 4330143

+/- 3m

2109—M HECs are heard by BL and JE, originating from the SE.

2212—JE sees M fly W, towards the net. M continues giving HECs as well as less aggressive TCs somewhat continuously for an extended duration, essentially circling the net site from a distance. M calls are heard from both the CN1 and CN2 sides of the ridge, with a majority of the calls heard from the CN2 side, as far as 150m S.

2254—BL and JE hear M giving TCs approximately 15m N. This is the closest the M approaches.

2257—M calls are no longer heard.

2300—PB ends and lure net is taken down.

2308—BL and JE leave site to return to the car.

2320—BL and JE head for CN8. **NOTE: We were uncertain whether it was the same M that responded during our time at the net, or possibly two MM (CN1 and CN2). However, we never heard more than one male at a time.**

## 29 June 2017

~2210—MC, LD, and JE arrive at CN1\_2017 nest to attempt a M capture.

2215—MC begins approaching and getting into capture position. The M is seen in the site, perched on a nearby tree.

2220—While checking height, the F flushes. We get out of the site to set up a lure net.

2243—We set up a lure net on the saddle between CN1 and CN2, ~20m SE of the CN1\_2016 nest tree, and begin PB of T42. The net is open N/S.

Vegetation: mixed pipo, young psme

Weather: calm, clear, 10C

X: 480687

Y: 4330128

+/- 3m

2245—We hear a M giving TCs and TECs from the W.

2247—The M approaches and enters the net site. By this point, the M is now giving HECs. He continues for several minutes The M is circling the net, jumping around higher trees on both sides of the net.

2254—**The M is silent and** **we check the net to find a FLOW in the top shelf!** **The M is banded and is the CN1\_2016 M and the CN1\_2013 Floater.** As we approach to extract the FLOW from the net, MC and JE see a 2nd FLOW in the site, flying over the net and to the S. Because we saw the 2nd FLOW, we leave the PB running during processing.

**Band # 1593-64887 (on L leg)**

80.5 g LWC: 130 mm

- 29.5 g LLP(5): 96 mm

51.0 g LLP(6): 107 mm

Rect: 60 mm

**Notes: Bird was not bled.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 1.5 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | .5 | .5 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | 1 |
| P4 | .5 | 1 |
| P5 | .5 | 1 |
| P6 | 1 | 2 |
| P7 | 1.5 | 2 |
| P8 | 2 | 2.5 |
| P9 | 2 | 2.5 |
| P10 | 2 | 2.5 |

2325—JE releases the M and he has SAF going S and perches in a nearby tree.

2328—We break down the lure net and pack up to head back to CN8.

## 13 July 2017

2043—BL arrives at the CN1\_2017 to attempt capture of M and F. I see a FLOW face in the cavity entrance when I arrive, which I take to be a nestling, since I subsequently hear the F giving FSC off cavity a couple minutes later. Owlets giving very audible, raspy begging, particularly the one in/near the cavity entrance. Weather: Clearing (pm rain showers), calm, ~15 C.

2055—I get into capture position.

2059—**F makes PD and I capture her after she exits—F was not previously banded. I attempt to peep cavity, but combined with dark conditions and curvature in the trunk, I cannot get peeper into the cavity—based on audible begging patterns in the cavity, I clearly hear 2 owlets, possibly 3 owlets, and based on behavior and quality of begging I estimate the age of the eldest sibling at ~19-20 day.**

**Band # 1833-03528 (on R leg)**

61.5 g LWC: 123 mm

- 7.0 g LLP(5): 96 mm

54.5 g LLP(6): 105 mm

Rect: 55 mm

**Notes: I successfully bled F on L wing, with small hematoma.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 3 | 3 |
| P5 | 3 | 3 |
| P6 | 3 | 3 |
| P7 | 3 | 3 |
| P8 | 2 | 2 |
| P9 | 1.5 | 1.5 |
| P10 | 1.5 | 1.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2200—**While holding onto the F, I capture M after he makes PD in cavity. M stayed in the cavity at least 5-6 min (skilled veteran M) before exiting prior to capture. M was previously banded, with Band #1593-64887—he was captured in a lure net earlier in the summer and is the CN1\_2013 Floater!**

**Band # 1593-64887 (on L leg)**

57.5 g LWC: XX mm

- 7.0 g LLP(5): XX mm

50.0 g LLP(6): XX mm

Rect: XX mm

NOTE: I do not take any measurements, since he was processed on 6/29/2017.

2233—M is released; he shows strong ascending flight away from nest area.

2251—F is released; she shows strong ascending flight away from nest area. I gather equipment and leave.

# CN1—2018

## 14 June 2018

1500-1710—Flam crew peeps most cavities in CN1 to look for the 2018 nest site. We peep all remaining past nest sites and unmarked trees. We get throughout almost all of the most E part of the territory. We did not hit a few conifer cavities in the SW part of the territory and some of the potr cavities in the W part of the drainage.

2025—BL and KA arrive in CN1 territory to listen for nesting vocalizations, tap, and lure net.

2034—From central territory drainage, BL heads E up towards the middle ridge (between CN1 and CN2) and the area near the CN1\_2017 nest site to listen and tap. KA remains W in central drainage near clump of young potrs and largest group of cavity trees to listen and tap.

2045—We stop tapping and listen for a M calling off roost. All quiet, except for a GHOW calling from far off to the W.

2104—BL hears M giving TC from the E end of the middle ridge, approximately 100 m E of the Saddle. He calls ~30 sec before quieting.

2108—While standing ~15 m down-drainage from the CN1\_2017 nest tree, BL again hears the presumed CN1 M giving TC on middle ridge, now about due S from BL position. M quiets after ~30 sec, but then BL happens to see FLOW silhouetted against the sky while perching in a PSME snag 5 m SW of last year’s nest tree. This FLOW remained perched in the snag for nearly 1 min, during which time BL heard quiet TC either coming from this FLOW or from immediately upslope to the S. Nonetheless, the vocalizations stop shortly before the perched FLOW flushes down-drainage. **NOTE**: BL remains near the CN1\_2017 nest tree until ~2125, but nothing is heard or seen in this vicinity and no FSC were ever heard.

2138—BL gives 4 TCs from the upper drainage. No response near him, but KA hears M FLOW respond with ~10 TCs just W of saddle on S side of central drainage.

2203—We meet up on saddle to begin setting up lure net.

2220—While setting up PB, we hear M give TCs ~100 m NE.

2222—PB starts of T42. Net is located on ridgetop of ridge on S side of central territory drainage at the saddle. Net open N/S.

Vegetation: open, mixed forest of mature pipo, psme

Weather: Clear, slight breeze, 18 C

X: 480718

Y: 4330145

+/- 3 m

2225—Two M FLOWs are calling simultaneously. One is located ~100 m S making TCs, presumable the CN2 territorial M. The other comes in toasty towards the net from due E up the ridge, potentially the CN1 territorial M.

2228—The M who came from the E is within 5 m of the net, giving HECs.

2234—The same M from the E now drops off the W side of the saddle and gives HECs. Then switches to TCs. The S bird has gone quiet.

2238—HECs continue from ~20 m SW; the M originally from the E appears to have circled around the net.

2242—**We capture an unbanded M, top shelf, came in from the S.**

**Band # 1833-32508 (on L leg)**

62.0 g LWC: 129 mm

- 7.5 g LLP(5): 95 mm

54.5 g LLP(6): 104 mm

Rect: 59 mm

**Notes: Bled L (slow to clot), small hematoma**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2.5 | 2.5 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2244—With M in hand, we hear another M continue to give TCs from the N, near CN2 territory. This makes us question the identity of the captured FLOW.

2250—We hear a FLOW continue to call from the S, near CN2 territory. M gives higher pitched TCs (consistent with pitch of bird calling from that area all night, distinct from CN1 bird).

2310—**We capture a second silent bird, unbanded presumed M (see notes on sex of bird), top shelf and came in from the S.**

**Band # 1833-32509 (on L leg)**

68.5 g

- 7.0 g

61.5 g

**Notes: BL suspects that this bird is a heavy, first year M. However, due to its heavy weight and relatively large bare patch that could be brood patch, we forgo further measurements and processing.**

2323—We release the second bird, band #1833-32509, strong ascending flight.

2327—We hear HECs from E on the ridge.

2332—TCs are given NW in CN1 central territory.

2336—We hear TCs from ~100 m S in CN2 territory.

2340—We release the first M, band #1833-32508. Strong ascending flight.

2340—HECs continue 20 m S of net, with some TCs.

2341—TCs continue NW.

2353—After stopping PB, we leave the territory. Overall, presumed two silent birds captured, and two additional territorial Ms were calling, for a total of four Ms in the area.

# CN1\_2019

## 6 June 2019

~1430-1700—Flam Crew (minus BL) enter CN1 and CN2 to cherry peep in hopes of finding a nest. We spread out along the main CN1 drainage, the CN2 drainage, and check most of the trees N of CN1 along the road. Past nests were checked (except for #1322) and past nest trees that were found to be fallen were #1371 and #777. Nothing was found.

2040—KC and JE arrive at CN1 to listen, try to sniff out a nest, and lure net. We spread out along the main drainage, with KC on the N side and JE on the S side.

2057—We hear a GHOW hooting very far off in the distance to the N/NE.

2130—JE has heard nothing so KC splits off to tap past nest tree #1322 before we meet to set up a lure net. KC taps the tree but no face appears in the entrance.

2133—KC, near the head of the drainage in the vicinity of the CN1\_2017 nest*??*, hears TCs SW, moving E, ~100-150m away.

2204—We meet, set up a lure net, and begin PB of T42. The net is located along the ridgetop of the middle ridge between CN1 and CN2. We set up ~60m E of the saddle, with the net open E/W, flanked by some young potr.

Vegetation: mature pipo/psme, young potr/pipo

Weather: calm, 40% cloud cover, 15 C

X: 480771

Y: 4330162

+/- 3m

2220—M is heard ~50m E along the ridgetop giving TCs and TECs.

2221—M approaches and is quickly in the net site making HECs from the top of a conifer 20m N of the net.

2225—M begins jumping around the site N to W, making TCs and TECs 50m.

2227—M is making HECs ~5m W of the net, so we switch the track to Flammulated Owl (Psiloscops flammolus)

2231—M goes silent, we hear wingflaps at the net! The FLOW flew in from the W and is in the 2nd shelf from the top. The bird makes a couple HECs in hand and we switch the PB to T42 while processing the bird. **This is presumed CN1\_2019 M, as he was the CN1\_2013 floater and CN1\_2016 and CN1\_2017 M.**

**Band # 1593-64887 (on L leg)**

83.5 g LWC: 132 mm

- 29.0 g LLP(5): 96 mm

54.5 g LLP(6): 107 mm

Rect: 62 mm

**Notes: Bleed attempt on L wing did not draw enough blood. Very small hematoma. R wing was then bled and the cap tube was >3/4 full, making this blood sample a candidate for to generate a genetic marker. R wing has small to med. hematoma.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 0.5 |
| P4 | 2 | 1 |
| P5 | 1 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1.5 | 1 |
| P7 | 2 | 1.5 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2309—M is released and he has a SAF S.

2312—We stop PB and begin to break down the net. M is back in the site, making HECs at us from perches around the net site.

2320—As we leave the area, M seemingly follows us ~20m W along the ridgetop as we hike out, making HECs and TECs at us.

# CN2—2004

## 4 June 2004

2200—Flam crew arrives in the vicinity of where BL heard TC on two previous occasions while performing the flam roadside census on the N Cedar Mtn Road (census pt #3). We spread out in an approximately 200 m radius circle and attempt to elicit calling.

2207—SY arrives at position 100m W of cars on top of very small ridge, almost immediately, TC heard from SSW seemingly atop ridge directly to the S.

2214—From atop ridge directly S of road SY hears TC continue in drainage approx. 250m S.

2220—Arriving at bottom of drainage SY hears 2 birds 1 very loud to the S with a distinct higher p[itched not on the end of call. SY erroneously decides that this bird is not a flam. Original bird (C1/C2) is heard farther up slope to the N and farther W in a PIPO stand.

2224—SY songposts C1/C2 bird.

2240—Following KS’s request SY chases C1/C2 male to a tree upslope and N of KS’s songpost.

## 11 June 2004

2245—KS marks C2\_1, which is a location point where KS observes an unidentified flam flying around in a group of trees but not calling.

2255—EE and KS hear C2 M calling on ridge to the far SW of original starting point. C2 has a high pitch call that BL referred to as “Victor Victoria” the previous week.

2300—KS observes a territorial encounter between C2 and C1. JM marks the C1 songpost and KS marks the C2\_2 songpost.

2305—EE marks C2\_3 songpost on a ridge far to the W

2318—EE marks C2\_4 songpost about 5m S of previous songpost.

2320—KS and EE hear C2 male calling to the NE and we follow after him and mark songposts C2\_5 through C2\_7.

2350—EE marks songpost C2\_8 about 1/2 km to the N of C2\_3, C2\_4

# CN2—2005

## 14 June 2005

2135—SY, JM, DF and MS begin tapping and listening in the main CN2 drainage (D1). SY and JM work E while DF and MS work W.

2200—From the far E portion of the drainage, near the head, JM and SY hear TCs on a ridge to the S above a side drainage (D2) for <1 min.

2225—DF and MS working down D1 tapping and enumerating. We hear TC’s for <1 min 100m or so up drainage (E).

2230—From ridge separating D1 from D2 we hear TCs for <30 sec. to the W in the vicinity of the confluence of D1 and D2

2248—DF and MS hear soft hooting, sounds like LC’s or possibly quiet FSC. We observe and listen in that area (eastern quarter of D1) but hear nothing more.

2307—From the top of ridge separating D1 and D2 SY and JM hear TCs for approx. 1 min. to the N on the edge of D1. We mark general area songpost CN2\_1.

2315—We leave.

## 21 June 2005

1554—Flam Crew spends the afternoon peeping in the drainage S of last year’s CN1 drainage where “Victor Victoria” was heard. We find CN2 F in *Potr* cavity tree CN2\_926 in a bear torn hole (~8 inches tall and 3 inches wide) facing W and about 25-30 feet off the ground.

Cavity Specs:

Entrance dim: 5.5 x 16.0 cm Entrance thickness: 3.0 cm

Horiz. depth: 13.0 cm Vert. depth: 20.0 cm

2301—EE and DF return to nest tree to attempt to capture CN2 male. As we approach the F is out of the cavity.

2304—M makes PD to F out of cavity. F gives FSC. F flies back into cavity. DF begins to set up net for capture.

2306—M makes PD to F in cavity. No vocalizations.

2320—MS and SY enter CN2 area to spot map any male flams heard. Clear skies above with light clouds in far west, 15 deg C. and periodic light winds rustling tops of aspens. MS goes W of Turkey Creek Campground up onto a slight ridge and SY heads SW of campground.

2328—M attempts 3 PD but aborts due to our presence.

2329—SY gives hoots.

2333—M makes PD (stayed in hole ~ 1min) and FD attempts to capture. No success.

2338—MS gives hoots.

2344—MS and SY leave after not hearing any singing male flams.

2405—EE and DF leave.

## 24 June 2005

2033—DF and EE arrive to try to capture both the F and M at the CN2 nest.

2038—DF has net over cavity.

2046—M calls off roost about 100m to the east.

2048—It begins to rain lightly so we take the net down.

2100—Rain stops so we have net over hole and peep it. F is still in the hole.

2101—M is giving TC about 30m to the W.

2116—F flushes into net but escapes.

2117—F calls from W 1 time. We peep the nest cavity and find 2 eggs in the middle with no signs of hatching.

2118—We leave a short distance to give the F room to return and return later to attempt to capture M.

2137—F returns to cavity and descends.

2143—M makes prey delivery (attempted capture).

2151—We leave due to encroaching lightning.

## 28 June 2005

2030—DF and EE arrive to attempt to capture both CN2 F (band) and M (band and bleed). It is lightly raining so we wait before attempting capture.

2045—M calls off roost from SE about 50m away.

2046—DF has net over hole.

2053—M lands about 2m from cavity with a Lepidoptera in beak.

2056—M attempts prey delivery to F in cavity and F flushes into net. She is a new bird so we band her:

Band # 64440

100.0g

-21.5g

78.5g

LLP: 95mm

Rects: 57mm

WC: 138mm

We peep nest and find 2 eggs with 1 egg showing possible sign of being piped

2106—We release F and leave the area to allow F to return to cavity.

2132—We return to attempt to capture M.

2135—M makes LC and then makes prey delivery to F inside cavity. F gives FSC.

2145—M makes 2 attempts at prey delivery but aborts both times as DF attempts to capture.

2030—EE and DF arrive to capture F and M. It is raining lightly with light breeze to medium breeze.

2148—M makes prey deliv.

2150—M makes prey deliv.

2215—M makes prey deliv and is captured, but escapes after 2 min. before net is retrieved.

2220—M makes prey deliv.

2229—M makes prey deliv and is captured, but escapes in less than 1 min.

2325—M makes prey deliv and is captured.

2330—M out of net. Previously unbanded, and given Band #64441.

Band #64441 LWC: 132mm

76.0g LLP: 92mm

-22.5 Rect: 55mm

53.5g

2345—M released after bleeding, we leave.

## 14 July 2005

2030—EE and DF arrive to capture F. Storm approaches, moving overhead. Wind with strong gusts. 21C.

2033—Net up.

2036—Tree tapped, no sign of F.

2044—M perches in Potr SW of nest. M is molting. Moves to two other perches.

2050—M flies off to E.

2101—M gives LC’s from perch S of nest.

2105—M flies off to E.

2108—M back on perch, gives LC’s.

2112—M attempts 2 prey deliveries, taking a perch after aborting each.

2113—F captured, but escapes. F flies W, and M follows.

2114—Nest cavity peeped, finding 2 owlets completely in white natal down, eyes barely open. We leave.

## 15 July 2005

2015—SY and DF arrive to capture F at the CN2 nest. Clear sky with occasional light gusts of wind. 19C.

2036—Net up. Tree is given a strong tap, but no F.

2050—Tree is given strong tap, but no F.

2054—Tree is given strong tap, but no F.

2055—M gives LC’s from S of nest, then perches in *Potr* SW of nest.

2058—M flies off to SE.

2059—Tree is given strong tap, but no F.

2105—M gives LC’s from S, then perches on several different *Potr*’s around nest.

2107—F captured but escapes, flying off to SE. The M follows.

## 29 July 2005

0930—SY, MS, DF, and BL arrive at the CN2 nest to attempt capture of F and to capture/band/bleed owlets. F is in the entrance as we approach, and she flushes as we raise the net. We peep the cavity—both owlets still there and appear close to fledging.

0945—BL somewhat foolishly climbs the nest tree and removes the owlets.

Band # 64478 Band # 64479

78.5 g 75.0 g

- 16.5 g - 16.5 g

62.0 g 58.5 g

LLP: 65.0 mm 51.0 mm

Rect: 37.0 mm 18 mm

0951—After bleeding owlets, we return them to cavity. #64478 appears to be ready to fledge tonight (~22 days old) or tomorrow night, while its sibling (~18 days old) will probably fledge in 4-5 nights. We leave.

# CN2—2006

## 8 June 2006

2153—BL arrives at the CN2\_2005 nest tree (CN2\_926, tag # 926), and observes what may possibly be a *Otfl* flying through the nest area from E to W.

2154—I then observe a M *Otfl* perched (he later vocalizes) in a *Pipu* snag approximately 10 m to the W of the 2005 nest tree.

2156—M flies to a cavity approximately 3 m above the 2005 nest cavity and delivers prey to F—**this is the CN2\_2006 nest**.

2206—M delivers prey to F, giving LC as he approaches. No apparent vocalization from the F, although a stout breeze is blowing. M approaches and leaves to the SW.

2230—M made a total of 7 prey deliveries to the F from 2206-2230. I leave for CN1 territory.

2250—KC and EE enter the nest site to capture the M.

2306-2325—We see 7 prey deliveries, one occasion of which the M flew into our net, but bounced back out. He did not return, but we heard some TEC’s shortly after he escaped to the S.

2418—After no more prey deliveries, we leave the nest site.

## 16 June 2006

2038—BL arrives at the CN2\_2006 nest to attempt capture of F. I raise the capture net at this time.

2054—M calls off his roost to the S of the nest.

2059—M enters nest site, giving a few LC. He flies off without approaching the nest tree.

2120—F flushes the cavity into the capture net. F was previously banded—band # 64440—this was the CN2\_2005 F.

94.0 g LWC: 128 mm

10.0 g LLP: 102 mm (primaries well worn, especially on the tips

84.0 g #10 primary is broken off about mid-shaft

2127—F released (peeper not available to peep clutch size). M calling in nest area. I leave.

## 30 June 2006

2045—EM and SY arrive at CN2 nest site to peep contents of nest and to attempt capture of the M.

2046—SY taps tree, F rises to the entrance.

2048—F flushes, we peep: At least 2 nestlings (probably 3) still in natal down, egg tooth visible.

2052-2139—We observe 7 PDs by the M before the F returns to cavity at 2139.

2141—Net in capture position.

2152—PD, capture attempt.

2157—Aborted PD.

2158—PD, capture. This M is previously unbanded.

New Band #64506 We bleed this male.

65.0g

-16.5g

48.5g

LWC: 133mm

LLP: 94mm

Rect.: 59mm

2218—While holding this male we hear a location call from the immediate vicinity of the nest.

2219—We release the M and leave.

## 11 July 2006

2032—EM and SY arrive at the CN2 nest site to attempt capture of all adults. Weather: 30% cloud cover, calm, 18 C.

2037—Net in capture position for the F. (29’ 7”).

2038—I tap and F rises to cavity entrance.

2041—F flushes into net but escapes through a hole. We peep: 1 owlet present in gray juvenile plumage with a little white down on the periphery of the plumage.

2053—After giving several HECs M makes a PD (grasshopper) while a second bird is perched silently in the site. The non-PD bird exits to the E and the M follows.

2057—PD, no vocalizations.

2103—Net in capture position.

2132—A bird flies in from S, lands on a *potr* snag 2m W of nest tree. .The bird then exits the site to the E.

2154—Net is lowered to allow for a PD as nestling has been begging loudly for approx. 45min.

2200—PD.

2205—PD, capture. This MALE was banded on the last visit—this is the CN2 male, banded on 30 June. Net is immediately returned to capture position.

Band #64506

62.0g

-16.0g

46.0g

LLP: 99mm

Rect.: 63mm

LWC: 131mm

I hold this bird to induce a 2nd M to make a PD.

2235—M is released, flies N.

2305—We drop net and leave.

OTHER ENTRIES??

# CN2—2007

## 31 May 2007

2340- BL and CB arrive at CN2 searching for nest. 40 % cloud cover, still, 12 C

2345- M gives LC 20m to South. (Presumably PD at the Nest)

2350- Nest cavity discovered upon tapping, female rose to the entrance. (CN2\_926, tag # 926) **This is the CN2\_2007 nest**. Same nest cavity from 2005 and 2006.

2405- Female has remained in entrance since discovery, we leave.

## 8 June 2007

2035—BL arrives at the CN2 nest to attempt capture of F.

2038—Capture net in place.

2040—M calls off roost approximately 70 m down drainage (to W).

2045—I see F peering down at me from the cavity through the net.

2057—Capture F as she attempts to leave cavity. She is previously banded—Band # 64440; this is the CN2 F from 2005.

2100—I release F, and after a couple of minutes of gathering equipment, vacate the area. I leave for CN1 territory.

## 15 June 2007

2103—BL arrives at the CN2 nest to attempt capture of M.

2116—F returns to cavity (she apparently had still been off the nest when I arrived).

2119—M delivers prey to F in cavity (M gives a few LC upon arrival; F responds with 1-2 FSC).

2122—Same.

2126—Same. At this time, I am in process of setting up capture net.

2200-2215: Both the resident M and a UFO were in the nest site, with the resident M giving HEC’s. The UFO perched on the limb of a *Potr* adjacent to the cavity on a couple of occasions, and also flew across the nest site on a couple of occasions.

2217—M delivers prey to F in cavity, evading the capture net in the process.

2220—F leaves the cavity, apparently of her own volition.

2231—I leave.

## 26 June 2007

2300—CB and EM arrive at CN2 nest tree to observe nest activity and try to capture M.

2335—We leave nest tree. Nothing seen nor heard.

## 28 June 2007

2236—KB and EM arrive at CN2 nest tree to attempt to capture M.

2240—KB has net prepared for capture.

2307—EM peeps cavity. Nothing visible. **CN2 nest has failed.**

# CN2—2008

## 13 June 2008

1740—Flam crew enters CN2 territory to peep/tap and initiate nest search.

1805—Without luck, flam crew leaves CN2 to have a picnic.

## 19 June 2008

1430-1630: Flam crew arrives in CN2 territory to continue nest search in the CN2 drainage E of the CN2\_2007 nest tree. Nothing found.

# CN2—2009

## 28 May 2009

2035—BL and SR arrive on ridge between CN\_1 and CN\_2 territories and set up lure net. Weather: ~30% cloud cover, calm, 8C. GPS: X=480711, Y=4330186, +/- 5 m.

2103—Playback started.

2106—TC from the W.

2107—TC move to the N and sounds closer. Possibly CN\_1 M.

2108—TC stops abruptly and BL leaves to checks net.

2130—BL leaves to tap cavities in the bottom of the CN1 drainage.

2145—TC close from the N briefly. Becomes fainter within a couple minutes.

2206—Back at the lure net, Faint LC from the N.

2215—BL moves into the CN2 drainage.

2222—TC from the N.

2241—FLOW snagged in lure net, W facing side, 3rd shelf from bottom. No TC beforehand.

2249—FLOW freed from net.

**Band # 64632 This bird is the CN\_2\_2008 M,** that SC and BL captured/banded in the lure net last year.

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83.5 g LWC: 130 mm

- 29.5 g LLP(5): 95 mm

54.0 g LLP(6): 103 mm

Rect: 59 mm

2317—FLOW released.

2343—We leave to listen in creek bottom in CN\_2 territory S of lure net.

2350—BL and SR hear CN2\_M giving LC due S of the CN2\_2007 nest area—we pursue and find M and F (she gave sporadic, quiet FSC) in same tree on the mid-slope.

2354—We observe M and F copulate.

2359—F flies downslope (N) and we lose her, but hear her giving FSC in the *Potr* bottom a few minutes later. We are unable to locate her exact position, but she follows a somewhat circuitous path until in the *Potr* bottom, just S of the 2007 nest, until we leave her at 2430. F probably not yet incubating—she may still be finishing her clutch. We see band on M but not F.

2430—We leave.

## 4 June 2009

2126—SC, Leath Tonino, and BL set up lure net ~100m east of lure net from last week on the ridge between CN1 and CN2 territories. We start playback at this time.

2127—We hear M giving TCs from just north of the lure net.

2129—FLOW is captured in the net—top shelf on the N side of the net.

2131—Bird out of net. **This is a previously banded owl—band # 64632. This is the CN2 2008 M, captured in the lure net in 2008, and who apparently did not nest that year.** BL and SR caught this bird last week.

83.5g

29.5g

54.0g

2136—M TC’s from the North.

2147—CN2\_2008 M is released.

2150—SC and BL leave the lure net, manned by Leath Tonino, to check cavities in the CN2 drainage.

2201—We tap on the CN2\_2007 nest tree (CN2\_926, tag # 926), and F rises to the entrance—**this is the CN2\_2009 nest tree!** Nest cavity also is the same as in 2007.

2202—F descends in the cavity.

2204—M arrives in the nest area giving LC, and apparently makes a PD at this time, although we don’t see him exit the cavity. BL leaves to get the capture pole at the lure net.

2227—BL returns with capture pole (no PDs by the M in the interim). SC attempts to raise the net, but the F immediately flushes from the cavity.

2229—M arrives in nest area giving LC, but leaves after flying to cavity entrance.

2232—F returns to cavity.

2233—M makes PD in the cavity.

2242—M makes PD in the cavity.

2243—Same. SC prepares to get in capture position.

2256—SC in capture position with net raised.

2310—F flushes cavity as M arrives in the nest area giving LC. We leave to return to the lure net, as Leath reports an unbanded FLOW in the net.

2321—We extract the unbanded FLOW from net, and band him: band # 64653.

84.5 g LWC: 133 mm

- 29.5 g LLP(5): 100 mm

55.0 g LLP(6): 108 mm

Rect: 61 mm

We bleed bird on right wing. Large hematoma.

2339—Net checked. Net is empty.

2347—Release bird. We break down the lure net and leave.

## 11 June 2009

2040—SC and BL arrive at the CN2\_2009 nest tree to attempt capture of F. PC, calm, 11 C. M calls off his roost on the ridge to the WNW at this time. F ascends to cavity entrance as net is raised, then descends after ~ 2 min. SC gets net in capture position.

2055—F flushes as net is moved from cavity to adjust position.

2101—**We peep and find 3 eggs in the center of the cavity.**

2108—F returns to the cavity.

2113—M arrives in the nest area, and without vocalizing, makes PD in the nest cavity.

2128—SC gets into capture position (**net is at 29’ 7”**).

2131—M makes PD in the cavity. SC covers the cavity entrance, and M peers down at us from the cavity entrance as the F gives FSC from the bottom of the cavity.

2134—M finally flushes into the net!

2137—We remove M from net—he is previously banded; **band # 64632. This is the CN2\_2008 M, originally captured/banded in the lure net in that year.**

76.0 g

- 19.5 g

56.5 g

2143—We release M, and leave for CN1\_2009 nest.

.

## 18 June 2009

~2100—SY and SC arrive CN2 nest to capture F.

2101—As SY raises net we hear F beg possibly from cavity although it sounds like it may be

from nearby tree. It is likely that she flushed before we arrived.

2110—SY covers net over cavity hole.

2115—SC peeps cavity to confirm that this is in fact the correct cavity and that F has already

flushed for the night. F is not on cavity and **there are 3 eggs center touching. No**

hatching yet.

2120—We leave and head for CN1 nest to capture M.

## 30 June 2009

2030—SC, BR and KB approach the CN2 nest tree to capture the Female. Female is up. Weather: Clear, calm, 20 C

2036—F down.

2041—BR approaches the tree and begins raising net.

2046—**F flushes into net. New band # 1593-64688.**

Mass: 74 grams

Tear: -20 grams

54 grams

2048—KB peeps nest tree. 2 nestlings:

1: Gray plumage on back eyes open, similar to Red at A2.

1: Small, white, looking down, perhaps eyes open?

2054—Release, flies SE and we hear F vocalizations.

## 10 July 2009

1451—SC, JG, SR, Andy, Sasha and Carson arrive CN2 nest. **We peep CN2 nest. Cavity is empty. No evidence of egg shells. It is most likely that the nestlings have already fledged. It appears that they have fledged prior to the estimated date of fledging of July 12.** We leave.

# CN2—2010

## 18 June 2010

2052—DW and SY arrive in CN2 to listen for nesting vocalizations and search for a possible nest.

Weather: 18C, calm, mostly clear

2056—SY taps cavity tree #923, past nest tree. F flushes from an unseen cavity, flies ~10m WSW to a pipo. **This is the CN2\_2010 nest.** We back off to let F back onto cavity.

Cavity is ~35 ft. high, W facing in potr snag (old CN2 nest cavity). Tree is near bottom of drainage (pretty much the last aspen in the drainage), surrounded by dense young aspen.

2122—We can hear F give LCs and FSCs from the vicinity of the nest.

~2136—M comes in and makes PD preceded by LCs and FSCs. We discover exact nest cavity location.

2140—SY fully extends net. We hear FLC followed by FSC from the cavity and TCs from the M.

2141—M moves away a bit, TCs at noisy campers in the distance. F stops FSCs.

2149—SY captures CN2 M during PD preceded by lots of FSCs from F and some LCs from M.

He is previously banded. **Band #1593-64759**.

This M was captured in lure net on ridge dividing CN1 and CN2 28 May 2010. He was

banded and suspected to be CN2 M.

84.5 g LWC: 131 mm

- 27.0 g LLP(5): 101 mm

57.5 g LLP(6): 109 mm

Rect: 64 mm

M is molting P2 and P3 on both wings. Both feather are still in shaft.

2205—Release – strong flight W ~10m to a pipo. We leave and head to CN5/11.

## 29 June 2010

2038—DW and BL arrive at the CN2\_2010 nest to attempt capture of F. Weather: mostly cloudy, slight breeze, ~ 21 C.

2048—DW starts to raise the capture pole after debating which cavity is the nest cavity (we confirm it is the upper cavity (30’ 4”) rather than the lower bear-tear—this upper cavity also was the cavity previously used for nesting by pairs in this territory.

2054—Net is in place. BL taps tree, but initially there is no response.

2055—**F rises to the entrance and flushes into the awaiting net—she is previously unbanded. We band her with Band # 1593-64762 (r leg). We also peep the cavity at this time (with Ron) and see 3 eggs, one of which *possibly* was in the process of hatching—but this was quite uncertain.**

2101—We release F and leave the nest area.

2103—We hear M giving LC in the nest area.

2107—We leave.

## 12 July 2010

2243—BG and SY arrive at CN2 nest to attempt to capture the M in order to affix a geolocator.

2246—Net in capture position (30’ 5”).

2315—**We peep after hearing no evidence of nesting behavior. Nest has been predated and contains eggshells and 1 flicker feather.** As we raise peeper we hear a few TCs from M.

2327—SY and BG leave CN2.

# CN2—2011

## 3 June 2011

2105—After setting up lure net on ridgetop between CN1 and CN2, SY begins tapping and listening in CN1 drainage. AW begins tapping and listening in CN2 drainage.

2112—Playback started. PS remains at lure net.

2120-2138—SY taps on nd observe the CN1\_2010 nest – no activity.

2155—SY returns to ridgetop to assist with net, no activity heard in CN1 drainage.

2127-2225—TECs and HECs heard from all directions around net. M seemed to be favoring the CN2 side of ridgetop.

2145—Possible 2nd M heard. Goes quiet within 1 minute.

2146—AW hears 1 TC in CN2 drainage SE direction on slope.

2205—AW returns to net.

2214—M Great Horned Owl approaches net. F Great Horned Owl responds shortly thereafter.

2225—M FLOW caught in 2nd shelf as it moved from SW direction moving NW.

2229—AW and SY hear Tcs from W of net down ridgeline.

2242—PS releases bird strong ascending flight towards CN2 territory.

2255—TCs and TECs heard at net again most likely from M that was just banded.

2300—Playback stopped, break down net and leave territory.

Band # 1593-64854 (on left leg)

71.0 g LWC: 133 mm

- 15.0 g LLP(5): 96 mm

56.0 g LLP(6): 103 mm

Rect: 64 mm

Vegetation: Doug Fir and Ponderosa Pine Forest

Weather: Calm wind, Clear sky, Temp: 5C

X: 480703

Y: 4330149

+/- 5m

## 10 June 2011

~1600—Begin peeping CN2 cavity trees.

~1800—Leave CN2 after peeping all cavity trees, no 2011 nest found.

# CN2 – 2012

## 30 May 2012

2035—CC, JR, PPS, and BL arrive on the ridge separating the CN1 and CN2 territories to set up lure net and to listen for nesting activity. We set up the lure net just over the S-facing crest of the ridge in the vicinity of the saddle. Weather: mostly clear, mostly calm, ½ moon in near middle of sky, 12 C.

X: 480702

Y: 4330150 +/- 3 m

2051—Lure net set-up is complete.

2057—We hear M start to give TC several hundred meters to the N—CN1 or CN3? A couple of minutes later, we then hear a higher-pitched M giving TC to the SW approximately 150 m distant. Both Ms sing for 5-7 minutes.

2100—We start playback.

2107—M starts giving HECs from ~ 20 m S of the net. He continues calling, and passing back and forth over the net, for the next ~ 20 min.

2123—Higher-pitched M starts giving TCs again to the SSW.

2125—PPS and BL leave the net area to go listen for nesting activity in the CN1 drainage.

2127 – M starts giving TCs and TECs from the CN1 drainage.

2133 – M went silent

2140 – M gives more TCs.

2143 – M gives HECs towards CN1 drainage.

2209 – TCs and HECs towards CN2 drainage.

2214 – **CN1 M caught**; 2nd shelf flew in from the S.

2217 – Playback turned off.

**Band # 1593-64854** (on L leg)

**(NOTE: The band number in this entry was previously listed as 1593-65854 but we believe this is a typo. ON 7/30/2018)**

90.0 g LWC: 133 mm

- 29.0 g LLP(5): 95 mm

61.0 g LLP(6): 105 mm

Rect: 62 mm

JR bled left wing – small hematoma.

Blacklight: P1-5 pinkest, P6 very little, P7-10 some pink. Photos taken.

2251 – M released; strong ascending flight towards CN1.

2253 – Playback started.

2317 – **Silent unbanded male caught**; 4th shelf; flew in from the S.

**Band # 1593 – 64877** (on R leg)

86.0g LWC: 135 mm

- 29.0g LLP(5): 96 mm

57.0g LLP(6): 105 mm

Rect: 60 mm

JR bled right wing, after trying left.

Blacklight: P1-4 pinkest, P6-10 some.

2350 – BL hears F vocalizations in the area of the net; LCs first followed by FECs. Both were of short duration – 15 seconds or so. (GHOW in background to the S.)

2400 – FEC heard again.

2401 – M released, strong ascending flight towards CN1.

2420 – Turn playback off, break down net, and leave.

## 05 June 2012

1500—Crew arrives to peep CN1/CN2. Splits into two groups, one goes into CN1 while the other goes into CN2. All trees were peeped.

1715—All crew members leave area.

# CN2 – 2013

## 30 May 2013

2122—AW, NS, and RC start playback at net site between CN1 and CN2. We are on the eastern end of the ridgetop that divides CN1 and CN2.

Vegetation: Mixed psme/pipo, open.

Weather: Mostly clear, calm, 8°C.

X: 481020

Y: 4330190

+/- 3m

2141—As AW and RC prepare to listen in CN1/2, we find **unbanded silent M in 3rd shelf of net, coming from the NE. (A second capture of this bird in CN1 confirms his identity as a CN1 floater).** We band, bleed, and blacklight the bird. Blood sample was taken on L wing; medium hematoma present after bleeding stopped. NS has blacklight photos.

**Band # 1593-64887 (on L leg)**

81.0 g LWC: 127 mm

- 28.5 g LLP(5): 95 mm

53.5 g LLP(6): 105 mm

Rect: 58 mm

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Blacklight, R wing, 0-3 | Blacklight, R wing, 0-5 | Wear, L wing, 1-3 | Wear, L wing, 1-3 |
| 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| 2 | 1 | 1 | 1 | 1 | 2 | 2 |
| 3 | 1 | 1 | 1 | 1 | 2 | 2 |
| 4 | 2 | 3 | 2 | 3 | 2 | 2 |
| 5 | 2 | 3 | 2 | 3 | 1 | 1 |
| 6 | 3 | 4 | 3 | 4 | 1 | 1 |
| 7 | 3 | 4 | 3 | 4 | 1 | 1 |
| 8 | 3 | 4 | 3 | 4 | 1 | 1 |
| 9 | 3 | 4 | 3 | 4 | 1 | 1 |
| 10 | 3 | 4 | 3 | 4 | 1 | 1 |

2145—As we process silent bird, TCs begin from E of net. Bird seems to be coming from CN1. TCs move close to net, then stop after ~10 min.

2217—AW and RC leave net site to listen along ridgetop while NS remains at net site. AW and RC listen for ~40 min in CN1, then ~20 min in CN2 without hearing anything.

2321—After hearing nothing, AW and RC return to net and stop playback.

2333—After net is broken down, AW, NS, and RC move upslope to listen in direction that M

was previously calling.

2345—AW and RC continue into CN3 to attempt to spot map the territory.

2445—AW and RC leave CN3 without hearing anything.

## 19 June 2013

Afternoon—Flam Crew peeps in CN2.

# CN2—2014

## 20 June 2014

Afternoon—Flam crew peeps CN1 CN2 and CN3. We peep out the majority of the trees and do not find any nests.

# CN2—2015

## 12 June 2015

~2130—DL, BL, and MC arrive in CN1 territory and begin to tap and listen, attempting to find a potential CN1\_2015 nest. We hear and see nothing.

2205—We arrive on the CN1/CN2 saddle to set up a lure net. Before we set up our net, BL gives a few hoots and a M to the N responds with TCs and TECs—this is probably CN1 M.

2217—We begin PB.

Vegetation: young-mature pipo/psme

Weather: clear, calm, 11C

X: 480704

Y: 4330146

+/- 3

2227—**Capture a silent, banded bird in the 2nd shelf from the W—band # 1593-64887; this M was banded as a CN1\_2013 floater (NOTE: while banded as a ‘floater’, this likely just reflected he was silent coming into the net. He may very well have been the CN1\_2013 territorial male, but since we never found a CN1\_2013 nest, we never captured him anywhere else that year).**

**Band # 1593-64887 (on L leg)**

63.0 g LWC: 128 mm

- 7.0 g LLP(5): 96 mm

56.0 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2 | 2 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | .5 |
| P2 | 0 | .5 |
| P3 | 0 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2249—M is released. He has strong ascending flight to the NW. While we processed this bird we also had another M giving TCs from the S (possibly CN2 M?).

2252—BL and MC leave to go listen. BL goes to CN1 territory and MC goes to CN2 territory.

2300—MC hears a M giving HECs immediately S of the net in the bottom of the CN2 drainage. As MC approaches the M flies into an overhead tree giving HECs.

2330—Multiple birds have been calling, so DL switches the playback to the *Megascops* call on PB #3. The presumed CN2 M quickly comes into the net site giving HECs. This is in the vicinity of a couple cavity trees near tree #1526, he then flies up drainage.

2306—A second M begins calling up drainage to the E (CN6 M?) from the presumed CN2 M. The first male begins giving HECs, **MC hangs songpost CN2\_1.** The upper drainage M makes a short flight closer giving one encounter call then flies back up drainage.

2318—MC now chases the upper bird further up the drainage. **I hang songpost CN2\_2.**

2333—**While the presumed CN2 is calling ~ 20 m to the SE of the lure net, we capture a silent, unbanded bird—we refer to him as a CN1 floater at the time. He came in from the W and was in the 3rd shelf.**

**Band # 1833-03242 (on L leg)**

61.5 g LWC: 134 mm

- 7.0 g LLP(5): 102 mm

54.5 g LLP(6): 112 mm

Rect: 67 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2.5 |
| P2 | 2 | 1 |
| P3 | 2 | 1 |
| P4 | 2.5 | 1 |
| P5 | 2 | 1 |
| P6 | 1.5 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1.5 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

Note—We took a genetic blood sample and M had a moderate L wing hematoma.

2343—Recapture 1593-64887. CN2 M is still giving HECs at the net.

2346—Stop playback.

2352—M is released, strong ascending flight to the W. We take down the net and leave.

## 19 June 2015

Afternoon—Flam Crew peeps cavity trees in CN1, fairly thorough coverage. Crew crosses S ridge and peeps a few CN2 trees. No nests found.

## 26 June 2015

2040—SY and LP arrive to top of R between CN1 and CN2 with intent to lure CN1 and/or CN2 territorial M.

2048—Lure net set up. PB started. Net opens N/S.

Vegetation: young-medium psme, medium-mature pipo. Fairly open.

Weather: calm, overcast, 17C

X: 480958

Y: 4330175

+/- 9m

2051—M giving TCs and TECs comes into net area from CN1 drainage (N of net) ~60 m away. He continues to vocalize until ~2059.

2100—SY leaves net area and goes E up R to listen and tap.

2110—TCs heard again in CN1 drainage in similar location to when he was heard at 2051, except this time he seems to be a bit further E than before. He comes into net area at this time from NE. Gives some HECs too.

2117—**Banded M in net from S. 2nd shelf. He gives TCs and TECs prior to hitting net.** LP sees bird fly from mature pipo (~10m S of net) into net. **This is the previously caught CN1\_2015 M.**

\*Note: *Only measurement taken is mass because this M was caught earlier in season.*

**Band # 1593-64887 (on x leg)**

80.0 g

- 29.0 g

51.0 g

2118—SY returns to net site.

2123—#**1593-64887** is released with strong ascending flight to the S.

2125—M giving TCs in net area. This is assumed to be the CN1 M that was just captured. This M continues to vocalize with TCs and TECs in net area for the remainder of the time that the PB is on.

2135-2158—SY does a loop through lower CN6/upper CN2 listening and tapping. Nothing heard.

2202—PB off. Lure net is taken down.

2208—TECs heard on upper slope ~30 m SW of net location as we finish taking down net. We hear simultaneous TCs from low in the CN1 drainage meaning this is most likely the CN2 M. We leave area at this time to drive to CNG1.

# CN2—2016

## 7 June 2016

~2030—KM, ER, and MC begin listening in the C1/C2 territories. KM stays in the NE drainage and listens for calls. MC and KM hear PYOW and GROW and a handful of planes for the first ten minutes.

2038—ER starts listening for nesting vocalizations in the CN2 drainage below the doghair aspen thicket around the first cavity trees. Between planes, domesticated dogs, and coyotes, the listening conditions are very poor.

2040—KM hears two TCs in the C1 drainage N of the 6/2/16 lure net site. The FLOW goes silent. KM taps the cav trees in the vicinity of the calls but does not see or hear any FLOWs.

2048—ER hears the CN2\_M give TCs on the S-facing slope at the W end of the drainage below the aspen. I follow. The M continues moving E up drainage on the S-facing slope. TCs for ~3 min.

2111—As MC is walking along the CN1/CN2, near the saddle point where we lure net and cavity tree #3010 he hears a M LC ~30m N down slope. He gives chase. The M gives more LCs and a F responds with LCs. Then, a series of planes and coyote calls obscure the FLOW calls and I lose the pair.

2125—After not hearing more from the CN2\_M and tapping nearly every cavity tree in the drainage, ER gives a couple hoots. The CN2\_M picks back up with TCs from the N-facing slope, at the W end of the aspen thicket. I pursue, but don’t pick anything else up.

2155—KM, MC, and ER meet on the saddle between CN1 and CN2 to set up a lure net to target both territorial males and any possible floaters. The net opens in an N/S direction.

Vegetation: Mixed age pipo and some psme

Weather: Mostly clear, calm, 7C

X: 480683

Y: 4330128

+/- 13m

2158—A M gives TCs/TECs/HECs coming in from the CN2 drainage and ends about 40m S of the net.

2201—M gives TCs/TECs about 20m N of net.

2203—M gives a few TCs from the E, flies over net.

2205—**M hits net from S in the 3rd shelf. He is banded as the CN1\_2013 floater and CN1\_2015 territorial M.**

**Band # 1593-64887 (on L leg)**

83.0 g LWC: 132 mm

- 29.5 g LLP(5): 96 mm

53.5 g LLP(6): 106 mm

Rect: 62 mm

**Notes:** Bleed L Wing.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 3 |
| P4 | 3 | 3 |
| P5 | 3 | 3 |
| P6 | 2 | 2 |
| P7 | 2 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1 |
| P10 | 1 | 1.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1.5 | 1.5 |
| P10 | 2 | 2 |

2224—**Silent unbanded M caught in net from S in the 3rd shelf while we still have the CN1\_M in hand.** Most likely a CN1/CN2 floater.

**Band # 1833-03390 (on L leg)**

90.0 g LWC: 128 mm

- 30.0 g LLP(5): 94 mm

60.0 g LLP(6): 103 mm

Rect: 62 mm

**Notes:** Bleed L wing, small hematoma.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 1.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1 | 1 |
| P6 | 0.5 | 0.5 |
| P7 | 0.5 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 2 | 2 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 2.5 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

2232—M gives a few TCs W while we have the CN1\_M and floater in hand.

2233—M gives a few TCs from the CN1 drainage about 40m N of the net.

2240—M goes quiet.

2245—Release the CN1\_2016 M (**1593-64887**) with a SAF W.

2304—M gives TCs/TECs about 40m N of the net.

2307—Release the floater (**1833-03390**) with a SHF N.

~2315-2345—M gives occasional TCs from the CN2 drainage isolated to the main patch of cavity trees. MC and ER alternate trying to walk the PB down the slope to draw him in. When MC has the PB under his tree, he begins responding with HECs, but never budges. We decide to move the net to target the CN2\_M.

2355—PB off. We break down.

2402—We set up a net in the drainage bottom in a thicket of aspen about 20m N of the tree that the M was singing in, about 20m E of the start of the aspens.

Vegetation: Young potr, dense.

Weather: Mostly clear, calm, 6C

X: 480747

Y: 4330188

+/- 16m

~2435—After too long of silence, the M picks up around his original perch about 20m S of the net. We try to hoot him in to the net, to no avail.

2445—PB off. We leave.

## 17 June 2016

Afternoon—Flam Crew does a thorough peep of cavity trees in CN1 and CN2 in hopes of finding a nest. **We find the CN1\_2016 nest tree!**

## 8 July 2016

1626—BH, ER, and DL leave CN1\_2016 nest to peep trees on ridgetop and tap around in CN2 dr.

~1705—We leave CN2 dr. after finding no FLOW nest.

# CN2—2017

## 6 June 2017

Afternoon—Flam crew cherrypeeps in territory. We hit all known past nests and any good cavities that we saw along the way.

1630—**BL peeps the POTR full snag cavity tree (#1508), and observes a FLOW in the bottom of the cavity—this is the CN1\_2017 nest tree! Nest cavity is NOFL excavated, 40’0” from the N side of the tree (~41+’ from down-drainage side), and cavity faces 300 deg. F did not respond to a tap, and stayed down when the camera was removed. Nest tree is the farthest up-drainage (to the E) of any POTR cavity tree in the CN1 drainage, and is located in the bottom of the drainage, which bifurcates at this point at the base of an intervening ridge. Nest tree is also ~ 60 m up-drainage of the E-most POTR cavities of the past (which are now on the ground).**

2030—BL and JE park at the CN1/CN2 parking spot and begin walking towards the CN1\_2017 nest.

2043—BL and JE arrive at CN1\_2017 nest and silhouette the tree from ~16m NW. F is down.

2107—JE sees F flush nest towards the W, down drainage.

2111—**BL peeps the nest to find a full clutch size of 3 eggs in the center of the cavity!**

2112—F almost immediately returns to nest area and perches on the N limb on lowest branch directly above the nest cavity.

2113—JE sees F flush S, out of the area of the nest cavity.

2122—BL and JE leave to set up lure net—F had not yet returned to the nest at this time. Throughout the time spent observing, no vocalizations were heard from either a M or the F. No PDs were observed.

2200—Lure net is set up on the middle ridge between CN1 and CN2, adjacent to the saddle. At this time, the PB of T42 begins.

Vegetation: Mature pipo/psme with net flanked by sub-mature psme.

Weather: mostly cloudy, slight breeze, 12C.

X: 480718

Y: 4330143

+/- 3m

2109—M HECs are heard by BL and JE, originating from the SE.

2212—JE sees M fly W, towards the net. M continues giving HECs as well as less aggressive TCs somewhat continuously for an extended duration, essentially circling the net site from a distance. M calls are heard from both the CN1 and CN2 sides of the ridge, with a majority of the calls heard from the CN2 side, as far as 150m S.

2254—BL and JE hear M giving TCs approximately 15m N. This is the closest the M approaches.

2257—M calls are no longer heard.

2300—PB ends and lure net is taken down.

2308—BL and JE leave site to return to the car.

2320—BL and JE head for CN8. **NOTE: We were uncertain whether it was the same M that responded during our time at the net, or possibly two MM (CN1 and CN2). However, we never heard more than one male at a time.**

# CN2\_2019

## 6 June 2019

~1430-1700—Flam Crew (minus BL) enter CN1 and CN2 to cherry peep in hopes of finding a nest. We spread out along the main CN1 drainage, the CN2 drainage, and check most of the trees N of CN1 along the road. Past nests were checked (except for #1322) and past nest trees that were found to be fallen were #1371 and #777. Nothing was found.

# CN3—2004

## 4 June 2004

2200—Flam crew arrives in the vicinity of where BL heard TC on two previous occasions while performing the flam roadside census on the N Cedar Mtn Road (census pt #3). We spread out in an approximately 200 m radius circle and attempt to elicit calling.

2207—SY arrives at position 100m W of cars on top of very small ridge, almost immediately, TC heard from SSW seemingly atop ridge directly to the S.

2214—From atop ridge directly S of road SY hears TC continue in drainage approx. 250m S.

2220—Arriving at bottom of drainage SY hears 2 birds 1 very loud to the S with a distinct higher pitched not on the end of call. SY erroneously decides that this bird is not a flam. Original bird (C1/C2) is heard farther up slope to the N and farther W in a PIPO stand.

2224—SY songposts C1/C2 bird.

2240—Following KS’s request SY chases C1/C2 male to a tree upslope and N of KS’s songpost.

2250—BL pursues a M giving TC (hereafter labeled at C3) on the top of a ridge approximately 400 m SSW of the census pt. M gave a TC with a distinctive ascending tone on the end of the hoot, similar in pitch to a vocalizing F (like the M labeled as Victor Victoria in Hotel Gulch in the early 1990’s). I mark one songpost before he quiets.

## 11 June 2004

2212—SY arrives at W end of ridge N of the road to attempt spot mapping.

2214—Male gives a TC ENE of my position. I chase but do not locate bird.

2307—I find cavity tree in vicinity of where BL songposted C3 male (C3\_1). Cavity tree marked as C3 Cavity Tree. Broken top snag, slightly charred, GPS X: 481353, Y: 4330829.

2313—SY returns to original position and immediately hears C3 male to the E. I give chase but again do not locate bird.

# CN3—2005

# CN3—2011

## 17 June 2011

2213—AW, SY, and BG start playback on the ridge between CN1 and CN3. While setting up,

we hear a M giving TCs approximately 30m NE of the lure net. M comes in to the

vicinity of the net as soon as playback starts.

Weather: Calm, clear, 14C.

Vegetation: Mature psme/pipo with scattered young trees.

X: 480695

Y: 4330455

+/- 3m

2224—CN1 M starts responding to the playback.

2225—Both Ms give TECs.

2226—CN3 M retreats from net area to the NE. CN1 M is caught in the 3rd shelve and flew in from the E. *\*Note—SY watches CN1 M leave a psme and fly into the net.* We do not take any measurements because the CN1 M was captured the prior week on 10 June 2011.

**Band # 1593-64854 (on left leg)**

93.0 g

- 33.5 g

59.5 g

Molt notes: P1-P8 fluoresce very strongly. P9 fluoresces moderately. P10 has light fluorescence. Secondaries have strong and consistent fluorescence. *\*Note—Very little fluorescence at the base the retrices. Wings display symmetrical fluorescence.*

2239—M is released with strong flight to the SE.

2243—We hear the CN3 M approach the lure net and retreat to the NE.

2300—End playback.

## 24 June 2011

2112—As AW, EE, and BG enter CN3 territory to lure net for CN3 M. As we are setting up the

lure net on a spur off of the ridge between CN1 and CN3, we hear a M giving TCs to the W.

2119—Silent bird flies into vicinity of the lure net and perches in small psme.

2123—Silent bird flies into vicinity of lure net and perches while a territorial M is giving TCs

further down the spur to the W.

2126—AW, BG, and EE start playback on a spur off the ridge between CN1 and CN3. Net is

positioned on the top of the ridge. Territorial M continues to give TCs.

Vegetation: Mixed aged psme/pipo, minimal ground cover.

Weather: Calm, clear, 16C.

X: 480875

Y: 4330528

+/- 8m

2136—M is captured. M is previously banded and is a CN2 floater from 2008. He flew in from

the N and was caught in the 2nd shelve from the bottom. We believe this to be the CN3

M. BG bleeds left wing for smear.

**Band # 1593-64633**

94.5 g LWC: 135 mm

- 33.5 g LLP(5): 94 mm

61.0 g LLP(6): 103 mm

Rect: 66 mm

2136—We catch bat, after freeing him from lure net he flies into other side of net. We release again.

2205—M is released, strong flight to the NE.

2211—We stop playback and break down net. AW, BG, and EE leave to walk down into the CN3 drainage to listen for nesting vocalizations.

2255—We leave, having heard and seen no signs of flams.

## 8 July 2011

1542—Flam crew in CN3 to peep and hopefully locate CN3\_2011 nest.

1737—Crew leaves having peeped entire territory and having seen/heard no signs of Flams.

# CN3\_2011

## 12 July 2012

~1520—Crew arrives at CN3 to peep and find a nest.

~1650—Crew leaves CN3, not finding anything and having peeped every tree.

# CN3—2012

## 12 July 2012

2100—CC, NS, and AW start playback on the ridge between CN3 and CN1 attempting to capture a CN3 M.

Vegetation: young to medium pipo/psme

Weather: wind <5 mph, clear, 17 C

X: 480968

Y: 4330462

+/- 3 m

2114—AW and NS leave CC at the net to listen mid-slope to drainage bottom.

2124—TCs from heard directly down slope to the N. M appeared to approach net from the E and sang from the upper slope/ridge top.

2128—M goes silent.

2228—AW returns to net without hearing anything. She zig-zagged from the drainage bottom to the ridge top over the course of an hour and 15 minutes (spending significant time on the upper slope and ridge top) attempting to elicit scolding calls or vocalizations.

2230—End playback. We leave.

# CN3—2013

## 2 July 2013

Afternoon—Flam Crew peeps in CN3.

# CN3—2014

## 5 June 2014

~2045—AW, MC, and ER arrive at the CN1/CN2 parking spot with intention of listening for nesting vocalizations in CN1 and luring for CN1/CN2 Ms. We begin hiking into CN1 and it begins to hail, so we seek shelter to wait out storm cycle.

2133—After storm passes, we begin listening in CN1 drainage with AW furthest E, MC furthest W, and ER in between.

Weather: cloudy, relatively calm, 15C

~2205—No vocalizations heard. We leave drainage bottom to set up lure net on ridge between CN1 and CN2.

2215—Start playback. Lure net is located on ridge between CN1 and CN2 towards eastern end of territory.

Vegetation: open, young-old pipo/psme

Weather: calm, cloudy, 12C

X: 480911

Y: 4330172

+/- 8m

~2218—Just after playback begins, we hear single TC to our NW (from CN1 drainage bottom).

M gives another TC <50 m from net to the N.

2224—**M goes silent and MC checks net to find a FLOW in the bottom shelf. FLOW is**

**previously banded and was captured twice by AW in 2013 as a silent floater in CN1. Both times M was captured in 2013, a second, territorial M was heard in the vicinity of the net site but was never captured. During one instance, the territorial M was giving TCs in the net site while the CN1\_2013 floater was in hand. It appears this M may now be the territory holder in CN1 and this represents another instance of a floater becoming a territory holder in a subsequent year.** M flew in from the N. Blood was obtained in 2013 so no sample was taken.

**Band # 1593-64887 (on L leg)**

81.5 g LWC: 129 mm

- 28.0 g LLP(5): 95 mm

53.5 g LLP(6): 105 mm

Rect: 58 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2.5 | 2.5 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1.5 | 1.5 |

2245—M released.

2252—We decide to end playback and break down net due to increased lightening. We begin listening in CN1 drainage bottom to wait out storm.

2308—TCs heard from drainage bottom, near eastern edge of potr cavity trees.

2315—M continues to give TCs, this time further to E, up drainage.

2322—We pursue and M continues to give TCs from vicinity of upper clump of potr cavity trees.

2330—M responds to AW hoots from large pipo in drainage bottom located in upper clump of cavity trees.

2347—M moves to psme <25 m S and continues to give TCs.

2354—M goes silent.

2412—We hear nothing else and leave CN1 to listen in CN3.

2418—AW gives hoots from ridge between CN1 and CN3. ~2 minutes later, M responds to hoots from the ridgeline to our NW.

~2420-2446—M continues to call and respond to AW’s hoots. We follow him as he moves N, down slope towards CN3 drainage bottom. We obtain CN3\_1 songpost on him near the ridgetop from a live psme. No DBH is taken.

X: 480795

Y: 4330533

+/- 6m

2246—We obtain a general area songpost on CN3 M in group of psme on a low slope near the drainage bottom. **This confirms presence of a CN3\_2014 M.**

X: 480709

Y: 4330551

+/- 5m

2248—We end observation and leave for vehicles.

## 20 June 2014

Afternoon—Flam crew peeps CN1 CN2 and CN3. We peep out the majority of the trees and do not find any nests.

# CN4—2004

## 29 June 2004

2318—EP sees CN4 male in Douglas fir 10 meters south of Stump Road about 400 meters east

of starting point. This tree is in an aspen bottom. EP follows male for approximately

five minutes before he observes bird going to an aspen on two different occasions.

2325—Nest found. Nest in a knot facing north about 25 feet off the ground in a large POTR

located about three meters from Stump Rd.

2325, 2326, 2329, 2330, 2337, 2340, 2344, 2347, 2351, 2352, 2400—Prey deliveries. The

female is out of the nest for all of these deliveries after 2330.

2400-2430—EE attempts to capture male but he does not return. We leave.

## 1 July 2004

2251—EE and EP arrive at nest to capture male. Female off nest entire night.

2254—Prey delivery.

2255—PD.

2256—PD.

2305—PD.

2307—PD.

2314—PD.

2320—PD.

2324—Capture the male. He was previously unbanded—given BAND #92368.

Weight: 63 g

-12.5 g

50.5 g

LLP: 102 mm

Ret: 60 mm

WC: 132 mm

2334—Release.

2346—PD.

2348—Aborted PD due to presence of sheriff.

2349, 2356, 2358, 2405, 2406, 2408, 2422, 2426, 2428—Prey deliveries.

2430—We leave.

## 8 July 2004

2036—JM, KS, and EP arrive to CN\_4 nest. F is not in the nest cavity, we could hear owlets begging from the nest.

2037—Owlet rises to cavity entrance.

2048—Owlet goes down.

2102—M perches in Aspen NE of nest tree.

2103—M flies to Spruce E of nest tree.

2106—M goes back to Aspen NE of nest tree.

2108—M catches a moth right by nest entrance.

2110—M takes of to SW.

2114—M returns to Aspen NE of nest tree. M makes several calls, and tries to enter nest three times and then leaves.

2131—EP captures male but he gets out.

2134—M makes PD and gives TECs.

2137—EP catches M with band # 92368, and a blood sample is taken.

2227—M makes PD.

2228—Same.

2230—Same.

2231—Same.

2233—Same.

2236—Same.

2239—Same.

2242—Male makes 2 PD.

2245—M makes PD.

2248—Same.

2249—Same.

2251—Same.

2314—Same.

2320—Same.

2327—Same.

2328—Same.

2332—Same.

2339—Same.

2345—We leave. We did not see or hear the female during the entire time that we were at this nest.

## 11 July 2004

1030—BL arrives at CN4 nest to band and bleed young and F. However, F not in nest cavity.

1045—Nest cavity is enlarged with a saw, and **3 young are removed**. Eldest owlet is very active and continually attempts to run away—it’s probably going to fledge tonight.

entrance dimensions (h x v): 4.5 x 4.0 cm

entrance thickness: 4.5 cm

horiz. depth: 15 cm

` vert. cavity depth: 12 cm.

doh: 23 cm

Band # 64500 Band # 64410

*(NOTE: Previously recorded as 94410, but ES changed to 64410 after reviewing banded birds and deeming the former a typo. Banded birds shows three CN4 nestlings banded on 7/11/04: 64500, 64410, and 64411. Change made on 7/10/20)* Band # 64411

79.0 g 75.0 g 69.5 g

-17.0 -17.0 -17.0

62.0 g 58.0 g 52.5 g

LLP= 67 mm LLP= 58 mm LLP= 48 mm

Lrect= 30 mm Lrect= 23 mm Lrect= 18 mm

1130—I return owlets to cavity and leave.

# CN4—2005

## 6 June 2005

2015—Flam Crew arrives to listen for CN4 nest activity. Mostly clear, breezy, approx. 20 C. We flag and peep cavity trees in the vicinity of the CN4\_2004 nest until 2045, and then spread out along the *Potr* corridor to listen. (Scott/Dash etc entries)

2137—SY hears F FS from roadside across from driveway of nearby residence. Songpost CN4\_1 is marked as a general area songpost.

## 7 June 2005

1545—BL, EE, SY, DF and MS enter CN\_4 area to peep cavity trees with aim of finding this year’s nest. Two peepers in use while other crew members enumerate new cavity trees. Clear skies, calm winds, 28 deg. C.

1703—EE taps cavity tree near where Stump road merges with driveway and CN\_4 F rises to entrance of cavity. (SY also present). Same area where SY heard female beg previous night.

1705—BL, MS, and DF enter nest area. Female does not come back out when BL taps.

1708—We leave area.

## 21 June 2005

1410—Flam crew arrives at CN4 nest to check occupancy. Weather: cloudy – distant thunder – wind <5mph, 30°C.

1412—We tap tree: F rises to cavity entrance.

1414—We leave.

## 21 June 2005

2234—SY and MS enter area to capture CN4 M. Mostly clear, calm, and 16 deg. C.

2235—We hear female calling across the road from the nest, so we put together peeper and try to check nest contents while she is away.

2043—Peeper going up…

2044—Female returns, MS takes peeper away.

2045—Prey delivery.

2046—Net up.

2053—SY captures CN4 M; this was the CN4\_2004 male—band #92368.

Band #92638

93.0g WC: 136.5 mm

-34.0g LLP: 92.00 mm

59.0 g Retr: 61 mm

2301—Release CN4 M who flies to W.

24 June 2005

2017—MS and SY arrive at CN4 nest site to attempt capture of F.

2035—F is captured. She is unbanded.

Band #64422

Wing Chord: 125mm

LLP: 96mm

Rect.: 59

We bleed her left wing.

2051—Release – strong flight to the SE.

## 1 July 2005

1959—BL, EE, DF, MS and SY enter CN4 territory to peep and check nest contents of 2005 nest tree.

2001—Peep nest and find three owlets with white natal down and some grey plumage coming in.

2005—We leave.

# CN4—2006

## 8 June 2006

2240—EM and SY headed to CN4 to attempt to find nest. SY peeped and tapped while EM tapped and listened for nesting activity. Nothing heard or seen. Almost all flagging was removed, so EM and SY tried to replace flags.

0055—EM and SY leave site.

## 16 June 2006

1850-2015: The Flam Crew attempts to find nest in the CN4 territory by peeping and tapping cavity trees. Nothing found (many cavity-trees remain to be peeped).

## 23 June 2006

1415-1730: The Flam Crew peeps and enumerates almost all of the remaining cavity trees in the CN4 territory, except for a few *Potr* farthest downstream (to the E) in the main drainage. No nest found.

# CN4—2007

## 31 May 2007

2315—EE, KB and SY arrive in CN4 terr. to attempt to determine occupancy and search for a potential nest. We begin tapping known cav. Trees in the main CN4 drainage and listen for nesting behaviors from nearby slopes.

0030—Having heard nothing, we leave.

## 15 June 2007

1800-2000: Flam crew arrives to peep/tap cavities throughout the CN4 territory. Nothing found.

# CN4—2008

## 29 May 2008

2350—Flam Crew arrives at CN4 territory to listen for nesting behaviors and attempt spot-mapping. However, we raise the ire of the local resident, who threatens to phone his friends at NORTHCOM from the security of his dilapidated auto, and we leave by 2415.

## 5 June 2008

1430-1700: Flam Crew taps/peeps cavity trees throughout the CN4 territory. We did not completely finish checking the known cavity trees, but nearly so, and no nest was found.

# CN4—2009

## 1 July 2009

1350-1543: Flam Crew arrives in CN4 terr. to tap/peep. No nest was found.

# CN4—2010

## 6 July 2010

~1545—The Flam Crew begins tapping and peeping in the CN4 drainage.

~1730—We finish, having not found any nests.

# CN4—2011

## 20 July 2011

~1600-1640—Flam Crew begins peeping CN4. Nothing found, lots of trees remaining that need to be peeped.

**Note**: Apparent hazard tree clearing along stump road has resulted in several cavity trees being cut down.

# CN4—2012

## 4 July 2012

1600—Crew begins peeping CN4, wearing American flag bandanas in celebration of the 4th of

July.

~1700—Crew leaves CN4 area after finding nothing and peeping essentially all the trees, leaving

only a few.

## 12 July 2012

0109—SY arrives in CN4 to listen (working from junction of 9-J Rd and Stump Rd to the W ~100m.

0124—Stop listening, nothing heard.

# CN4—2013

## 2 July 2013

Afternoon—Flam Crew peeps in CN4. Nothing found.

# CN4—2014

## 9 July 2014

Afternoon—Flam crew peeps out the CN4 drainage. We peeped the vast majority of trees and do not find any nests.

# CN4—2016

## 13 July 2016

1650—Flam crew peeps in CN4, with very little enthusiasm for an apparently hopeless venture. Unperturbed, and with a spring in his step, **MC taps tree #966 and a F rises to the entrance. This is the CN4\_2016 nest tree! The tree is a ~25 cm DBH full snag potr that is~8 m to the S of Stump Rd, and ~50 m W of the Stumps’ lower driveway (and ~20 m E of the upper driveway)—just in the drainage bottom. The cavity is a sapsucker or small NOFL excavation 32 ft. 8 in. high, facing 280˚ NW, just above a naked patch of bark on the tree.** The F goes down after ~2 minutes.

1700—The Flam crew, now alight, joins MC at the tree. We tap in an attempt to flush the F and peep. The F rises to the entrance but is unimpressed at the earlier attitude of the crew and goes back down after throwing us a dagger glance. **We peep anyways and see the F to one side of the cavity and two owlets fully in view. One owlet has significant grey on its scaps with just the start of grey on its head ~11 days old. The other has just the start of grey on its scaps, but a fully white head ~7 days old.** *The age disparity and position of the F implies that there may be a third owlet in the cavity out of view.* We leave.

## 14 July 2016

2210—KM and BL arrive at the CN4\_2016 nest, newly found on 7/13, to attempt capture of M and/or F. F is not in cavity entrance when we arrive, and all is quiet in the nest site.

2212—M arrives in nest area giving LC, and he makes PD in the cavity at this time. BL gets into capture position.

2232—**M is captured after making PD in the cavity (M stayed in cavity long enough to allow BL to free the net, which had become entangled on an adjacent tree branch). M was not previously banded.**

**Band # 1783-74336 (on L leg)**

56.5 g LWC: 125 mm

- 7.5 g LLP(5): 96 mm

49.0 g LLP(6): 102 mm (tip broken on primary)

Rect: 54 mm

**Notes: P2 and P3 were in molt on both wings; on L wing P2 was 70 mm, P3 was 60 mm. Blood sample taken on L wing—moderate hematoma.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 0.5 | 0.5 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 0.5 | 1 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0 | 0 |
| P3 | 0 | 0 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2315—M released, and he shows low, steady flight of ~20 m.

~2300-2340: KM returns to nest site to attempt capture of F, but F does not accommodate her attempts.

2340—We leave.

## 19 July 2016

2218—Steve Getty and BL arrive at the CN4\_2016 nest to attempt capture of F and assess status of owlets. All is quiet on our arrival, and no owlets or F are in cavity entrance.

2222—M gives a few LC and arrives in nest area, followed by audible begging from the cavity, and then M makes PD in cavity.

2225—**We peep cavity—2 owlets present, the eldest of which had all grey juvenal plumage with a moderately pronounced facial disc, and was probably ~19 days old. Runt still had some vestiges of natal down evident on head, although it was primarily grey—it was probably 3-4 days younger.**

2240—We leave. F not seen or heard in the brief time we were in nest site.

## 21 July 2016

2025—Jaxon Rickel and BL arrive at the CN4\_2016 nest to attempt capture of F and check status of owlets. No F or owlet is visible in cavity entrance, and all is quiet in the nest area. Weather: Overcast/threatening skies, light breeze, ~ 15 C.

2030—I raise capture net over cavity. No response. Seconds later, I hear the M give soft, nearly F-like LC ~20 m up-drainage (NOTE: BL initially thinks this may be F). Rain starts falling lightly but steadily.

2035—I take capture net away from cavity entrance, and M (BL initially think it may be F) makes PD at cavity entrance.

2043—**I capture M after PD at cavity entrance (initially thinking it may be F)—he is Banded with #1783-74336, thus confirming he is the CN4\_2016 M.** Rain starts falling more heavily

**Band # 1783-74336 (on L leg)**

56.6 g LWC: 125 mm

- 7.5 g LLP(5): 96 mm

49.0 g LLP(6): 102 mm

Rect: 54 mm

**Notes:** M is now molting P4 on both wings (last week it was only P2 and P3)—P4 is 51 mm. No other data taken, no blood sample taken.

2105—M is released, and he shows strong, horizontal flight.

2155—**We peep cavity, and observe 2 owlets—both are active in the bottom, and eldest is showing advanced facial disc with his overall juvenal plumage (~21 days). Runt still has some white on the head, but otherwise shows juvenal plumage (3-4 days younger).**

2200—We leave. It has rained lightly but steadily since ~2030, and no additional PDs have been observed. One owlet was begging loudly most of the time, possibly from cavity entrance.

# CN4—2017

## 1 June 2017

~1630-1730—Owl crew cherry peeps CN4. KM and JE start at one end, and MC, ZM, and LD start at the opposite end. ER and ES join the rest of the squad to peep the central trees. We do not have any luck in locating any FLAM nests, though ES found a pygmy owl nest near the 2016 nest tree.

# CN5—2004

## 6 July 2004

2245—Flam crew arrives in the vicinity of the census point on Nine J (FS 523), where territorial male (subsequently called CN5) was heard on two previous occasions. We fan out on a mostly N-S axis and move to the N and E from the road, calling occasionally and listening.

2420—While checking and tapping on two cavity-containing *Potr* in a relatively flat area near the head of a small drainage, a F scolds me from approximately 15 m to the S. The M arrives about 30 sec later and begins giving LC in this vicinity, which he continues to do until about 2430.

2430-2440: M gives HECs in this same area as a UFO appears approximately 10 m S of the cavity trees. The resident M and the UFO eventually move off to the W, where the resident M begins giving TC. F remained approximately 15 m S of the cavity trees during this time, perched near the edge of the crown of a *Pifl*.

2445—M returns to the nest area (F apparently has left) giving LC, and makes a prey delivery in a flicker-sized hole, approximately 5 m above the ground, in a *Potr* snag with a dbh of approximately 18 cm—**this is CN5\_2004 nest**. M flies off. **GPS coordinates of nest tree**:

X: 482199

**Y: 4333637** (accuracy +/- 9 m)

2455—We flag nest tree and leave.

## 8 July 2004

2053—BL, SY and EE arrive to attempt to capture and bleed M or F. F is up in cavity upon our arrival.

2055—M gives about 5 TC off of roost and F leaves nest. **We peep nest and find one large owlet with complete gray down. Based on facial disk development may fledge in 4-5 nights. Also find one un-hatched egg.**

2104—M is giving TEC and aborts on a prey delivery.

2105—M aborts on another prey delivery (orthopteran).

2110, 2120—M makes prey delivery.

2135, 2137, 2139, 2145—M makes prey delivery and we attempt to capture but fail.

2151—M makes prey delivery and we fail to capture. Net becomes caught on branch. BL ascend tree to free net.

2200, 2208—M makes prey delivery and we fail to capture.

2215, 2228—M is captured in about 30 seconds and then escapes.

2249—M makes prey delivery and BL captures him.

**Band#64404**

74.5 g

-20.0 g

54.5 g

LLP: 109 mm

WC: 131 mm

Rect: 66 mm

2131—M is released after being bled. Handling took a long time because of difficulties with clotting. We leave.

## 11 July 2004

1225—BL arrives at CN5 nest to band and bleed young and F. However, F not in nest cavity. As I start to climb nest tree, the owlet fledges, and then I see one of the adults flush from a conifer adjacent to the nest tree (to the E). I leave the fledgling on the ground for the moment and enlarge the cavity entrance to remove the unhatched egg (**as it turns out, there are two unhatched eggs in the cavity**).

1235—Nest cavity is enlarged with a saw, and the two unhatched eggs are removed.

entrance dimensions (h x v): 5.0 x 4.5 cm

entrance thickness: 2 cm

horiz. depth: 8 cm

` vert. cavity depth: 10 cm.

doh: 13 cm

dbh of tree: 16.5 cm

OWLET—Band # 64412

72.0 g

-16.5

55.5 g

LLP= 61 mm

Lrect= 28 mm

1255—I attempt to return the owlet to the cavity, but it fledges again, so I set it in the conifer adjacent to the nest tree, from which the adult had flushed. I leave.

# CN5—2005

## 6 June 2005

2300-2430: Flam Crew listens for CN5 nest activity while peeping and flagging new cavity trees along the drainages in the CN5 territory. Very breezy, clear, approximately 18C. Nothing in the CN5\_2004 nest cavity, nor is anything seen or heard elsewhere in the terrtitory.

# CN5—2006

## 11 July 2006

1430-1700: Flam Crew peeps and enumerates cavities in the CN5 territory. No evidence of nest is found.

# CN5—2007

## 28 June 2007

1430—Flam Crew begins peeping CN5 territory.

1607—SY peeps CN5\_1 (tag #979), F is present in cavity ~30 ft. up, E facing (left branch of trunk. **This is the CN5\_2007 nest.**

2207—BL returns to the CN5 nest to attempt capture of M and F.

2211—M makes a PD in the cavity, where the F gives a few FSC as he approaches.

2214—Same.

2217—Same. I get in capture position.

2221—Same.

2232—Same.

2238—F flushes from the cavity**. I peep the nest, and observe 2 owlets, who appear to be of similar age to the A8 brood,** based on the juvenile plumage starting to appear on the wings.

2308—I capture the F after she makes a PD to the nest. She was not previously banded, and is equipped with Band # 64590. (On 13 June 2011, JG uses this entry to correct the incorrectly entered band # on Hayman Fire territory history)

92.0 g LWC: 127 mm

- 32.0 g LP (#5): 99 mm

60.0 g LP (#6): 105 mm

Rect: 63 mm

2318—Release F.

2348—I leave, after unsuccessfully attempting to capture the M, who finally made a PD at this time but averted capture (cavity is very shallow, and M often only fluttered at the entrance).

## 3 July 2007

2340—SY and BL arrive at the CN5 nest to attempt capture of M. Hail still on ground from powerful thunderstorm that moved through the area from approximately 1900-2030 hr.

2346—SY captures unbanded M, but a couple of minutes later he escapes from BL’s sock. SY again assumes capture position.

2424—SY captures the banded F **(#64590)**—no adult had been seen in nest area in preceding 40 min. Once extricated from net, we release her.

2430—We leave. Owlets frequently were heard begging from the cavity during our observation period.

## 10 July 2007

2049—BL arrives at CN5 nest to attempt capture of M. Overcast, raining lightly as thunderhead passes over, approximately 20 C. I peep cavity at this time and observe 2 well-developed owlets—they appear to be within 3-4 days of fledging, with facial disk starting to become apparent. F not in cavity.

2102—F arrives in nest area, and makes a PD at this time at the cavity entrance—it sounds as though one of the owlets is in the entrance.

2103-2117: 7 PD’s during this interval, 6 of which were by the F, at the cavity entrance.

2118—M captured after he makes a PD at the cavity entrance. **M was not previously banded—I give him band # 64593**.

82.5 g LWC: 134 mm

- 29.5 g LP(5): 101 mm

53.0 g LP(6): 108 mm

Rect: 60 mm

I proceed to bleed the M.

2141—M is released.

2143-2230: I work on repairing capture net, which was torn badly during the capture of the M. During this time, I hear the F make 2 apparent PD’s, as judged from hearing her FSC.

2231—I leave.

# CN5—2008

## 26 June 2008

1630-1800: Flam Crew peeps/taps cavities in the CN5 territory.

1727—KB approaches CN5\_894 to find a female flam staring down. **CN5\_894 is the CN5 2008 nest tree**. The cavity is south facing in the elbow of the tree.

1728—The f momentarily goes down, then pops back up.

1730—She goes back down.

1733—She is up.

1735—She is back down.

1745—Flam crew leaves the area.

2055—BL returns to the CN5\_2008 nest to attempt capture of F and/or M. Partly cloudy, calm, 20 C.

2056—As I approach nest tree, I see F in entrance of cavity observing me. I move around to the backside of the cavity tree where I extend the capture net, and then swing it around as the female flushes the cavity—**she manages to flush into the net. F is unbanded, and I give her Band #1593—64643.**

85.0 g No measurements or bleeding are completed.

- 29.5 g

55.5 g

2101—I release F. I hear M give LC calls near the ridgetop to the W of the nest at this time, the same direction in which the F flew.

2102—**I peep the nest and observe 2 unhatched eggs near the center of the cavity**. I gather equipment and move to the ridgetop W of the nest area.

2145—I approach the nest area after hearing no vocalizations from the nest area in the interim.

2150—Approximately 15 m from the nest tree, an adult FLOW buzzes me at this time, giving a long, insect-like trill vocalization each of the 4-5 times it flew over my head.

2155—I move within 3 m of nest tree, where I can silhouette the cavity against the sky.

2158—An adult flies into the cavity, which I presume must be the F after a few minutes as no owl subsequently flushes from the cavity. This suggests it may have been the F that buzzed me moments earlier.

2225—I leave nest—M was not seen or heard in the nest area since the last entry.

2235—After gathering equipment, I leave the area.

## 10 July 2008

2030—BL arrives at the CN5\_2008 nest to attempt capture of F (for bleeding only) and M. Partly cloudy, calm, 24 C.

2035—I raise capture net over cavity entrance, with no response. After waiting a couple of minutes, **I peep cavity and find only egg fragments in the bottom—nest has apparently succumbed to predation. I find no evidence of eggshells or owlets on ground outside of cavity.**

2045—I pack equipment and leave.

# CN5—2009

## 4 June 2009

1558—SY peeps CN5\_953, F flushes from lower cavity that we had not initially seen. **This is the CN5 2009 nest**. Cavity is S-facing and approximately 12 feet high. This tree is located toward the northern extent of the CN5 territory in the side drainage that leads north from our parking area on Nine J road and can be accessed by following the overgrown two-track road that follows that side drainage north.

2008—SY, QB, and SR arrive in CN5 territory to capture F at cavity tree C5\_953.

2028—QB has net in place. F pokes head out for a few seconds.

2037—Several soft hoots (LC?) from S.

2044—TC and TEC close from the E.

2049—Net down.

2059—M flies in from E and perches in nearby branches. Gives a single soft hoot and flies to nest tree.

2103—Caught M as making PD, F did not flush. Weather: a few thin clouds, 9C

**This is the CN5\_2007 M banded with band # 1593-64593**

70.0 g LWC: 131 mm

- 17.0 g LP(5): 95 mm

53.0 g LP(6): 99 mm

Rect: 60 mm

SY puts radio pack on. Tag #:164.7940, broadcasts better at .793.

2238—FLOW released. SR sits by nest to watch for PD, SY and QB track with radio telemetry.

2318—SR observes bird (unsure if owl), fly silently from N to S by nest tree w/o stopping.

2400—We leave.

## 11 June 2009

1945—SY, SR, and QB arrive in CN5 territory to locate male at roost using radio telemetry and capture female at CN5\_2009 nest site. Weather:~40% cloud cover, breezy (~5mph), 15C.

2003—QB and SR arrive at CN5 nest; F is not up. We begin tracking M at roost.

2024—Locate M’s roost – **CN5\_1**

X: 482100

Y: 4333828

M is 4/5 of the way up the tree (~50 ft.) on SE side, right against the trunk, facing N. Roost is only ~25m SW of nest.

2028—QB and SR arrive at nest to capture F. F is not up.

2032—Capture net in position. F did not come up.

2038—M gives 4 quiet hoots from the roost and begins preening.

2042—M calls again from roost.

2045—M makes a foliage glean within the roost tree.

2046—Flushes – direct flight to **CN5\_2**

X: 482082

Y: 4333854

Probable forage in a pipo, dbh: 40.5

2054—We catch F.

**She is unbanded. We band (R leg) with Band #: 1593-64673.**

**This is the CN5\_2009 F.**

86.5 g LWC: -

- 21.0 g LP(5): -

65.5 g LP(6): -

Rect: -

2102—We release F.

2103—SR peeps cavity and sees 3 eggs, touching in the center.

2108—QB joins SY to track M using radio telemetry. SR stays at nest to observe PDs.

2116—M flies to branch on tree giving LC and caring a small insect. Flies to nearest tree to E.

2118—M flies to cavity as though making a PD but F is not yet back in cavity. M flies to E giving TC/TEC.

2133—F returns to cavity.

2201—QB marks **CN5\_7**

X: 482255 Y:4333587 +7m

General area point. Behavior unknown, in one of two mature pipo.

2238—We leave.

## 18 June 2009

1950—SY and DH begin searching for the CN5 M’s roost.

1959—QB arrives at nest to peep and monitor while DH radio tracks M. F is not up.

Weather: partly cloudy, calm with gusts of ~5-10mph, 19C.

2019—DH finds M in roost. DH marks **CN5\_1**.

X:482124 Y:4333915

Live PSME, DBH=49.0.

Perch: very small dead branch facing upslope (NE), right next to trunk, ~5m from top of tree? (~5/6 of the way up the tree)   
Site: top of rolling ridge extending SW, just E of young aspen grove in drainage bottom, ~ 35m NE of nest.

Very open, mature stand of PSME, some PIPO and PIPU.

2043—M moves to another perch on same tree, flutters. New perch is ~2m lower, 1.5m from trunk, he is facing NW, Forage?

2054—DH turns on receiver, M is moving, must have flushed without being seen (in past 10 min).

2100—DH marks **CN5\_2** and **CN5\_3**. (M flew from one tree to the other).

CN5\_2

X:482149 Y:4333861 +11m

PSME, live, DBH: 32, Behavior unknown- M flew out of this tree to CN5\_3.

CN5\_3

X:482136 Y:4333886 +5m

PSME, live, DBH: 31.0, Behavior unknown-M flew into this tree from CN5\_2.

2103—Bird flies into nest area, silent, no radio signal, enters and remains in cavity. F returning, must have flushed without being seen. Bird came from E; area of CN5\_2 and CN5\_3., where DH thought he heard a F beg. PD there?

2119—DH marks **CN5\_4**

X:482123 Y:4333873 +11m

Live PIPO, DBH: 32.0, Observed two forages in this tree and preening, stayed in tree ~5min.

2120—F flushes unprovoked to E. DH simultaneously hears begging upslope to S of CN5\_4.

2122—QB peeps cavity, 3 eggs center touching but pushed to one side of cavity.

2133—F returns from E.

2143—DH marks **CN5\_5**

X:482289 Y:43334021 +6m

General area within 15m, very open mature forest slope.

2144—M in nest area, does not call.

2145—F flushes, begs from tree near nest, returns briefly to cavity, then flies away again.

2146—F returns to cavity.

2158—F flushes. M is still in area.

2201—M and F perch next to one another in tree ~ 10m E of nest

CN5\_6

X:482125 Y:4333863

Live PIPO, DBH: 38. M preens himself, F preens him too.

2206—M forages in CN5\_6, makes PD to F.

2207—F returns to cavity.

2210—F begs from cavity.

2221—QB hears M calling far to E of nest area (maybe? Very faint). Not CN5, he is in nest site, silent.

2233—DH marks **CN5\_7**

X:482153 Y:4333941 +7m

General area within 20m, PSME

2241—M in nest site, silent, flies by nest but no PD

2245—F flushes to tree next to nest, begs, M responds with LCs from W. Cannot see if a PD is made in the tree.

2252—DH marks **CN5\_8**

X:482085 Y:4333874 +8m

Live POTR, DBH:15.0, Forage, very close to nest.

2254—PD in tree near nest cavity? M flies to tree but is not there for very long, flies away to E, gives TCs.

2309—M in nest area, gives LCs.

2310—M makes PD to nest cavity., flies to SW of nest area, gives TCs

2345—M flies into nest area silently

2346—M gives silent PD to nest cavity, leaves.

2351—M in nest area, F flushes, begging and LCs and PD in tree near nest.

2355—We leave area.

Weather: clear, calm with gusts of 5-10mph, 12C.

**Note**: QB had non-directional radio receiver at nest, so could ID the M when he entered the area, although he did not call very often. F flushed nearly every time M was in area, so QB may have been unable to see a couple of PDs that may have occurred outside of the nest cavity. Refer to PD data sheet for more info on PDs. Eggs have not hatched, but may be close.

## 24 June 2009

1440—SY begins searching for the CN5 M’s roost.

1456—M’s roost located.

CN5\_1

X:482016 Y:4333834 +7m

M is in a lg. *psme* that is ~65 ft. high. M is ~2/3 of the way up the tree, immediately adjacent to the trunk on the S side, facing to the E. Tree is across drainage, ~40m W of the nest. I leave.

## 30 June 2009

2155—DH, JG, and QB arrive at CN5\_2009 to set up a lure net to attempt to capture the 2009 CN5 M and remove the radio transmitter placed on him earlier this year.

2214—Playback begins.

X: 482099

Y: 4333373

+/-: 5m

Lure net is located on the edge of the burned/unburned area S of the nest tree, approximately 50m N of the road on the NE side of the two-track road that leads from the parking area to the nest. This boundary marks the edge of mature pipo/psme forest.

2219—M calling near nest. TCs, TECs, and HECs all heard. He came from the N/NE.

2223—**M caught in net, bottom shelf from N side hanging by one leg. He is unbanded. QB bands his left leg with Band #64650.**

70.5 gLWC: 122 mm

- 17.0 g LP(5): 94 mm

53.5 g LP(6): 101 mm

Rect: 56 mm

**NOTE**: This owl is missing primaries 1-4 on each wing.

JG bled his left wing.

2246—Release M, strong flight to the nearest tree.

2249—We hear very high pitched vocalizations from the N/NE area near the lure net. We presume that this is a F calling off-cavity.

2252—Both M and F heard calling near net.

2257—QB and DH leave to attempt capture of CN5 M at the nest site, JG remains at lure net.

**NOTE**: Net checked every 10 minutes during playback until F heard in area, then checked every 5 minutes.

2310—DH and QB arrive at CN5 nest to capture M and observe.

2312—QB has net in position. Loud wingflaps heard but no bird seen.

2314—Bird lands on nest tree, remains silent.

2317—Flies to adjacent tree.

2319—Very large bird, probably a Long-Eared Owl lands on the nest tree. M gives TECs from adjacent tree and the larger owl leaves the area.

2324—M flies to cavity to attempt PD, captured. He is banded and is the CN5 2009 M. **Band # 64593.**

64.0 g LWC: 134mm

- 10.0 g LP(5): 97mm

54.0 g LP(6): 107mm

Rect: 55mm

**Note**: We remove radio transmitter. The straps are stuck around his wings and require light tugging to remove. The right strap has a small amount of dried blood on it, both straps pull off some feathers. There is a fairly bald spot where the backpack was resting on his back, although it does not appear too irritated. There is also a large (~1.5cm long, .5cm wide) yellow skinflap filled with fluid over his right wing which appears to be a blister. It is located where the strap went over his right wing, and there is not a similar blister on the left wing.

2337—We release M. He makes a strong flight to the SW.

2340—We try to flush F to peep the cavity, but she will not even come up to entrance, so we pack up and leave.

## 1 July 2009

1553-1727: Flam Crew peeps ridges, shallow drainages, and high burn area NE of CN5 terr. in search of possible new nest. We find no nests.

## 10 July 2009

1525—Flam Crew arrives to process CN5\_2009 nestlings. F comes up to tap.

Weather: overcast, wind 5-15mph, 25C.

1526—**F flushes as we peep; 2 nestlings.**

Cavity dimensions:

Horizontal x Vertical: 56 x 55mm

Entrance Thickness: 40mm

Horizontal Depth: 145mm

DOH: 28.0 cm

Vertical Depth: 20 cm

1542—Nestlings out of cavity.

**Band #1593-64668** (R leg)

87.5 g

- 27.0 g LP(5): 48 (29)mm

60.5 g LP(6): 47 (30)mm

Rect: 17 (12)mm

We bleed L wing. Predicted fledgling date for this nestling is 7.13 or 7.14.

**Band #1593-64667** (R leg)

65.5 g

- 10.0 g LP(5): 39 (21)mm

55.5 g LP(6): 37 (20)mm

Rect: 19 (17)mm

We bleed L wing.

1607—Nestlings back in cavity. We pack up and leave.

# CN5—2010

## 28 May 2010

~1430-1700(approximate)—Flam Crew peeps CN5 area (did not finish all cavities) – nothing found.

## 3 June 2010

~1430—Flam crew arrives in CN5 to continue peeping.

1606—JSG and SY re-peep cavity tree CN5\_953 (CN5\_2009 nest) – F is in cavity. F does not rise to cavity entrance. **This is the CN5\_2010 nest tree.**

**Note:** this cavity was unoccupied last week.

Cavity is S-facing and approximately 12 feet high. This tree is located toward the northern extent of the CN5 territory in the side drainage that leads north from our parking area on Nine J road and can be accessed by following the overgrown two-track road that follows that side drainage north.

1625—Flam crew tries to repeep the tree – F flushes, we leave immediately.

2021—SY arrives at the CN5 nest to peep and attempt to capture M.

Weather: 17C, calm mostly cloudy (~80%)

2030—I notice flam roosting in psme snag ~5m E of nest tree. F we flushed earlier? Bird is against the trunk on the SE side of tree ~2.5m up.

2037—M enters site from W; gives LCs. F in psme responds w/ LCs. The bird in the psme is apparently the F we flushed earlier in the afternoon.

2038—F flushes to the N.

2039—M goes to cavity – aborted PD.

2040—M flushes to the N.

2041—I peep: 1 egg in center of the cavity.

Note: Net ht. check; from 1.5-2m E of tree: 18’8”

2055—BG and JG start playback approximately 100 meters NE of the parking spot on the edge of the high burn/low burn forest cover.

X: 482097

Y: 4333349

+/-: 5 m

Weather: 17 C, calm, partly cloudy.

Vegetation: Mixed-age Pipo/Psme, succession/young Potr. Net is set up on the edge of high burn/low burn forest.

2102—M gives LCs to N.

2131—JG and BG hear TCs from the W of the lure net.

2134—After the M circles the net and continues giving TCs, we hear him fly into the net. **He is captured in the first shelf on the E side of the net. He is an un-banded supposed territorial M. Band # 1593 - 64787**

65.0 g LWC: 127 mm

- 11.5 g LLP(5): 92 mm

53.5 g LLP(6): 98 mm

Rect: 59 mm

JG bands the left leg and bleeds the right wing.

2141—SY hears M give TCs nearby; leave nest briefly to songpost. (1 Gen. Area post recorded).

2150—SY returns to nest site – M is giving TCs in site when I arrive. Stops after ~1 min.

2159—With the M captured at 2134 in hand, JG and BG hear another M approach the net from the N in the direction of the CN5\_2010 nest. This M approaches the net very aggressively and delivers TCs, TECs, and HECs in the immediate area of the net. The M from 2134 is still in hand and becomes aggressive upon hearing the other M’s calls.

\*Note: Given the second M in the area and the probability that the second M near the lure net is the CN5 M based upon the direction from which he approached and the timing of SY’s last sighting at the nest, we refer to the M captured at 2134 as the CN11 M.

2206—Supposed CN5 M goes silent.

2207—We release the CN11 M and he exhibits a strong flight S. We check the net and it is empty.

2211—I re-peep tree to confirm that I had not missed the F’s return. F still not on cavity; I leave.

2228—SY arrives at lure net.

2232—We hear two TCs to the SE/direction of the parking spot.

2317—Having not heard anything since 2232, we end playback and break down the net.

2330—SY, JG, and BG cross the road to the S to search the area that we suppose the CN11 M approached from. We spread out along the road approximately 75 meters apart from each other and move S, delivering TCs occasionally.

2345—JG delivers TCs and hears a response to the SE. I am already about 150 meters S of the road. I move toward the TCs.

\***Note**: From 2345 to 0020 we follow this M around the area SE of the road. We find one possible cavity tree (difficult to discern suitability at night), record one general area songpost, and occasionally elicit TC responses from the supposed CN11 M.

0020—We leave the area.

## 11 June 2010

2039—JSG, JG, and BG arrive at the CN5 nest in order to capture F.

2043—BG gets net into position.

2044—Capture F at nest. She is unbanded. Capture height is 18’8”.

Band # 1593-64796.

2048—F is released with strong flight.

2050—**JG peeps the nest and sees 2 eggs centered and touching.**

2106—We leave the CN5 nest site.

## 18 June 2010

2033—JSG and JG arrive at the CN5\_2010 nest tree to attempt to capture the male.

Weather: Calm, partly cloudy, 13 C

2052—M calls off-roost ~ 30 meters E of the nest tree and very close to us. He flies to a live Psme ~25 meters SE of the nest tree.

2055—M begins giving LCs NE of the nest tree. The F is up.

2057—F flushes. We peep the nest cavity and see 2 eggs touching and in the center of the cavity.

2109—M begins giving LCs from the same spot at 2055.

2114—The F returns to the nest cavity.

2119—JSG has the net in position. The F flushes and we leave the nest site.

2143—We return to the cavity and move towards it to begin getting the net in position, but the F rises to the cavity entrance so we back off.

2144—We hear the M in a territorial encounter giving TCs/TECs with another M ~ S of the nest tree. The CN5 M is in the immediate nest area and the second M is ~ 200 meters S of the nest tree.

2148—JSG has capture net in position.

2205—I hear the same territorial encounter as at 2144. The second M is in the same direction and about the same distance away as at 2144.

~2220—The CN5 M makes a PD, but we do not make the capture.

2225—We leave to find BG. As we leave, the CN5 male is in a territorial encounter again. This time the second M is much closer to the nest tree and this time he is to the NW of the nest tree. The CN5 M is about 5 meters away from the nest tree giving TCs/TECs/HECs.

2258—In trying to find out more about the second M heard at 2143 and 2205, JG, JSG, and BG deliver TCs just N of the road/parking spot and hear response TCs to the NE/in the direction of the CN5 nest tree.

2311—We leave, having only heard the M at 2258 toward the nest tree – this was probably the resident CN5 M.

## 29 June 2010

2140—JG and JSG arrive at the CN5\_2010 nest tree to attempt to capture the M.

Weather: 18 C, Partly cloudy, calm

2142—As JSG begins raising the net, the F rises to the cavity entrance. We turn our lights off and wait, but she flushes within 30 seconds of coming to the cavity entrance. **We peep the nest cavity and see two nestlings probably about 1-2 days old. They are huddled together in the center of the cavity, heads down, and not moving other than what appears to be or looks like shivering.** We take the peeper down and leave the nest site.

2207—We have returned to the nest site and now have the net raised and in position to capture the M.

2211—The F begs from within the cavity.

2212—M PD, miss capture. (From 2212-2224, the F begs from within the cavity and the M follows with a PD 4 times, see master PD sheet for details)

2230—M PD, we capture him. He is unbanded. This is the new CN5 male.

**Band # 1593-64795 (on left leg)**

73.0 g LWC: 135 mm

- 16.5 g LLP(5): 98 mm

56.5 g LLP(6): 102 mm

Rect: 56 mm

*\****Note** – We did not take a blood sample because we crimped the band while we were putting it on his right leg initially. This band (#1593-64788) was damaged beyond re-use after taking it off his right leg. Because we had him for 35 minutes by the time he was properly banded on the left leg with band #1593-64795, we let him go. He showed no signs of injury on his right leg, was flexing his right talons during the process, and flew away with a strong flight.

2305—We release the CN5 male and he flies away with strong flight. We leave.

## 12 July 2010

~1630—The Flam Crew arrives at the CN5 nest to band and bleed owlets. We get net in position to capture the F, but she is off the cavity.

1645—BL has climbed ladder to the cavity entrance and has taken the owlets out of the cavity.

**We band the first owlet on the left leg with Band # 1593-64774**

43.6 g

P#5: 39 mm (22 in shaft)

P#6: 40 mm (21 in shaft)

Rect: Just natal down

**We band the second owlet on the right leg with Band #1593-64763**

50.4 g

P#5: 40 mm (25 in shaft)

P#6: 40 mm (23 in shaft)

Rect: Just natal down

~1715—We return the owlets to the cavity, and leave.

2206—JWG, DW, and BL arrive at the CN5\_2010 nest to attempt capture of M (to attach geolocator) and F (to bleed). Weather: clear, calm, 18 C. All quiet at the nest at this time.

2208—JSG gets into capture position and raises the capture pole.

2212—M arrives in the nest area giving LCs, and makes PD at this time (cavity is quite shallow, so he only perches briefly in the entrance before flushing).

2231—M PD at cavity entrance.

2237—M PD at cavity entrance.

2244—M PD at cavity entrance.

2248—BL gives JSG a rest and takes over in capture position.

2256—Capture M as he attempts to make PD. M is band # 64795, confirming his identity as CN5\_2010 M.

**Band # 1593-64795 (on l leg)**

82.5 g

- 30.0 g

52.5 g

We proceed to attach geolocator to the M, gluing the straps down with Super-Glue.

2316—JSG captures F on a PD.

2318—F is out of net. **Band # 1593-64796**

84.0 g

- 29.5 g

54.5 g

2317—We release the M, after he showed feisty characteristics the last 3-4 minutes of the attachment process. He flies strongly 5 m as he ascends to the limb of a *Psme*. He proceeds to pull on the breast straps with his bill for several minutes.

2323—M flies another ascending 5 m to the top of a *Potr* snag, where he resumes pulling.

2327—M flies strongly 15 m to a limb in a large *Psme*, where he resumes pulling.

2331—M flushes from tree and BL loses him. Note: All indicators suggested the M was flying strongly and responding normally with no balance issues.

2333—F is released after bleed on L wing to strong flight. Slight hematoma**. F yields genetic blood and parasite smear.**

# CN5—2011

## 3 June 2011

~1530—Crew arrives in CN5 territory to peep/tap cavity trees in hopes of locating CN5 nest.

1621—JG peeps CN5\_821 #821 and sees FLOW in the S-facing cavity above the bear torn cavity. This is the CN5\_2011 nest. The F did not come up to the tap and remained inside the cavity following the peep. The nest tree is in the E main CN5 drainage approximately 150 m SW of the CN5\_2009/2010 nest tree. It is a full snag Potr on the W slope of the drainage and directly next to a live Pipo. The cavity is approximately 22 feet high and is NOFL-sized.

~1640—Crew leaves CN11 to go peep CN5.

2030—BL and JV arrive at CN5 nest to attempt a capture of the M.

2041—M calls off roost just down drainage of the nest and F begins to beg on cavity.

2044—BL has net up and ready.

Weather: clear, no wind, 14 C

2052—M gives a scolding call as a long-eared owl flies by nest.

2053—M comes back into nest site.

2054—F comes up in the cavity entrance and M makes a quick PD.

2057—F flushes.

2116—JV and BL leave to meet JG and BG.

2245—BL, JG, BG, and JV arrive in CN5 territory to lure for CN5 M and hopefully obtain geolocator.

2257—JG, BG, JV, and BL begin playback in CN5 just to the W of Entryway Road and S of the nest tree.

Vegetation: Mixed Psme/Pipo, moderate burn, low ground cover.

Weather: Calm, clear, 8 C

X: 482049

Y: 4333581

+/- 3m

We heard the M calling during lure net setup in the direction of the nest tree.

2311—TCs heard to the E, in the direction of the nest tree for about 1 minute.

2314—TCs heard to the E, in the direction of the nest tree for about 2 minutes.

2321—We discontinue playback, break down net, and leave.

## 10 June 2011

2106—JV, PS, and JG arrive at CN5\_2011 nest to attempt mist net capture of M. JG monitors nest as JV and PS set up net. F had already flushed before they arrived. Weather calm, clear, 15C.

2108—M calling off roost.

2111—M PD following female beg.

2113—JG observes F flush, goes to peep but F back on already. Questionable as to whether F had actually flushed.

2124—M in site.

2126—M PD.

2127—JV and PS begin moving mist net into position.

2010—Net taken down.

2011—M PD

2240—JV, JG, and PS start playback next to entryway road in CN5.

Vegetation: moderate burn, low ground cover, young psme

Weather: clear, 10-15 mph gusts give way to calm wind, 13 C

X: 482072

Y: 4333642

+/- 3m

2245—CN5 M responds just downslope of net giving TCs.

2247—Catch CN5 M **unbanded** in net in the 2nd shelf coming from the east.

PS bands on left leg.

**Band # 1593-64805 (on left leg)**

83.5 g LWC: 130 mm

- 29.5 g LLP(5): 97 mm

54.0 g LLP(6): 106 mm

Rect: 60 mm

2311—Shut off playback and take down net.

2313—JV releases M. Strong flight to the north.

## 17 June 2011

2109—JV, JG, PS, EWE, and friend have a mist net set up in front of the CN5 nest in order to attempt a capture of the M. While setting up the net the M calls off roost to the N. JG decides to put up a capture net while JV and PS continue setting up the mist net in case the M comes in for a PD. There are just too many branches in front of the nest so JG takes down capture net and gets in position for the mist net capture. The mist net is up on 5 poles with PS and JG ready to raise it up when the M comes in for a PD.

2115—M gives TCs to the E of the nest.

2116—M lands on the nest tree and F comes to the cavity entrance.

2117—F flushes to the W and the M follows.

2118—JG peeps the nest. **There are 2 eggs touching in the center.**

2125—F comes back into the nest site.

2126—F goes back on the cavity flying right over the mist net.

2137—M comes into nest site and makes a PD to the F on the cavity but he does not get caught in the net.

2142—M makes a PD to the nest and is caught in the mist net.

**This is the 2011 CN5 M that JG, PS, and JV caught at the lure net on 10 June 2011.**

**Band # 1593-64805**

2150—Release M. Strong ascending flight to the WSW. Team breaks down the net and leaves to lure net for possible CN13.

## 24 June 2011

2101—JV, JR JG, and PS have the mist net down at the CN5 nest. JG has the capture net up over the cavity. JV, JR, and PS had put the mist net up because of the pipo on the side of the cavity, but JG was successful in getting the net up so the mist net was not needed.

2102—M calls off roost to the N of the nest.

2104—M lands on the pipo next to the nest tree.

2106—F begins begging.

2108—JG captures F in net as she tries to flush. She is tangled pretty badly in the net because the net got caught on the pipo so we went to work cutting her out of the net.

~2112—Team has the F out of the net. JG bands on the left leg.

**Band # 1593-64791**

2115—Release F. Strong, ascending flight to the E.

2150—JV and PS start playback at the top of Entryway Road where it meets Nine J.

Vegetation: young, mixed pipo/pipu/potr

Weather: clear, mostly calm, 17 C

X: 482102

Y: 4333354

+/- 3 m

2126—M comes in net site giving quick, constant TECs. He flies over the net for about 9 min.   
2135—JV takes the playback and quietly brings it to the other side of the net.

2136—Territorial M follows the playback and gets caught in the net in the 3rd shelf coming from the SW. PS bands him on the left leg. JV bled him on the right wing for genetics and a smear. He has a moderate hematoma and doesn’t clot very quickly. JG stays with him while JR, PS, and JV take down the lure net.

**Band # 1593-64825** (on left leg)

87.0 g LWC: 127 mm

- 33.5 g LLP(5): 102 mm

53.5 g LLP(6): 106 mm

Rect: 61 mm

**Molt –** P-10 on right wing in molt. Strong fluorescence on both wings on P’s 1-4, not very strong on outer primaries and secondaries, suggesting a possible second year molt pattern.

2308—Turn off playback and take down the net.

2315—M is clotted and JG releases him. Strong, ascending flight to the S across the road.

## 12 July 2011

2035—SY and IJ arrive at CN5\_2011 nest to capture the F and peep cavity,

Weather: overcast, light rain.

2039—SY gets the net up (highest cavity, flicker-sized hole facing south).

2042—We peep both cavities; the lower cavity is empty with egg shells (however we are confident that it is not this year’s nest); and **the upper cavity is empty with non-flam feathers. We stay in the area for ~45 min to listen for possible fledgling begging calls or adult vocalizations. The nest was previously peeped 24 June 2011 with 2 unhatched eggs, so it is unlikely that fledging has occurred and more likely that nest predation/failure has occurred.**

2130—Having heard no fledgling or adult vocalizations, we leave the area.

# CN5 – 2012

## 30 May 2012

1500 – All crew members arrive at CN5 to peep.

All areas are peeped except for two pockets in two different areas. One area is around

Trees 1119 and 727. The other area is around trees 1273 and 1293.

1700 – All crew members leave CN5.

**Note (6/20/2012): Some portions of entries have been removed from this section and have been moved to CN13—2012. Pertinent entries regarding CN5 remain.**

## 12 June 2012

2016—SY, AP and Abby Pyle arrive at CN13\_2012 nest site to attempt to capture M with a mistnet in front of the cavity due to the double entrance of the nest.

Vegetation: Large/medium Psme and small Pipo, bushes and fallen trees.

Weather: Cloudy at first, clearing later in night. Calm 19C.

X: 482163

Y: 4333443

+/- 9M

2023—F up when SY approaches nest and clears branches for the mistnet.

2025—SY moves away from nest, F still up.

2051—F lushes on her own.

2052—SY peeps. **There are 3 eggs in the center touching, no cracks are seen.**

2054—F gives FSCs from Psme near nest. M responds from NE with TCs.

2055—Unknown bird goes to cavity. We believed that it was the F going back on.

2057—M gives LCs.

2100—We start to set up the mistnet away from the nest site.

2101—Hear M TCs.

2112—Net is in place in front of nest. We see two birds in a tree across from the cavity opening. They are the M and F, giving LCs and FSCs. We immediately lower the net and move it away from the nest.

2138—JR and MD arrive to assist.

2147—SY, JR, AP and MD move mist net into nest site. As we were setting up the net the M makes a PD and flies over the 5 pole net. TECs were heard as we were leaving the area. SY goes back in to watch the nest site.

2246—JR and MD go down into CN5 drainage to listen. M heard to the N/NW. We follow and JR gets a general area songpost.

X: 482002

Y: 4333718

+/- 4m

2258—A bird is in the net. **He is a banded M, the same caught in the CN5 lure net by AW.** He gives HECs once SY approaches him in the net. We mass him, but do not take measurements again. **When the bird is in the net, we can hear the bird that JR and MD are songposting. We suspect that the M that is in the net is in fact a new territory, and the bird signing is the CN5\_2012 M.**

**Band # 1593-64825 (on R leg)**

79.5 g

- 15.5 g

64.0 g

~2305—**SY places a radiotag on the M. It is on the frequency 164.831**. We mass the bird again after the radiotag is on. **The pack mass is 2.5 g.**

82.0 g

- 15.5 g

66.5 g

2315—M released and glides to ground, SY picks back up and then M lies to burned psme snag about 3m off the ground. His flight is just ok. He is perching ok, has good balance when not trying to pull off the backpack.

2348—SY, JR and Abby Pyle stay to observe M. MD and AP head NW to spot map in CN5 near where JR songposted at 2246.

2404—MD hears a single TC from the N.

2408—AP hears M TCs to the N, across the drainage. I move towards it and end up near the end of the CN5 low ridge.

2415—AP hears wing flapping in nearby brokentop.

2418—AP sees a bird fly W low overhead, and hears soft wing flaps as it takes off. I take a GPS of the location.

X: 482074

Y: 4333679

+/- 3M

2425—MD and AP leave drainage area to meet back up with SY, JR and Abbey Pyle near the site of release to pack up.

2435—We leave the area.

## 22 June 2012

2252—PPS leaves CC at the CN13\_2012 nest and goes spotmapping NW towards CN5. JV and SY continue radiotelemetry tracking at CN13.

2318—PPS hears a M giving TCs to W in CN5.

2321—As PPS follows the bird and M gives TECs to SE, seeming to circle around behind.

2324—M gives TCs to N of PPS. PPS tries to return to the point at which the M gave TECs and takes a general area songpost CN5\_1 at X: 0481900 Y: 4333725 +/- 3m

**29 June 2012**

2240—JV and NS arrive at parking spot near CN13 nest. We start walking down Entryway Road towards CN5.

Weather; cloudy, calm, 20 C

2247—JV and NS at old CN5 nest tree, which has fallen. JV gives hoots, we listen. We walk W for ~30 min, stopping every few minutes to give hoots. After hearing nothing for 30 minutes, we walk back to parking spot.

# CN5—2013

## 30 May 2013

1500-1700—Flam Crew taps and peeps cavity trees in the CN5 and CN13 territories—most of CN13 and the E portion of CN5 were completed, but the W portion of CN5 was not peeped.

2055—CK, LL and SY arrive to set up a lure net in the open on the edge of a high burn area adjacent to 9-J on the N side.

Vegetation: lure net adjacent to young Psme and Pipo. Mature Pipo present as well.

Weather: Clear and calm to start at 9C. Wind quickly picked up to 5-10mph sustained, gusting 15+mph.

X: 482094

Y: 4333369

+/- 3m

2056—LL hears faint M TCs from N in the main central drainage ~200m away.

2100—CK and SY leave lure net. CK heads N into the main central drainage and SY heads over ridge to adjacent drainage to the NW to tap trees and listen for calls. LL stays at the lure net.

2131—CK heads NE in the main central drainage and taps tree CN5\_953 while keeping sight of main keyhole cavity facing E. Immediately after 3-4 taps a bird resembling a FLOW flies strongly away to the N.

2138—No positive ID on the bird, but CK waits 10m E of the cavity to see if there is a return

2245—SY hears nothing in adjacent drainage and leaves. Arrives at CN5\_953 with a peeper to check for nests. No presence of nesting sites nor FLOW return. SY and CK then return to lure net.

2302—Playback stops. We take down net and leave to CN11.

## 7 June 2013

Afternoon—Flame Crew peeps in West end of CN5.

2145—AW, CK and RC arrive in CN5 with intent to lure for and CN5/CN13 M. Net opens SSW on low slope of spur R approximately 120 m N of CN13\_2012 nest.

2158—Start playback.

Vegetation: Med-mature pipo/psme, young potr, low burn intensity.

Weather: Clear, light breeze, 6.5C.

X: 482188

Y: 4333486

+/- 3m

2201—M approaches from the N, giving TCs/HECs. Possibly CN13 M?

2207—M moves to the N of the net.

2212—M moves back S of the net.

2217—M backs off.

2226—AW leaves to tap and listen in CN13.

2227—CK leaves to inspect CN5\_2013 (#1185) as possible FLOW nest.

2244—Wing flaps heard 20m N of net. No visual/aural confirmation of FLOW identity. Flaps are intermittent and end shortly.

2246—AW hears M TCs from the lower CN5 aspen flat. TCs given from low slope of open ridge to NE.

2250—CK taps and peeps #1185 and sees no noticeable nest.

2256—CK hears M TC SE of #1185.

2257-2301—M TCs from live psme. AW obtains songpost CN5\_1. DBH: 54.0. Songpost is in

vicinity of SY telemetry post CN13\_5 from 6/22/12. This is most likely the CN5 M. ***Note (on 26 June 2014): after re-reading this entry, it appears this M was actually the CN13 M. We never heard 2 birds at our net sites. Because this bird was using the territory similarly to the CN13 radiotracked M, we can assume he is the same M.***

X: 482266

Y: 4333884

+/- 3 m

2312—AW follows M as he gives continuous TCs for ~4 min from stand of mature psme/pipo.

M moves constantly during this time, singing from approximately 3-5 trees. AW obtains

CN5\_2 general area. This is most likely the same bird as was songposted earlier.

X: 482341

Y: 4333608

+/- 3 m

2316—CK returns to net.

2322—M heard giving TCs 50m NE of net.

2324—RC leaves to tap and listen in CN13.

2330—We stop playback and move to the W side of the drainage.

2354—CK and AW start playback on low slope of W side of main CN5 drainage bottom. Lure

net is a single net.

Vegetation: Young pipo/potr, moderate bun intensity.

Weather: Clear and calm, 10C.

X: 482094

Y: 4333608

+/- 3m

2410—RC returns to net, having heard and seen nothing in CN13.

2418—Stop playback. We leave.

# CN5—2014

## 5 June 2014

Afternoon—Flam Crew peeps the entirety of CN5, we do not find any nesting FLOWs.

2045—JS is dropped off by SY roadside S of CN13\_2014 nest tree. JS approaches nest cavity to peep.

2100—Female is not heard or seen, JS taps and peeps CN13\_2014 nest. There are **3 eggs centered and touching.**

2106—JS moves further N down drainage to listen, thunder, lightning and rain are persistent.

2145—After saving the lodge from certain disaster, SY returns to CN5. JS and SY spread out across the several ridges and drainages of CN5 to listen.

Weather: 14C, cloudy, calm. Recent T-storms with significant hail.

2140—From position on E side of lower CN5 drainage, JS hears TCs in the aspen flat in the bottom of the drainage and pursues.

2146—The TCs that JS was following in the bottom of the drainage of CN5 subside. General area (+/- 20m) songpost CN5\_1 is noted in that aspen flat area.

2324—From back on lower N facing slope of CN5 drainage, JS hears a few TCs from the N approximately 100m away. JS and SY converge on action heard.

2328—JS and SY start observing cavity tree #1535 based on 2-3 TCs in immediate vicinity.

2338—Lightening and moderate rain commence – we depart.

***Note: The Ms behavior in the vicinity of this tree (which was too high to peep) was very suspicious. Longer time observing this tree in better conditions is warranted.***

## 13 June 2014

2139—SY, JS, JG and JG’s girlfriend Brooke, after adventures in CN13, join up with RD and LL to investigate CN5.

2158—LL from tall THTP pipo tree #1535 in CN5 confluence heard 2 TCs from SW, JS heard the same calls from her position in the aspen flat of the CN5 confluence.

2216—JS spots FLOW overhead in aspen flat, came in silent. SY joins, FLOW hops to second post just N, we still have a visual.

2226—FLOW flushes N. SY and JS investigate the area, later joined by RD, LL, BW and JG, nothing heard or seen.

2256-2306—SY silhouettes cavity tree #953 (past nest tree) – no activity observed.

2317—Lure net set up on central CN5 ridge just W of the main CN5 drainage to attempt to attract FLOW previously spotted/any other active Ms in area.

2319—PB started.

Vegetation: mature/young pipos/psme, surrounded by high burn area, open slope.

Weather: clear sky, moon bright, no wind, 14C

X: 482028

Y:4333017

+/- 4m

2323—Group hears faint TCs from NW.

2328—Group hears TCs and TECs from SE, closer than NW bird. Note: Coming from CN5?

2333—Both Ms go silent.

2334—**Unbanded M caught**, entered from N side, 2nd shelf. Suspected to be the CN5 M. 1st M, heard to the NW, continues to call while we have this bird in hand.

**Band # 1783-64523 (on R leg)**

71.5 g LWC: 128 mm

- 16.0 g LLP(5): 97 mm

55.5 g LLP(6): 105 mm

Rect: 58 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 3 | 3 |
| P5 | 2 | 2.5 |
| P6 | 2 | 2 |
| P7 | 1 | 3 |
| P8 | 1 | 1 |
| P9 | 0 | 1 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 1 |
| P5 | 1 | 1.5 |
| P6 | 1.5 | 2 |
| P7 | 2 | 2.5 |
| P8 | 2 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

Note: Bled, tiny hematoma.

2359—**Unbanded M caught**, approached from N, 2nd shelf. Suspected to be NW calling bird. **We suspect this is a previously unnumbered, peripheral territory.**

**Band # 1783-64544 (on R leg)**

70.5 g LWC: 124 mm

- 16.0 g LLP(5): 95 mm

54.5 g LLP(6): 103 mm

Rect: 56 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 3 | 3 |
| P5 | 3 | 2.5 |
| P6 | 2 | 1.5 |
| P7 | 2 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2.5 |
| P8 | 3 | 2.5 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

Note: Bled (tried L wing first, but had to bleed R), hematoma present.

2405—1st M released, immediate strong ascending flight W.

2407—PB off.

2430—Lure net down and 2nd caught M released, strong ascending flight N. We head back to parking spot.

***Note: Events of the night do not indicate the identity of the silent FLOW JS spotted in the CN5 aspen flat. By receiving calls and M captures at the lure net from the NW (CN11?/unknown territory) and the SE (CN5), we can expect to have caught the CN5 M Band #1783-64523.***

## 10 July 2014

2020—MC and ER arrive in CN5 to listen for occupancy and possible nesting vocalizations. We spread out in the main drainage with MC ~20m W of the most western cavity tree and ER ~100m E of MC.

2145—We hear nothing and head out to CN8. ER stayed in the main drainage while MC stayed to the NW visiting the peripheral pockets of cavity trees, ending at tree #1080. As we leave we hear CN13 calling to the E.

# CN5—2015

## 1 June 2015

2017—BH and SY spread out along the main CN13/CN5 drainage to listen for nesting vocalizations.

Weather: 12C, mostly clear, calm.

2100—Nothing heard, we go to set up a lure net.

2117—We start playback at a nest on the main CN5 ridge, ~35m SW of the faint 2-track. Net not fully up due to faulty poles…

Vegetation: Medium density young to mature pipo/psme on ridge top of low ridge.

Weather: 11C, clear, wind 0-3 mph.

X: 482020

Y: 4333598

+/- 8m

2121—We hear distant TCs (200+m) to the SE.

2125—Poles replaced – net fully open.

2126—We hear TCs right at the net, M still calling to the SE – 2 Ms in the vicinity. The 2nd (closer) M is likely CN5, heard W in drainage. ID of the bird to the SE is unknown.

2130—CN5 M goes quiet – possibly clipped the net.

2132—SE M gives TCs, is moving around net site.

2137—SE M goes quiet.

2140—SE M begins giving TCs again, still distant. Wind has picked up a bit, gusts to 5 mph.

2145—SY leaves net to go listen/tap. I move toward the SE M who is fairly consistently giving TCs

2219—PB track changed to ‘Track 42’

2222—TCs near the vehicle SE of net site (at the standard CN5 parking spot). Very brief, approx. 2-3 calls.

2230-2300—SY records 4 songposts in several trees on the S side of the road. The M called more or less constantly in the areas S and SE of the CN5 parking spot. M was still calling when I left.

2245—BH hears approx. 2 TCs ~40m SE, possibly indicating SE M heard consistently earlier.

2317—SY returns to the net and increases PB volume.

2319—We hear TCs distantly to the SE.

2322—CN5 M (presumably) begins giving TECs right at the net. M to the SE is still calling.

2341—Stop playback. The CN5 M made several flights around the net site giving TCs, TECs and, HECs before going quiet. We see M flying around net and landing in PB tree. Ultimately avoids net and vacates area after ~10 minutes. May have bounced out of the net at one point.

2351—BH and SY spread out to listen in the CN5 and CN13 area. SE bird giving intermittent TCs basically the whole time, we ignore him for now.

2455—We leave the CN13 and CN5 area and head up towards the vehicles to go after the SE M (now designated the CN14 M).

0105—From the CN5 parking spot we hear TCs distant to the S. We chase.

0116—**We hang a songpost on the M in the same area SY hung songposts earlier in the night**. After recording data, we leave.

## 12 June 2015

Afternoon—Flam crew peeps CN5 and CN13. Fairly thorough coverage of cavity trees in CN13, missing a few cavity trees on W side of CN5.

2027—BH, ER, and SY arrive in CN5 with the intent to listen for nesting vocalizations and eventually lure for the CN5/CN14 territorial males. We split up to listen. ER in W drainage, BH in E, and SY on small ridge in the middle. We hear and see nothing.

2127—We return to the parking spot to set up a N/S lure net ~30m NNE of the CN5 parking spot.

2137—Start PB.

Vegetation: Very open, pipo/psme/potr snags

Weather: Clear, slight breeze, 13C

X: 482104

Y:4333367

+/- 7m

2139—M gives TCs about 40m S of net, presumed CN14\_M.

2140—A second M begins giving TCs from about 30m NNW of the net. This is the presumed CN5\_M. The CN14\_M begins giving TECs and hoarse TCs and jumps within 20m of the net on the N side of the rd, still on the S side of the net.

2141—Both CN14\_M and CN5\_M within 10m of the net. The presumed CN14\_M gives more hoarse and aggressive HECs and stays mostly on the S side of the net while the presumed CN5\_M gives TECs on the N side of the net.

2142—The M giving hoarse calls goes silent, while the M giving TECs (CN5\_M) still calls. **An unbanded FLOW captured in the 3rd shelf on the N side of net. This is the presumed CN14 territorial M.**

**Band # 1833-03270 (on R leg)**

91.0 g LWC: 120 mm

- 34.0 g LLP(5): 90 mm

57.0 g LLP(6): 98 mm

Rect: 56 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 2.5 |
| P2 | 1.5 | 2.5 |
| P3 | 1.5 | 2 |
| P4 | 1 | 2 |
| P5 | 0.5 | 1.5 |
| P6 | 0.5 | 1 |
| P7 | 0.5 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1.5 | 0.5 |
| P4 | 1.5 | 0.5 |
| P5 | 2 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 3 | 3 |

2153—The CN5\_M goes silent, so we check the net. **An unbanded FLOW captured in the 1st shelf on the N side of net. This is the CN5 territorial M!**

**Band # 1833-03271 (on R leg)**

72.0 g LWC: 132 mm

- 16.0 g LLP(5): 99 mm

56.0 g LLP(6): 109 mm

Rect: 57 mm

We bleed his L wing.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 2.5 | 3 |
| P5 | 2 | 2 |
| P6 | 2 | 1.5 |
| P7 | 2 | 1.5 |
| P8 | 1.5 | 1 |
| P9 | 1.5 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 1 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 3 |
| P9 | 2.5 | 2.5 |
| P10 | 3 | 3 |

2220—**Third FLOW captured in N side of net, unbanded. Silent into the net, decidedly CN5 floater M.**

**Band # 1833-03272 (on L leg)**

88.5 g LWC: 129 mm

- 30.0 g LLP(5): 96 mm

58.5 g LLP(6): 105 mm

Rect: 57 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1 | 1.5 |
| P6 | 2 | 1.5 |
| P7 | 3 | 2.5 |
| P8 | 3 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

*Note: Blood samples taken from all 3 birds captured.*

2225—CN14 M released (**Band #1833-03270**) strong ascending flight W.

2238—CN5 M released (**Band #1833-03271**) strong ascending flight NW.

2241—TCs given consistently from S, presumably **Band #1833-03270** CN14\_M.

2248—CN14\_M gives TCs from about 50m S of net.

2255—CN5 Floater M released (**Band#1833-03272**) circled area before heading SE.

2258—PB off. We crash the net and split up to listen and spotmap in CN5. We head to NE near where the CN5\_M came from during the lure net.

2310—We hear TCs down drainage to the W – we chase.

2314-2316—The CN14\_M gives TCs from his position S of the road.

2322—From the N confluence of the E and W drainages in CN5 (near the past lowest nest in the drainage, ER and SY hear LCs from about 40m up the small ridge. SY pursues.

2323—**SY taps cavity tree #1033 and a F FLOW flushes to the N. This is the CN5\_2015 nest tree! Tree #1033 is a broken-top pipo in the mid to upper slope on the E-facing slope of the central ridge in CN5, and is located approximately 300 m from the CN5 parking spot and 100 m from the N end of the ridge. The cavity is W-facing and is the highest on the tree, less than 1 meter from the top (approximately 17 ft high), located under a staub.** We leave to let F back on cavity.

2339—We head into CN14 intending to spotmap and listen for nesting vocalizations.

2353—We hear TCs ~40m SE of the CN5 parking spot. We chase. M goes silent for a few seconds and then gives two HECs. We look for cavity trees in the area.

2359—The CN14\_M gives a few more HECs in our immediate area, <100m S of the standard CN5 parking spot.

2404—After not hearing anything more, we leave.

## 19 June 2015

2041—BH and MC arrive at CN5\_2015 nest tree with intent of capturing CN5\_F on flush.

2045—MC approaches nest tree and raises net to the lower of 2 cavities on the W side of the tree.

*Note: The nest was found from a F flush by “the flusher”(SY) and the exact cavity was never determined.*

2103—F flushes from upper NOFL sized cavity and flies W.

2104—**We peep the nest cavity and find 3 eggs**.

2105—We leave CN5.

## 26 June 2015

2155—DL and MC arrive at CN5\_2015 nest to capture the M.

2203—MC is in place with the net. F did not rise on approach.

Weather: overcast, calm, 14C

2205-2237—CN5 M starts to give TCs ~30m N of the nest. CN14 M responds from ~30S of the nest. CN5 moves to ~10m S of the nest and they had a brief encounter, but they both only gave TCs, and were never aggressive. MC was also giving hoots from the nest during this time. Both males go silent around 2237.

2250—F flushed after MC tapped tree.

2315—M begins to give TCs while MC moves back into the nest site. Again, F does not rise during approach.

2325—The TCs change to HECs, the M perches in a large conifer snag N of the nest. The M flies to the tree, perches on the branch above the cavity and makes a PD, MC swings and misses. The M then flies back to the snag giving TCs. While he is calling a second, silent bird flies to the tree and perches on the same branch then leaves.

2336, 2339, 2341—MC gives hoots at nest.

2345—M in nest site giving LCs

2351—The M makes another PD, MC swings **and we capture banded M.**

**Band # 1833-03271 (on ? leg)**

80.0 g LWC: 136 mm

- 20.0 g LLP(5): 100 mm

60.0 g LLP(6): 111 mm

Rect: 62 mm

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0.5 |
| P2 | 0 | 0 |
| P3 | 0 | 0 |
| P4 | 0 | 0 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

*Note: No blacklight available.*

2408—We release the M and leave. SAF to the S.

## 8 July 2015

2022—DL and SY arrive at the CN5\_2015 nest to attempt F capture at the nest.

Weather: 10C, cloudy, calm. Significant rain during afternoon leaves ground wet.

2036—Net in capture position – no response from cavity.

2039—M gives TCs ~40m NW for ~30 sec.

2045—More TCs to the NW, slightly louder indicating FLOW moving closer.

2048—M moves closer to the nest site giving TCs ~20m NW.

2049—Single FSC heard off cavity to the NW near the M.

**We peep: F is still on cavity and at least 2 Ns are visible, poking up through her wings. We do not get a great look, but they appear quite young – all white natal down – 2-3 days old?** We put the net back in place.

*Note:* *The FSC must have come from a different F. Prospecting? Neighbor that failed?*

2054—M comes to the nest tree attempting to make a PD. He continues to do this, and when denied, he flies around the nest site giving TCs and TECs. He does this several times.

2105—We try to let the M make a PD when he comes to the nest tree.

2119—M makes a PD.

2130—After several aborted PDs and no sign of the F in the entrance, we leave CN5\_2015 nest site.

## 10 July 2015

2028—RC and DL arrive in CN5\_2015 nest area to attempt F capture. F down on arrival.

Weather: Mostly clear and calm, very brief rain from an absolutely ridiculous cloud, beautiful sunset, 9C.

2030—DL approaches with capture net.

2032—DL at tree, waits until 2035 to begin raising net.

2036—Net in place over cavity. F stays down.

2056—LCs ~40m NNE of nest.

2057—M enters nest site and makes a few short flights while giving LCs.

2100—M leaves site, gives a few LCs 50m NE of nest then a few more further off to the N.

2108—M gives a couple of LCs ~70m NNW of nest then enters site.

2112—2 aborted PDs.

2113—2 aborted PDs. LCs in site to S.

2114—Aborted PD. LCs in site to S.

2115—No sign of F. We tap. F stays down. M LCing in site to E.

2116—Aborted PD.

2117—PD allowed, net replaced.

2120—PD allowed, net replaced.

2123—PD allowed, net replaced.

2125—PD allowed, net replaced. We tap again. F stays down. **We peep and see F in cavity as well as at least 2 Ns. We can only see 2, but F could easily be covering one. Younger appears to be mostly all white (~7-8 days? We do not get a great view due to shallow cavity and F blocking much of our view) while the older N appears to have gray on head and seemingly coming in on body (~10-11 days).** RC backs out and DL waits a few more minutes for F to flush before we can the effort.

2130—M prey laden on nest tree. DL pulls down the net and we leave CN5\_2015 nest.

## 14 July 2015

2031—MC and ER arrive in the CN5\_2015 nest vicinity with the intent of F capture. F is either down or off cavity.

2034—MC begins approach of the nest while ER spots from about 20m W.

2038—MC has the net raised over the cavity entrance. While he raised the pole, the top of an owl head moves up and down in the entrance a couple times, but not for long enough to see a face. **Cavity height is 17’ 8”**. We hear the Ns begging in the cavity for the duration of our observations.

Weather: Cloudy, calm.

2054—The CN5\_2015 pair gives FSC and M LCs about 15m E of the nest. The F apparently either flushed early or is roosting off cavity. **We peep to see 3 nestlings. The eldest two are all gray, and the eldest has the beginnings of a facial disk with dark feathers in the corners of the eyes (~14 days). The youngest is just starting to get gray on its face and head (~10 days).** We back off to observe and let the F back on. Both adults are being very vocal, and the F begins scolding us from the drainage bottom about 20m E of the nest.

2109—PD to Ns from unknown id FLOW who used an approach perch on the top of the nest tree.

2111—PD to Ns from unknown id FLOW, no approach perch.

2112—2 PDs made both using approach perch..

2113—PD. No approach perch.

2115—FSCs off cavity about 10m E of nest which turn into scolds. The M begins scolding us as well from about 20m N of the nest. We back off to about 20m off the nest, but we were never very close.

2123—FSCs about 2m W of the cavity, then F makes a PD to the Ns. M scolds from about 10m NNE of the cavity.

2127—F PD to Ns.

2128—F flies from nest tree N toward where we are observing giving in flight scolds. AHH! MC decides to go back into the nest site to attempt to catch the F on a PD. M and F scolds continue around the site.

2130-2138—MC has net up at capture height. Scolding continues. Both birds are hopping around the nest site, but favoring the drainage. After neither bird has come in to make a PD, MC lowers the net, and we decide to back out about 50m NW of the nest.

2158—We approach the nest. About 30m from the nest, we begin to get scolded again by both M and F perched in a psme snag a few m E of the nest.

2207—M PD to Ns at the same time as the F gives FSCs down drainage.

2209—FSCs down drainage.

2215—MC back to nest with net. F gives an FSC down drainage.

2216—As MC raises net, the F scolds about 10m E of the nest. Net at capture height, and F continues scolding.

2217-2229—Both M and F continue to scold us for the remainder of our capture attempt. The F lands in the pipo where ER is observing a couple times and scolds her. Neither bird makes an attempt at a PD. Concerned that the Ns are not getting enough PDs, we take down the net and leave the site.

## 17 July 2015

2021—BH arrives at CN5\_2015 nest site to capture F at the nest.

2036—I begin approaching nest with capture pole.

2038—I get capture pole in position over cavity.

2044—M enters site from NE giving LCs.

2047—F begins scolding loudly from ~20m N of nest tree.

2054—**I peep to find 3 Ns all with full juv. grey plumage. All owlets are active and audibly begging in the cavity. Eldest has partially developed facial disk, and the youngest N still has some white down tips. Owlets’ maturity leads me to conclude that fledging will occur in the next couple days.** I back off and observe nest activity from ~20m upslope.

2100—M makes PD to nest cavity then makes 45 degree flight to the ground.

2103—Both M and F give LCs in nest site.

2104—M makes flutter PD to cavity.

2105—F flies E from N perch and swoops me while giving loud scolds in flight. Lands on perch ~10m W of me momentarily, then immediately swoops back down towards me again with continued scolds. I back off ~10m and continue observing cavity.

2106—F follows me to my new observational spot, perching and giving loud scolds on a pipo branch above me. I retreat another 10m back from nest site.

2109—F continues scolding from perch in pipo.

2110—M makes flutter PD to cavity. Ns begging is audible from my position ~40m from nest.

2112—F goes silent.

2115—M makes flutter PD to cavity.

2117—F hunts me down and swoops me sideways as I am unobtrusively seated on the ground observing the nest. FLOW approaches silently, then after swooping begins giving loud scolds and lands on a branch ~3m from me. AHH!

2118—I move 100m down two-track S towards main road so as to let F calm down before returning to nest to resume F capture attempt.

2145—I get ~20m away from nest tree when F begins scolding me.

2150—I leave CN5.

## 20 July 2015

~1535—SY, MC, BH, DL, and friends arrive at CN5\_2015 nest to process owlets and capture F for genetic blood. SY begins approaching nest with capture pole.

1537—SY gets capture net in position, and finds F is off. **BH peeps nest to find all 3 Ns in cavity**. Because the F is not on cavity, we stop capture attempt and proceed to set up ladder for owlet processing.

1540—SY climbs ladder and begins enlarging cavity.

Cav. Dimensions:

Entrance: 65 mm x 50 mm

Entrance thickness: 25 mm

Horizontal depth: 85 mm

D.O.H: 44.5 cm

Vertical depth: 16 cm

1549—All owlets extracted.

Weather: light-moderate rain

**Owlet 1**

64.2 g

P#5: 68 mm

P#6: 68 mm

Rect: 35 mm

Band#: **1833-03255** (L. leg)

Notes: Bled L. wing. Fecal sample taken

**Owlet 2**

64.7 g

P#5: 65 mm

P#6: 65 mm

Rect: 30 mm

Band#: **1833-03256** (L. leg)

Notes: Bled L. wing

**Minkus**

54.3 g

P#5: 45 mm

P#6: 45 mm

Rect: 16 mm

Band#: **1833-03257** (L. leg)

Notes: Bled L. wing. Fecal sample taken

1608—MC returns owlets.

1610—We spread out in nest area to look for F roost, to possibly capture F on roost using mist

net.

1642—After no luck finding roost, we leave CN5\_2015 nest site.

# CN5—2016

## 2 June 2016

1620-1700—Flam crew arrives at CN5/CN13 to cherry pick and peep. We tap and peep all past nest trees and any nice-looking cavity trees from the road to the lower end of CN5, but do not find anything.

2025—MC, KM, and ER spread out in the CN13 drainage to listen for nesting or territorial vocalizations. MC starts in the confluence of the main CN13 and CN5 drainage and the side drainage W of CN5\_2015, KM listens about halfway down the CN13 drainage, and ER listens in the SE side drainage in CN13. ER, MC, and KM begin listening for calls in the drainage and slowly move W. MC and KM hear an LC and possibly an FSC near the junction of the main drainage and the large side drainage ~100m E of CN5\_2015.

2100—MC circles back towards the CN5\_2015 nest tree and hears a three note LC ~20m E of the past nest.

2141—KM and ER hear M LCs across the drainage from the CN5\_2015 nest tree.

~2200—We leave to set up lure nets.

2215—MC, KM, and ER set up a lure net along 9J Rd about 50m E of the CN13 parking spot on a N/S axis. MC and KM leave to set up a second lure net to the NW. PB begins.

Vegetation: Young pipo, psme. Open.

Weather: Clear, slight breeze

X: 482172

Y: 4333323

+/- 8m

2225—MC and KM set lure net on the ridge just W of CN5\_2015 nest tree and begin playback.

Vegetation: mixed age pipo and psme trees

Weather: clear skies, 15C

X: 481870

Y: 4333762

Note: This GPS coordinate is estimated from cavity trees that were nearby and is not exact.

2238—MC and KM hear TC NW of the net ~50m. The FLOW seems to fly E of net then goes quiet.

2245—M FLOW makes HEC ~20m NE of the net and flies closer. M changes perches near the net site multiple times but does not hit the net.

2251—MC changes the playback to a more aggressive call (4-note TCs).

2252—MC and KM successfully capture the calling bird, he is an unbanded M and came from the S side of the net in the 3rd shelf. This is presumably the CN5\_2016 M! MC and KM process the male.

**Band # 1833-03368 (on L leg)**

73.0 g LWC: 136 mm

- 19.5 g LLP(5): 100 mm

53.5 g LLP(6): 110 mm

Rect: 61 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 2 | 2 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1.5 | 1.5 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2313—After a completely silent night at ER’s lure net, she sees a Long-eared Owl hit the net apparently trying to eat the PB. It wiggles itself free.

2326— At the net site near CN5\_2015 nest tree, KM releases processed M, who flies NE from the release site. KM and MC return to ER at the initial lure net site.

2332—PB off. ER breaks down net, and rejoins KM and MC to head to CN1 and CN2.

## 7 June 2016

Afternoon—Flam Crew arrives in Hayman to selectively peep past nest trees and particularly nice-looking cavities in CN5, CN10, CN11, and CN14. **We found the CN5\_2016, CN14\_2016, and CN8\_2016 nests.**

1652—**ER finds the CN5\_2016 nest on drainage W of the main CN5 drainage**, SW of the CN5\_2015 nest. MC and KM join. The nest tree is a broken top psme at the base of the E-facing slope with many stobs and branches. The cavity faces NE about 6m up at the top of the tree, directly below a branch. The cavity is a large, natural, oblong shape. The nest tree is tag # CN5\_1345, however, there seems to be another tree with this tag, and the nest proved difficult to locate in the evening. Tag number and location to be confirmed.

2030—RC arrives in CN5 to peep CN5\_2016 nest and determine status. I begin looking for nest tree #1345. I have trouble finding this tree at first as the description does not match the location. When I locate #1345, it is a ~4m tall psme snag with a single cavity and no branches. I tap and later peep, but on FLOWs. **This is NOT the CN5\_2016 nest tree.** I look around area for other cavity trees and glass all broken top psmes that match the nest tree description for cavities, but find nothing. Also, no cavity trees in this vicinity are flagged (nest tree has two close flags).

~2045—I wait between #1345 and pipo broken top #1247 to listen for nest site vocalizations in another attempt to locate nest. 4 planes and a truck pass by in slow, grating succession. No FLOWs heard.

2105—As a last-ditch effort, I pop over another drainage to the W to locate one of the only other broken top psme cavity trees in the area #1342. I tap and peep, but find no owls.

2110—RC leaves CN5, downtrodden and longing for the familiar sight of a flam.

## 17 June 2016

2018—ER arrives in the CN5\_2016 nest site with the intent to peep the nest to observe clutch size and attempt a M capture at the cavity. F is down upon arrival. **The tree is tag number 1312, but is not in the database**. **The nest coordinates are:**

X: 481919

Y: 4333754

+/- 8m

2038—I begin approach to attempt to catch the M before the F flush. F pops up in cavity. I crouch down.

2041—F goes back down in the cavity.

2047—Net is up around cavity height. Because of branches, there will need to be some maneuvering.

2053—M gives LCs about 30m NE of the nest.

2057—F pops up in the entrance.

2058—F flushes by hopping out of the cavity to a branch one foot below the entrance. She perches there for a minute before flying out of the site. I lower capture net, and **peep reveals two eggs, centered.** I back out of the nest site until F returns

2107—F returns to the cavity from the NW.

2108—M approaches from the NW, uses approximately every approach perch in the nest tree, and makes a PD. M goes down in the cavity for a few seconds. On his exit, he also hilariously jumps a foot down from the entrance before making a more reasonable flight.

2114—M makes a second PD. F gives FSCs on cavity.

2122—M PD.

2128—I begin approach to the nest tree to attempt to capture the M.

2132—As I am raising the net to cavity height, I brush a branch. The F pops up in the cavity entrance, immediately goes back down, then flushes a few seconds later. I leave to join RC and BH in CN11 and CN14 after being fooled by a couple of owl clowns.

## 1 July 2016

2018—KM and ER arrive in the CN5\_2016 nest site with the intent to capture the F, peep the nest, and then possibly capture the M. F is down in the cavity upon arrival. We begin setting up poles for a potential M capture in a mist net.

2030—We finish setting up poles. We sit back to observe.

2035—KM begins approach with the capture pole.

2037—Net hits tree while being raised. F pops up in the entrance and stays up for ~1min, and then goes back down.

2040—Net over cavity.

2049—M arrives silently in the nest site, preyladen. He flies off SE without making a PD attempt.

2053—M returns and makes an aborted PD.

2057—**F flushes into the net bag! She is an unbanded F. Peep reveals two Ns in all white natal down. One owlet has the head up and moving, with eyes closed, and prominent egg tooth.** Given the age of the owlets, we do not attempt a M capture.

**Band # 1833-03393 (on R leg)**

2103—Release the CN5\_2016 F. SAF NE. We leave.

## 8 July 2016

2032—ER arrives in the CN5\_2016 nest site with the intent to capture the M at the nest. F is down in the cavity upon arrival. I begin setting up a mist net.

2045—F pops up in the entrance.

2047—F flushes. **Peep reveals two Ns both with gray on wings, back, and top of head. The runt has a pretty white face, and the elder has the beginnings of gray on the face, with no signs of facial disk (~14 days).** I continue to set up the mist net.

2048-2135—Adults make 12 PDs to the cavity. The F does not come back on in this time. I observe some of the flights to the cavity, narrowly avoiding the net. The mist net is on five poles on one side, and six on the other.

2114—F makes a PD and gets caught in the mist net. I extract and release within the minute.

**Band # 1833-03393 (on x leg)**

2135—F makes a PD and again gets caught in the mist net. This time, I decide to hold her to process and bleed, hopefully encouraging the M to make more PDs.

**Band # 1833-03393 (on x leg)**

87.5 g

- 29.0 g

58.5 g

**Notes:** Bleed L wing. As I soon captured the M, I just took a mass and blood sample, before releasing the F.

2145—While I have the F in hand, I hear wingflaps, and see that the **M was caught in the mist net, entering the cavity.** The M dropped a large brown cricket in the net on capture. He is a banded M, who was originally captured about 50m W of the nest and called the CN5\_2016 M on 6/2/16. I collapse the mist net.

**Band # 1833-03368 (on L leg)**

64.0 g LWC: 136 mm

- 15.5 g LLP(5): 99 mm

48.0 g LLP(6): 109 mm

Rect: 65 mm

**Notes:** Bled earlier this year by MC. RP2 was in molt at 40mm with 22 in shaft.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 3 |
| P2 | 1 | In molt |
| P3 | 2 | 2.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 1 | 1 |
| P8 | 0.5 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | In molt |
| P3 | 0.5 | 0.5 |
| P4 | 1 | 1 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2 | 2 |

2150—Release F SAF NW.

2219—Release M SAF SW. I begin breaking down the mist net and leave to meet the other members of Girl’s Club.

2254—ER, BH, DL, KM, and Sawyer start PB on either side 9J Rd about 150m E of the CN5 parking spot to see if we can pick up a CN13 M. ER and BH listen on the N side of the road, and DL, KM, and Sawyer listen on the S side.

2309—ER and BH hear a M giving TCs about 150m N of the CN13\_2014 nest tree where we have ended our PB session. We suspect this could be the CN5\_M. DL and KM hear nothing. We leave.

## 13 July 2016

1533—The Flam crew, minus BL, arrives in the CN5\_2016 nest site to process owlets. Upon our arrival, the F is down in the cavity, but she promptly comes up on our approach.

1537—We raise the ladder and the F stays up in the cavity, maintaining an intense gaze on the crew at the base of her tree.

1539—The F flushes as ER reaches the top of the ladder. Cavity enlargement is needed, so ER gets measurements of the cavity before utilizing the saw.

**Cavity Dimensions**

Horizontal entrance: 55mm

Vertical entrance: 115mm

Horizontal depth: 150mm

Vertical depth: 160mm

Entrance thickness: 20mm

DOH: 30.5

Height: 18’10”

1544—ER pulls two owlets out of the cavity and climbs down the ladder.

**Black Owlet**

53.9 g

P#5: 42 mm

P#6: 41 mm

Rect: 15 mm

Band#: **1783-74359 L**

Notes: *We bleed the owlet on the L wing. A small hematoma occurs.*

**Blue Owlet**

47.6 g

P#5: 30 mm

P#6: 29 mm

Rect: 9 mm

Band#: **1783-74360 R**

Notes: *We bleed the owlet on the L wing. A small hematoma occurs.*

1602—After the crew processes the owlets, ER climbs back up the ladder.

1605—ER returns both owlets to the cavity. The crew heads out of CN5 to peep cavity trees in CN4.

# CN5—2017

## 1 June 2017

2035—KM, ER, and LD (a team we might refer to as ELK), listened in the CN5 territory. KM immediately heard a soft FSC on the ridge to the E of the confluence of the two drainages in the E part of the territory. LD listened just SE of KM and ER shot NW to listen on the central ridge and in the CN5\_2016 nest drainage.

2044—ER hears a M giving TC on the eastern R. about 500m N of the parking spot by the power line. I pursue and pick up the M in a pipo, but he immediately begins moving W, pausing every few seconds to sing and following the power line W. ER follows M until he is stationary giving TCs 150m NW of the CN5\_2016 nest at 2103.

2116—M moves to the E side of the CN5\_2016 drainage where he gives TCs for greater than 30 minutes. ER takes songpost CN5\_1 in a live psme. DBH: 56.5 cm

X: 481974

Y: 4333714

+/-3m

2130—KM hears an FSC to the E of the central drainage in CN5. I think I hear an LC but upon conversation with ER I conclude that the noise is most likely echoes of the M TCs to the NW of me.

2146—LD hears FSC vocalization NE of S portion of Eastern most ridge, S of KM location’s location

2245—Team ELK abandons listening efforts to head back to the vehicle to grab lure netting equipment.

2250—M gives TC about 200m NE of the CN5\_2015 nest tree while we begin setting up the lure net.

2252—We begin playbacks at a net set up about 150m N of the road of the central ridgetop in CN5. We set up the net in order to hopefully target the M ER heard making TCs in the NW drainage. The net is about 50m SE of CN5\_2015

Vegetation: mixed pipo/psme, open

Weather: clear, breezy, 11C

X: 482070

Y: 4333636

+/- 3m

2255—Response from M about 100m NW from the net. He seems to fly closer to the net, following what seems like the live trees in the drainage. His closest approach brings him within 50m from the net. M makes TCs NW of the net and backs off, still responding. He makes a few TCs from the E, staying well over 150m from the playback.

2300—M goes silent for two minutes, but picks back up in the same location at 2302.

2315—LD hears M vocalizations from E ridge, ER and KM do not corroborate

2330—ER and KM walk playback N on the ridgetop in an attempt to draw M closer to the net. We listen to the M make TCs and TECs E of the playback on the ridge, but he does not fly any closer.

2400—We put the playback back near the lure net and wait. The M stays in the conifers almost directly E of CN5\_2015.

2415—We break down the net as the M appears to stay more than 100m from the net. We return to car.

## 16 June 2017

Afternoon—Flam crew does an extensive peep in CN5/CN13 territory. We find several downed cavity trees and peep most known cavity trees. Cavity trees on the ridge just W of the creek were not peeped, along with cavity trees in the farthest NE clump of CN5 and farthest N clump in CN13. We do not find a nest.

## 7 July 2017

2250—MC, JE, and LD start listening in CN5. JE and LD start PB up near the CN5 parking spot, moving W along the road. MC begins by tapping a few past nest trees. He ends up at the terminus of the 2015 nesting ridge, and gives a few hoots. MC then moves into the drainage to tap the 2016 nest tree and give hoots in the vicinity.

2312—We hear nothing and leave to meet with the crew.

# CN5—2018

## 7 June 2018

1645-1710—Flam crew cherry peeps in the CN5/CN13 territory. Goose eggs.

2035-2145—What a thrilling night! KM, ES, and KA listen for FLOW vocalizations in the CN5 territory. We hear nothing but the sounds of our own crunchy footsteps as we walk over the graveyard of fallen cavity trees.

2207—We start PB (T42) at a lure net set up about 150m N of the CN5 parking spot on the central ridge in the CN5 territory. The net opens N/S

Vegetation: young potr, psme snags

Weather: 10% cloud cover, breezy, 15C

X: 482096

Y: 4333522

+/- 3

2348—KA performs a net check and finds a flam-sized moth struggling the third shelf, apparently flying in silently from the N. The moth is an un-banded M. We release the nocturnal Lepidoptera and it promptly makes a SAF to the N, exhibiting a zigzagging flight pattern that follows the light of our headlamps.

2359—We cut PB, break down the net, and return to the vehicles.

## 21 June 2018

2250—ES and AM arrive in the CN5/CN13 territory to set up a lure net briefly.

2257—We start playback, T42. Net is positioned 50m N of 9-J road near boundary between CN5 and CN13 in a low slope position on a NW facing slope about 100m W of parking spot. Net is open E-W.

Vegetation: young potr, mature psme, in side drainage bottom

Weather: clear sky, slight breeze, 15.0 C

X: 481885

Y: 4333434

+/- 3m

2257-2337—No FLOW vocalizations are heard.

2337—Playback is stopped. We leave.

# CN5—2019

## 13 June 2019

1440-1510—Flam crew cherry peeps in CN5 for a CN5\_2019 nest tree. We spread out across the territory and target historic nest trees, but no signs of FLOW activity are found.

## 20 June 2019

1430-1700—Flam crew systematically peeps CN5 and CN13 for a FLOW nest, hitting past nest trees #938, 799, and 1312 as well as most of the marked cavity trees still standing. No evidence of a FLOW nest is found.

1700—Storms roll in so we depart.

# CN6—2005

## 24 June 2005

2114—MS and SY arrive at CN6 area – directly E of CN1 and CN2, accessed from lg. pullout on S side of rd. E of CN1/CN2 parking spot. 16°C, wind approx. 15mph, T-storm to the W.

2125—SY hears 1LC and subsequent FS calls right after giving several hoots. No further calling is heard. GPS of general area of calling:

x coord.: 481213

y coord.: 4330262 ±7m

2228—We leave.

## 28 June 2005

1930—The Flam Crew arrives at the CN6 Pullout, approximately 300 m E of where we parked for access to CN1 in 2004, to tap/peep cavity trees.

2020—BL, SY, and MS spread out near the head of the drainage in which CN1\_2004 nest was found to listen for nest activity.

2054—From the ridge top dividing the CN1\_2004 and CN2\_2005 nest drainages, BL hears a M giving TC from his roost ~50 to the S. Shortly thereafter, this M (presumably) is seen flying to the vicinity of a *Pipo* tree crown near BL, where he appears to forage for 1-2 min. Meanwhile, I see another *OTFL* fly into another *Pipo* tree crown approximately 30 m away. Here the 2nd owl perches quietly until the foraging M flies into the same tree, and without any vocalization, food exchange, or aggression, the two birds fly in the direction of the CN2\_2005 nest. Shortly thereafter, the CN2 M calls in the vicinity of the nest area (where DF and EE are). Consequently, BL presumed one of the owls to be CN2 M, and the other to be a UFO (perhaps a relative?).

2100-2330: We spread out to the E and N to further listen. BL marks two songposts (general locations) approximately 600 m E of the CN2 nest, but these were likely still attributable to the CN2 M. Nothing else heard or seen.

# CN6—2015

## 12 June 2015

~2130—DL, BL, and MC arrive in CN1 territory and begin to tap and listen, attempting to find a potential CN1\_2015 nest. We hear and see nothing.

2205—We arrive on the CN1/CN2 saddle to set up a lure net. Before we set up our net, BL gives a few hoots and a M to the N responds with TCs and TECs—this is probably CN1 M.

2217—We begin PB.

Vegetation: young-mature pipo/psme

Weather: clear, calm, 11C

X: 480704

Y: 4330146

+/- 3

2227—**Capture a silent, banded bird in the 2nd shelf from the W—band # 1593-64887; this M was banded as a CN1\_2013 floater (NOTE: while banded as a ‘floater’, this likely just reflected he was silent coming into the net. He may very well have been the CN1\_2013 territorial male, but since we never found a CN1\_2013 nest, we never captured him anywhere else that year).**

**Band # 1593-64887 (on L leg)**

63.0 g LWC: 128 mm

- 7.0 g LLP(5): 96 mm

56.0 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2 | 2 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | .5 |
| P2 | 0 | .5 |
| P3 | 0 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2249—M is released. He has strong ascending flight to the NW. While we processed this bird we also had another M giving TCs from the S (possibly CN2 M?).

2252—BL and MC leave to go listen. BL goes to CN1 territory and MC goes to CN2 territory.

2300—MC hears a M giving HECs immediately S of the net in the bottom of the CN2 drainage. As MC approaches the M flies into an overhead tree giving HECs.

2330—Multiple birds have been calling, so DL switches the playback to the *Megascops* call on PB #3. The presumed CN2 M quickly comes into the net site giving HECs. This is in the vicinity of a couple cavity trees near tree #1526, he then flies up drainage.

2306—A second M begins calling up drainage to the E (CN6 M?) from the presumed CN2 M. The first male begins giving HECs, **MC hangs songpost CN2\_1.** The upper drainage M makes a short flight closer giving one encounter call then flies back up drainage.

2318—MC now chases the upper bird further up the drainage. **I hang songpost CN2\_2.**

2333—**While the presumed CN2 is calling ~ 20 m to the SE of the lure net, we capture a silent, unbanded bird—we refer to him as a CN1 floater at the time. He came in from the W and was in the 3rd shelf.**

**Band # 1833-03242 (on L leg)**

61.5 g LWC: 134 mm

- 7.0 g LLP(5): 102 mm

54.5 g LLP(6): 112 mm

Rect: 67 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2.5 |
| P2 | 2 | 1 |
| P3 | 2 | 1 |
| P4 | 2.5 | 1 |
| P5 | 2 | 1 |
| P6 | 1.5 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1.5 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

Note—We took a genetic blood sample and M had a moderate L wing hematoma.

2343—Recapture 1593-64887. CN2 M is still giving HECs at the net.

2346—Stop playback.

2352—M is released, strong ascending flight to the W. We take down the net and leave.

## 26 June 2015

2040—SY and LP arrive to top of R between CN1 and CN2 with intent to lure CN1 and/or CN2 territorial M.

2048—Lure net set up. PB started. Net opens N/S.

Vegetation: young-medium psme, medium-mature pipo. Fairly open.

Weather: calm, overcast, 17C

X: 480958

Y: 4330175

+/- 9m

2051—M giving TCs and TECs comes into net area from CN1 drainage (N of net) ~60 m away. He continues to vocalize until ~2059.

2100—SY leaves net area and goes E up R to listen and tap.

2110—TCs heard again in CN1 drainage in similar location to when he was heard at 2051, except this time he seems to be a bit further E than before. He comes into net area at this time from NE. Gives some HECs too.

2117—**Banded M in net from S. 2nd shelf. He gives TCs and TECs prior to hitting net.** LP sees bird fly from mature pipo (~10m S of net) into net. **This is the previously caught CN1\_2015 M.**

\**Note: Only measurement taken is mass because this M was caught earlier in season.*

**Band # 1593-64887 (on x leg)**

80.0 g

- 29.0 g

51.0 g

2118—SY returns to net site.

2123—#**1593-64887** is released with strong ascending flight to the S.

2125—M giving TCs in net area. This is assumed to be the CN1 M that was just captured. This M continues to vocalize with TCs and TECs in net area for the remainder of the time that the PB is on.

2135-2158—SY does a loop through lower CN6/upper CN2 listening and tapping. Nothing heard.

2202—PB off. Lure net is taken down.

2208—TECs heard on upper slope ~30 m SW of net location as we finish taking down net. We hear simultaneous TCs from low in the CN1 drainage meaning this is most likely the CN2 M. We leave area at this time to drive to CNG1.

# CN7—2005

## 7 July 2005

2025—EE, MS, and BL arrive in the E Fork of the Little Turkey Cr drainage, approximately 2 km W (as crow flies) of the Turkey Cr Campground turnoff on the Cedar Mtn Road. Our aim was to tap/peep cavities in this drainage, an area approximately 0.5 km W of where SY heard a singing M while surveying on 29 June 2005 (the M was heard W of this survey point at a considerable but undetermined distance). PC, calm, 22C.

2225—While walking down an E tributary of the E Fork of the Little Turkey Cr, BL flags a *Potr* snag cavity-tree (dbh ~ 25 cm) just as FSC are heard from a F approximately 10 m distant. Shortly thereafter, a M arrives in the vicinity of the cavity tree giving LC, and then delivers prey to a nestling giving FSC in the entrance of a flicker-sized cavity approximately 11 m above the ground, on the N-facing side. This portion of the forest burned at low intensity. **This is identified as the B7\_2005 nest, in a previously undocumented territory.**

GPS coordinates of nest tree: X—478459, Y—4330623 (+/- 12 m).

2235—I leave after two more PD by the M (nestling at, or near entrance during this time) to pick up EE and MS.

2300—EE, MS, and BL return to the B7 nest, and get up to attempt capture of the adults.

(MS notes)

2301—Peep CS\_7 nest and find 3 older owlets.

2302—hear CS \_7 F to north.

2306—net up to capture either M or F.

2311—P.D. by M (*lepidopteron* prey).

2316—F makes P.D.

2317—P.D. of lepidopteron.

2318—P.D. and capture attempt.

2327—CS\_7 M heard to SE and then to W.

2329—P.D. by M- bird in net then got out. Loud rasping from owlets.

2341—**Capture of M—previously unbanded; he is given Band #64417.** Blood draw attempted by was only able to get a small amount of blood, possibly not enough for lab work.

Band # 64417

60.0g LLP: 101mm

-12.0g WC: 135mm

48.0g Rect: 60mm

2204—M released.

## 7 July 2005

2030—MS and EE enter little turkey creek drainage to peep and find cavity trees in search of a flam nest in this vicinity where a male has been heard singing

2114—MS sees flam fly into *pipo* 7m north, only about 75-100m down drainage from road. (Coordinates: x- 478071, y-4330551 +/- 12m). Shape and size looked flam-like but couldn’t see eyes. Flam moved up drainage, hoping from first tree to a *pipo* 10m away. After which I lost sight of flam.

## 8 July 2005

2035-2205: BL searches for cavity trees and listens for possible nest activity in the vicinity of the W Fork of the Little Turkey Cr drainage (above and below the Cedar Mtn Rd cut), near where MS saw a M the previous night. No flams seen or heard.

2045—SY and DF arrive to capture F.

2046—Net up, F calls from N, then from E.

2050-2157—20 prey deliveries made by M and F to nestlings (see prey delivery sheet).

2050—F captured but escapes.

2053-2102—Nestling at entrance.

2102—F captured but escapes.

2107—Capture of the F, she is previously unbanded.

New Band #64456

85.0g

-31.0g

54.0g

LLP: 96mm

LWC: 128mm

Rect.: 53mm

She is bled from the left wing.

2126—F is released, she flies to the S.

2111-2130—Nestling at entrance.

2132-2152—Nestling at entrance.

2157—Nestling at entrance.

2200—We leave.

## 8 July 2005 (MS notes)

1619—MS and SY enter to capture CN7 female.

1624—Net up and tree tapped.

1626—Peeping of cavity reveals that female is not in cavity, but 3 oldish owlets with eyes open and most of natal down gone.

1635—We leave.

## 15 July 2005

2011—MS arrives at CN7 nest to check status of fledging.

2013—Peeping of cavity reveals that 2 owlets are still in the nest, and appear to be close to fledging. One of the brood apparently has fledged.

2021—MS leaves.

# CN7—2006

## 8 June 2006

2008—EE and KC enter the CN7 area in search of this year’s nest. It is calm, mostly clear, and approx. 21.5 C. The 2005 nest is empty.

2040—EE finds the nest when she peeps a lower hole, and sees the F pop her head out**—THIS IS THE CN7\_2006 NEST**. The tree is **CN7\_3,** with a north facing cavity that is at the bottom of a large scar on the Potr. Height is approx. 25ft, and the area is very open, mostly burned.

2041—F flushes after M comes in from S giving TEC’s, and they sit on a tree to the W together—the F gives some quiet calls.

2045—F flies to the W, M follows seconds later, into the sunset. **EE peeps the nest and finds three eggs, center and touching**.

2059—F returns to the nest from the SE. M starts TEC’s from the W and is moving in closer.

2101-2207—EE and KC see 12 prey deliveries, and fail to net the M 4 times…he’s bouncing out of the net. The F flushes after the fourth try, after the M has given TEC’s. Pole should be ~23’4” high for capture. We leave the area.

## 16 June 2006

2122—EM and SY arrive at nest site to attempt to capture the CN7 M. Temperature is 16 degrees C with almost no wind.

2125—Prey delivery.

2126—Prey Delivery.

2128—SY has net set up for capture.

2130—PD, attempted capture fails.

2133—SY fixed net (hole) and was set up again for capture.

2135—Capture attempt—unsuccessful.

2137—Prey delivery, capture attempt unsuccessful.

2139—prey delivery, capture attempt unsuccessful.

2142—prey delivery, capture attempt unsuccessful. SY and EM repair another small hole in the net.

2144—F gives two begging calls.

2146—SY set up net and was ready for another capture attempt.

2155—capture attempt on PD fails.

2159—Prey delivery. Capture attempt fails.

2200—EM and SY leave site to meet up with BL at CN4.

Note: M is an escape artist. Next, we could try to curve the net more so it fits better around the narrow nest tree. Also, since the M comes out of the cavity feet-first, we could try to move the net back more to catch the M in mid-flight.

## 30 June 2006

2043—EE and KC arrive to attempt to capture both CN7 M and F and peep nest.

2047—KC has net set up over hole. M comes into area and gives TECs. F responds with FSCs.

2048—We capture F. She is unbanded so we band her with #64515.

New Band #64515

64.0g

-17.5

46.5g (WOW!!)

LLP: 96.5mm

LWC: 130mm

Rect.: 55mm

\*Note: Weight appears to be absurdly light. Brings into question user error in reading scale.

2150—**We peep and find 3 owlets all in natal down**. The oldest one appearing to be 3-4 days old. Shell fragments still visible.

2100—M makes prey delivery to offspring in cavity.

2101—F is released. We decide not to bleed her due to the presence of eggs.

2125—We return to cavity to try to capture M.

2128—A Flam returns and stays down in cavity about 30 seconds as EE is setting up capture net before leaving cavity again. Likely to have been F.

2131—F flies into *Potr* 7m to the SE, gives FSC, flies to another *Potr* 7m N of trr before entering cavity.

2135—M makes prey delivery.

2137—M makes prey delivery and stays down about 15 seconds.

2152—M is captured. He is unbanded so we band him with #64516 and bleed him.

New Band #64516

68.5g

-17.5

51.5g

LLP: 88.0mm

LWC: 135mm

Rect.: 57mm

2208—M is released and flies strongly to the S. We leave.

## 11 July 2006

1339—Flam crew arrives at CN7 to peep and try to capture F. We put net up and tap but F doesn’t come to entrance. We peep and find F in there and **2 owlets**. We leave.

2036—KC and EE arrive at CN7 to try to capture F and bleed her, as well as to make any nest observations. We also want to peep and determine age of owlets to estimate fledging date. Weather is clam, partly cloudy, and 16 degrees C.

2040—Net is over cavity entrance. Nest height with net is 19 feet 11 inches.

2051—KC captures F. **We bleed her** and take 5 contour feathers for future genetic work.

#64515

70.5g

-17.5

53.0g

We also peep at this time and find **2 owlets that appear to be between 15 and 17 days old**. They are entirely in juvenile plumage but have not yet developed a well-defined facial disk.

2110—F is released. We move ~50m away to allow F to resettle.

2146—We return and silhouette the nest.

2151—F fives several scolding calls from outside cavity suggesting she had not yet returned.

2154—We back away and from a distance see a Flam (M or F) go into nest area.

2157—Adult goes into nest area again.

2208—We move closer to nest tree again to observe more clearly.

2213—Adult Flam makes prey delivery to cavity.

2218—F comes into area and gives 1 scolding call before flying off to the S.

2221-2236—M makes 2 prey deliveries. No vocalizations.

2237—F gives 1 scolding call and M makes prey delivery.

2239—F gives a few more scolding calls before flying 5m SE of nest and then she flies into cavity. M comes into area and begins giving quiet TECs. F flushes after 10 seconds of M’s TECs. Makes prey delivery after 1 aborted prey delivery.

2241-2246—M makes 3 prey deliveries and gives no vocalizations.

2254—M flies in from N and makes prey delivery. Meanwhile the F comes in from E and makes prey delivery. M leaves giving TECs.

2259—We leave as M appears to be ready to make a prey delivery.

## 14 July 2006

1355—The Flam Crew, BL, and a Gazette photographer arrive at the CN7 nest to enlarge the **cavity, and band/bleed the owlets. We peep and confirm that two** owlets are still present; the F is not in the cavity.

CN7\_2006 cavity tree dimensions:

DOH: 28.5cm

Entrance Thickness: 3.5cm

Horizontal Depth: 12.5cm

Vertical Depth: 25.0cm

Cavity Entrance (Horizontal x Vertical): 5.5x6.5cm

Band #64528 Band #64529

55.0 g 68.0 g

- 12.0 g - 16.0 g

43.0 g 52.0 g

LLP: 39 mm LLP: 52 mm

Rect: 11 mm Rect: 18 mm

Both owlets bled (l brachial vein)

1445—Owlets returned to cavity, and we leave.

# CN7—2007

## 31 May 2007

1935—Flam Crew arrives in CN7 terr. to peep in search of a nest.

1952—SY approaches an unenumerated cavity approx. 25m upstream of the 2005 CN7 nest. F is in entrance of a cav. Approx. 20ft high, facing N-NE. **This is the CN7\_2007 nest.**

1959—We leave.

2040—EE and KB arrive to attempt to capture CN7 M. F is down upon our arrival

2041—Flam flies into vicinity and silently enters cavity. We do not see Flam leave and think this must be the F.

2043—M calls off roost ~50 to the NW. F is up in entrance and gives some FSCs.

2048—F goes back down.

2052—F comes back up as we make noise to find a better viewing angle.

2053—F flushes.

2056—We peep and find 3 eggs in the center touching.

2058—M returns to area giving LC to F and F follows. Both birds fly off.

2113—M gives LC near nest and F enters cavity.

2116—M makes PD but does not enter cavity. Possibly a shallow cavity.

2120—M makes another PD and does not enter cavity.

2126—M makes PD and enters cavity and stays down for about 2 seconds.

2129—EE moves close to begin capture setup. F flushes. We back off about 50 m.

2143—M gives 4 LC in nest area. It is possible F returns at this point but we can’t be certain because we are too far from tree.

2208—We move back in and attempt to set up net.

2214—F flushes as EE begins to raise net. F appears to be very sensitive to our presence. We abandon capture efforts for the night.

## 8 June 2007

2010—EE and KB arrive to attempt to capture F or M. It is a clear night, about 20C with a very light breeze (<5mph).

2030—KB approaches nest site. As I set up to capture the F, she flushes to a *PIPO* approx 5m away. Wee back off.

2041—F returns to cavity, but stays up.

2044—F goes down into cavity.

2059—M calls approx 30m to the south and circles in closer with LC’s. F responds with FSC’s.

2105—M gives TC’s off to south about 100m away.

2130—KB moves in to attempt to capture M. F is up in cavity. We wait. M flies into area. FSC and LC’s exchanged. PD.

2134—M back in area. We hear FSC and LC’s. Male makes a PD.

2140—Capture net set up.

2145—F apparently left at some point then returned.

2147—FSC and LC’s.

2149—FSC and LC’s. Capture attempt failed.

2212—Flam enters cavity and is silent, then flushes as we attempt to capture. Could it have been the F? We leave just in case.

## 15 June 2007

2030—KB and EE arrive to capture the M or F at CN\_7. The weather is clear, light breeze and 20C.

2035—The net is in place over the entrance; no sign of any owls.

2049—EE taps on the tree, the F flushes and we capture her. **Band #64456, which is the F from CN\_7 in 2005.**

2056—Release.

## 21 June 2007

SY and CB arrive at CN7 nest. F is up in cavity. Still 50% cloud cover, 18C.

2043- F flushes to the N.

2025 We peep the cavity, three hatchlings, all white natal down, all three have their eyes open and two still have their teeth.

2052 PD (unknown sex)

2058 F calls from adjacent tree

2059 PD (unknown sex)

2107 PD

2112 We back off

2129 Return to vicinity of cavity

2135 M gives LCs

2137- It appears that F is still off nest. We back off.

2112- BL and KB arrive

2137 M and F calling from trees adjacent to cavity

2324 PD by F

2335 PD

2349 Resident F accidently captured by SY (# 64456)

2352 F released. We leave.

## 26 June 2007

2021—SYI arrives at CN7 nest to observe prey deliveries and attempt capture of M for radio tagging. Weather: cloudy, calm, 18 C. F is in entrance when I arrive.

2042—F flushes. I peep: 3 nestlings eyes open, some grey plumage beginning to show through white down.

2048-2128—I observe 16 PDs (see data sheet).

2135—I get in capture position.

PD (gender unknown).

2138—M makes a PD – capture. **M is previously banded.**

Band # 64417; THIS IS THE CN7\_2005 MALE.

74.0g

-22.0g

52.0g

2152—BL arrives and we attach transmitter (freq. 164.9320)

Post transmitter mass: 76.0g

-22.0g

54.0g

2222—Release – M flies to *potr* snag ~7m S.

While we observe M he occasionally loses balance while pulling on harness. At one point he was hanging completely upside down for a few seconds, before he flew to a new perch, and again slipped from an upright posture to one that was off-kilter as he worked on the harness. He flushes again to a new perch, out of view. M exhibited normal flight each time he flew.

2300—M has left area of tagging and KB and SY begin tracking M while BL observes nest.

2309-2336: BL observes F make three PD to the nest during this time interval, with the owlets begging audibly from the cavity. M did not make any PD during this time.

2321—SY gets a general area fix on M (w/I 3m) in main CN7 drainage.

X: 478598

Y: 4330444 +/-32m

2340—SY gets a general area fix on M (w/I 25m) on R to the N of CN7 drainage.

X: 478766

Y: 4330583 +/-7m

2345—We leave area.

## 28 June 2007

2015—CB , SY and Alex Mattes-Ritz arrive in CN7 territory to attempt radio tracking on the M.

2035—We locate the M’s roost. He is in a recently dead psme ~5m from the ground in a bunch of foliage very near the trunk. (See telem. File for gps)

2055-2400—A. Mattes-Ritz observes 44 PDs (see data sheet) while CB and SY track M.

2143—SY marks gen. area fix on M (CN7\_1). He is in 1 of 2 pipos in CN7 drainage bottom for <2min.

2250—SY marks CN7\_2 (somewhat tentative) – probable forage in psme.

2324—We mark fix CN7\_3 in a pipo N of nest site. We observe as M flies to the N into another pipo which is marked as CN7\_4. We again observe M fly directly to sm. pipo to the E. We observe a hawking attempt. This tree is marked as CN7\_5. We presume this hawking attempt was unsuccessful as the bird moved to another tree in the immediate vicinity. Radio signal indicated a direct flight to 1 of 2 pipos to the E. This location is marked as CN7\_6. Radio signal then indicates that the M moved to the nest site (Note: PD reported ~3min later). **Note: See Telemetry File for locations.**

2406—CN7 M begins giving TCs and TECs in response to calls from the CN8 M (see CN8 notes). I mark CN7\_7.

2412—We leave.

## 3 July 2007

2140—SY and CC Film Crew arrive in CN7 terr. to attempt to radio track the CN7 M.

2154—I mark CN7\_1 – bird is silent and remains in tree for ~30sec.

2155—M has moved E to a *pipo* – I mark CN7\_2.

2156—M again moves E to another *pipo* – I mark CN7\_3.

2135—I mark fix CN7\_4 – M is in a *pipo* giving TCs. He flies directly to CN7\_5. He remains there for ~1min then flies to an adjacent *pipo* (CN7\_6) where he remains for ~30 sec. before flying away.

Note: GPS was non-functional –need to come back and get GPS coordinates for ALL fixes marked tonight.

2140—We leave.

## 10 July 2007

2250—CB and EM arrive at CN7 nest tree to check nestling status. When peeping in cavity we find that nestlings have fledged. We look for fledglings for 15 min then leave site. F entered area up the drainage ~20 M from nest tree once.

2315—We leave area.

## 16 July 2007

1935—Flam Crew arrives in CN7 territory to find the M roost, and attempt to locate/capture the brood sub-group he is tending so that they may be banded/bled, and used as lure to capture the M and remove his transmitter.

1950—While searching one of two trees for the roosting M, we locate one of the fledglings roosting near the top of a ~30 cm dbh *Pipo* approximately 225 m NE of the nest on the broad SW-facing slope, and approximately 50 m W of the Cedar Mtn Rd. Fledgling was roosting approximately 12 m high (2 m from the top), and approximately 0.5 m from the trunk on the S side. We then locate the adult M roosting in an adjacent ~ 35 cm dbh *Pipo*, approximately 5 m SE of the fledgling roost tree. The M was roosting next to the trunk on the S side, approximately 12 m high (2 m from the top). We proceed to flush the fledgling off his roost using one of the peeper poles (minus the camera), and upon doing so we cause another, previously unnoticed, fledgling that was roosting ~ 0.5 m from the first fledgling, to also flush. We eventually capture both fledglings by repeatedly flushing them with the peeper pole, and taking advantage of their progressively weaker flight to eventually trap them on the ground (both fledglings—especially one in particular—initially showed strong horizontal flight, at least for 15-20 m per flight). (see data file for location of M’s roost.)

Fledgling #1: Band # 64565

80.5g LP #5: 86mm rect: 50mm

-29.5g LP #6: 90mm

51.0g LWC: 115mm

Fledgling #2: Band # 64566

74.0g LP #5: 82mm rect: 44mm

-29.5g LP #6: 86mm

44.5g LWC: 109mm

2042—SY and EM leave site.

2110—CB and KB set up a mist net approx. 15m south of the roost tree and tether the two fledglings inside the V as a lure.

2120—We go to check on the net and find the M caught in a corner of the net. We release the fledglings down slope, about 1m off the ground in a *pipo*. As we remove the transmitter from the M, we notice that the strap running under his right wing has caused some rubbing and produced a sore. We are able to remove the strap with little damage and he appears to be fine- there is no new bleeding.

Band # 64417

77.0g LP #5: 95mm rect: 60mm

-29.5g LP #6: 104mm

47.5g LWC: 130mm

2140—We release the M near the site where we released the fledglings, though the two young are not in sight. We break down the net and leave the area.

# CN7—2008

## 29 May 2008

2000-2030: Flam Crew sets up lure net on ridge E of the CN7\_2006 nest, just due E of Cedar Mtn Rd, after setting up lure net in CN8 territory. Mostly clear, mostly calm, 16.5 C.

2056—SC, QB, CB and I start playback at lure net.

2105—We hear M give 2-3 TC approximately 100 m to W.

2112—M approaches net from the W, giving TC and then HEC as he arrives. He flies 3-4 times over the top of the net.

2114—We hear M bounce off of net.

2120—M goes quiet in net area.

2130—SC, QB, and CB leave to join rest of crew at CN8 lure net, where transmitter is attached to CN8\_2008 M. BL leaves net to tap cavity trees in the bottom of the E Fork of Little Turkey Cr.

2225—As I return to net area, I hear M calling in vicinity of net.

2228—**I find a FLOW in lower shelf of net—previously unbanded**. I remove this owl (CN7?) and await rest of Flam crew before processing. As I start to break down net at 2245, a M flies into the area giving 8-10 TC before quieting.

2255—Begin processing captured owl.

**Band #: 1593—64631**

93.0 g LWC: 131mm **Owl is not bled.**

- 30.5 g LLP (#5): 96mm

62.5 g LLP (#6): 105mm

Rect: 58mm

No sign of molt. Owl was of grayish morph.

2325—We release owl, and proceed to finish breaking down net and leave.

## 13 June 2008

1950—BL finds a female FLOW in the CN7\_\_2007 nest tree (enumerated?). She rose to a tap at the tree, and descends a minute or so later**. This is the CN7\_2008 nest tree**.

1952—BL leaves.

2018—KB arrives at the nest tree with the intent to capture the female. F is down. It is clear, calm, 20C.

2029—KB puts up the net.

2030—F flushes. KB stupidly forgot her banding bag and scales, so wing measurements and mass are unknown. **She is a previously banded Female, band # 64456. She is the CN7\_2007 female.**

2034—F is released.

2047—KB leaves the territory.

## 19 June 2008

2010—KB arrives at CN7\_2008 nest tree with intent to capture M. Weather: partly cloudy, calm, 20C.

2038—F flushes as I raise the net.

2040—Peeping reveals three eggs, centered and touching. It is an extremely shallow cavity.

2105—M gives TCs to the west.

2106—M gives LCs in the nest area.

2108—F is back on the cavity.

2118—Silent PD.

2124—As I raise the net, I hear M giving TCs to the west. At the same time I see a silent bird in the nest area to the east. I suspect this is the F, so I drop the net and back off. M continues calling.

2140—I approach the nest tree and again I see a bird flying around the nest tree silently and hitting some branches.

2146—I give the nest tree a tap to see if the F is on or off the cavity. No one comes up, so I suspect the F is off and I leave the immediate area of the nest.

2154—M gives TCs to the southeast.

2200—M approaches nest site with TCs. I suspect a PD is made, though I cannot see the cavity.

2213—M gives LCs, I once again suspect a PD.

2220—I approach the tree, start to put up the net when I see a silent bird flying around again. It leaves to the southwest.

2226—M enters the area giving TCs.

2232—I sneak down to the nest tree to peep. I see a bird in the tree with a moth. Peeping reveals no one in the cavity- the F is off. I leave the area.

## 26 June 2008

2028—KB and SC enter CN7 to attempt to capture M. F is down. Weather: partly cloudy, calm, 20C.

2040—F flushes as KB raises net. She gave no warning before blasting out of the cavity- doesn’t pop up.

2044—**Peeping reveals three nestlings. The oldest looks at the peeper- has open eyes and no visible egg tooth. The two smaller nestlings were not looking at the peeper.**

2055—M gives LCs and makes a PD to nestlings (F still off).

See Prey Delivery sheet from 26 June 2008 for details.

2103—F begs from outside cavity.

2115-2232—F comes back on cavity. She never stays on for more than a few minutes because she leaves the cavity to receive prey from the M, then brings it in to the nestlings. We observe and attempt to capture the M until 2232.

2227—Two birds at cavity. KB attempts to capture, one bird flies into the net and escapes. The other bird flew away .

2232—Two birds at cavity. KB attempts to capture One bird flies away, the other is captured in the net. It is the F, so we immediately release.

2234—F is released.

2238—KB and SC leave the CN7 nest site.

2245-2315—KB and SC listen upstream in the drainage for another possible nest (to the southeast). We do not hear any flams.

## 30 June 2008

2055—SY and CB arrive in at the CN7 nest site to attempt capture of the M in order to affix a radio tag.

Weather: Partly cloudy (storm to the W), wind 5-10mph, 19C.

2057—No adults observed in the area, F does not rise to a tap. **We peep: 3 nestlings present. The most visible nestling is still in white natal down, egg tooth present, eyes partially open. The other 2 owlets are less visible (cannot see their heads) but some gray juvenile plumage appears to be coming in under the white down.**

We also check capture net height: 17’9” from position ~1m NE of nest tree.

2105—We back off to allow F into the cavity.

2107—M heard giving a LC in the nest site.

2120—We move back into nest site.

2123—PD (M/F?) – net raised to capture position.

2125—PD, F

PD, M – capture attempt, M frees himself from the net.

2127—PD – Capture.

Previously banded bird **#64456**.

This is the CN7 F!

2130—F is released, we back out of nest site for a few minutes.

2138—We return to nest site and raise the capture net.

2145-2249—We observ 13 PDs, in most cases the sex of the bird was unknown. Only one capture attempt was made at 2249 which caused both birds to flush. We left at this point. (See data sheet).

2305—We arrive at the upper portion of the CN7 drainage to listen for a few minutes.

2313—Nothing heard, we leave.

## 1 July 2008

2112—QB and SY arrive at the CN7 nest site to attempt capture of M in order to affix a radio tag. Net is immediately rasied to capture position.

2114—Bird silently enters the nest site.

2118—PD, (M/F?)

2121—M and F enter nest site and perch on potr snag ~3m W of nest.

PD, F

PD, M – capture attempt failed.

2125—PD, F

2127—PD, (M/F?) – different perches used.

2129— PD, (M/F?)

2131—PD, M capture.

M is previously banded **#64417** – this is the CN7\_2005 M.

75.0g P5: 89mm

-26.0g P6: 95mm

49.0g LWC: 131mm

Rect.: 61mm

We affix radio tag 164.7520.

2156—M is released, strong flight N. M flies to med. Sized pipo ~20m Nn of nest tree. He immediately begins trying to remove the radio transmitter. He moves between ~3 perches and continues trying to remove the transmitter before flying farther to the N. We continue to track the M upslope, to the N but he seems to be affected by our presence.

2214—CN7\_1 – General Area

X: 478592

Y: 4330700 +/-6m

We believe we are w/I ~12m of the bird when we mark the post – he is in a known foraging area but seems to be avoiding our presence.

2218—We stop tracking, in order to leave the M alone and return to the nest site.

2123—We arrive at the nest site and begin packing up

2125—TECs and FSCs heard from the vicinity of the nest. We leave.

2135—We arrive at the upper portion of the CN7 drainage to listen and tap cavities.

2303—Nothing heard or seen, but several cavity tree are found. We leave.

## 7 July 2008

2035—KB, CB, QB arrive to monitor nest and track M. **Peeping shows 3 owlets.** Weather: mostly cloudy, clam, moist, 18C. KB leaves to track CN8 M.

2047—M in vicinity of nest making TCs. Peeped-2 owlets visible, neither looking at the peeper. We could not distinguish a facial disk. Both had wings dark grey, primary and scap, fuzzy grey heads.

2101—F heard near nest.

2105—KB leaves territory.

2111—M spotted visually and aurally in immediate vicinity of nest.

2112—PD

2116—Radio telemetry kit malfunctioning-CB and QB unable to track.

2123—M in area giving TCs and LCs

2128—M gives PD, flies away to NE

2129—M calling close to nest again (TCs); nestlings are giving very loud, constant calls.

2134—M makes PD

2137—M makes PD

2140—M no longer calling in area.

2145—SY arrives w/ spare tracking equipment. M is in the nest site giving TCs and TECs, presumably at us.

2154—M calling distantly to NE, enters nest area giving TCs and LCs.

2200—QB goes to monitor CN8 nest, CB stays to continue monitoring and SY stay to track.

2205—PD

2210—PD. SY begins tracking the CN8 M from the CN7 area as KB reported that he was near the territory boundary. CB remains at nest. No further activity is observed at nest site.

2220—SY switches to tracking the CN7 M as the CN8 M has returned to the W side of his territory.

2246—SY marks a fix on the M

**CN7\_1** – behavior unknown.

General Area – w/i 25m

X: 478733

Y: 4330821 +/-5m

M is in a patch of low burn psme near the main ridgetop.

2255—Stop tracking and head back to the nest site.

2300—CB and SY leave site.

## 10 July 2008

1505—Flam crew arrives at CN7 nest to process nestlings. Weather: partly cloudy, 5mph wind, 31C. **We peep: 2 nestlings, F is not in cavity**. Cavity is very shallow. BL enlarges hole slightly.

1513—SC removes nestlings from the nest.

#64610 #64607

77.5g 77.5g

-30.0g -30.5g

47.5g 47.0g

LP(6) 45mm (28 in shaft) 44mm (27 in shaft)

LP(5) 45mm (25 in shaft) 46mm (23 in shaft)

Rect: 18mm 16mm

No other nestlings are found in the nest by peeping or feeling. The remains of a chickadee fledgling are found in the bottom of the cavity, quite old and dehydrated.

1553—Nestlings returned to the cavity.

2030—SY begins radio tracking the CN7 M.

~2115—**CN7\_1 -** seen foraging in nest site

*potr* snag in nest site

X: 478487

Y: 4330551 +/-13

In drainage, dense

????—**CN7\_2** - forage

large *pipo* in cluster of 3 old pipo’s, open

X: 478512 +-6m

Y: 4330554

????—**CN7\_3** - forage

*potr* next to nest tree, also used as perch. Often flies from here to CN7 2 and back

X: 478526

Y: 4330555 +/-10m

2118-SY stops tracking and heads to CN8 while SC takes over tracking.

2135—**CN7\_4** - unkown

*psme*, fairly large, across creek from nest. Flew from CN7\_1 to CN7\_4

X: 478510 +- 9m

Y: 4330539

2205—**CN7\_5** - unknown

pipo open, N. of nest

X: 478525

Y: 4330576 +/-9m

behavior appears to be foraging quickly from tree to tree

2210—**CN7\_6** - unknown

large *pipo*, open on slope N. of nest site.

X: 478518

Y: 4330576 +/- 7m

Quick flights, assumed forage

2227—SY arrives at the CN7 nest site to observe and assist with tracking.

2236—**CN7\_7** - unknown

large *pipo* on edge of old open pipo stand.

X: 478524

Y: 4330629 +/-10m

Quick flights, assumed forage

2239—PD (F?; no vocalization). N came to the entrance for the PD.

2248—**CN7\_8** - unknown

large *pipo* snag with live top, open, almost on top of ridge.

X: 478569

Y: 4330633 +/-8m

Quick flights, assumed forage

2257—Stop tracking/observing and leave. M is giving TCs/TECs while we leave.

## 15 July 2008

2055—SY KB and CB approach the CN7 nest site to peep. SY has telemetry set up and says that M is near the nest area. Weather: partly cloudy, still, 19C.

2056—KB peeps. **Only one nestling is in the cavity**. Very gray in color.

2057—KB has capture pole in position. We would like to capture the M and remove his radio tag. SY begins radio tracking to find the M and perhaps the other owlet which might have fledged.

2113—Nestling begins begging. It is not up in the cavity.

2129—Nestling is begging and is up in the cavity.

2135—Nestling is down.

2151—Nestling is up, has been begging.

2210—Nestling is down in the cavity.

2212—SY tracks the M far to the NE (near the road on the ridgetop)

**CN7\_1** – G.A. w/i 20m

X: 478879

Y: 4330705 +/-11m

Psme stand adjacent to the rd.

2218—Nestling is up and begging

2220—When SY turns receiver back on, the M is SSE, in the direction of the nest.

2222—M is calling to the NE of the cavity.

2224—M enters nest site giving LCs, first sign of adult since we arrived.

2225—F vocalization, scolds us in the nest site.

2228—M gives TCs to the west.

2231—PD, failed capture attempt. The bird flutters away and scolds us. It was the F attempting to make a PD; however, she approached the tree about 12 inches below and 90 degrees to the west of the cavity entrance. She perches near the nest tree and continues to scold us.

2234—M gives TECs in the nest site towards us

2238—As M is giving TC’s, a bird enters the psme approximately 2 meters from the M’s perch. M immediately flies to this new bird, they both crash into branchdes and the M follows/chases the other bird up drainage to the east and begins giving TCs, approx. 20 m away.

No sign of F during this time.

2301—Nestling up in the cavity, still giving intermittent begs. Quickly goes back down.

2305—Nestling up, perhaps flapped in entrance, though neither CB nor KB saw, might have heard.

2306—**CN7\_2** – forage/perch

Dbh: 22.5

X: 478717

Y: 4330415 +/-6m

M does not make a forage attempt but he is perched ~2m off the ground on the NE side of the tree. He is watching the ground as though looking for ground based prey.

M flies to the W (CN7\_3)

2308—**CN7\_3** – G.A. w/i 3m

X: 478681

Y: 4330432 +/-6m

M was in 1 of 3 trees – he moved W before sp. Perch was located.

2313—Nestling down, we bring the net down as well and leave the area.

## 18 July 2008

1643—KB and SY begin radio tracking the CN7 M in order to locate his roost.

1655—We locate the M’s roost.

**CN7\_1** – roost.

Live pipo dbh: 52.5

X: 478544

Y: 4330719 +/-5m

M is 4-5m off the ground at the end of a live branch on the E side of the tree. No fledgling is immediately visible, M is >100m from the nest.

1708—We leave.

2000—DH and I arrive at CN7 M’s roost to attempt to capture M to remove the radio tag.

2017—2 mist nets set up on N (upslope) and E (sideslope) sides of M’s roost tree.

2022—We begin waving poles on S and SW side of the M’s roost.

2023—M flushes NNE, hits bottom rung of the E net <1m from the center pole.

Band #64417

Mass w/ tag: P5: 95mm

71.0g P6: 103mm

-16.5g Rect: 58mm

54.5g LWC: 132mm

We remove radio transmitter.

Mass w/o tag:

68.0g

-17.0g

51.0g

2040—M is released, very strong flight S. We begin breaking down the net.

2050—Net down, we begin listening for possible fledglings in the area.

2102—Nothing heard, we leave.

2115—We peep the CN7 nest: nothing in cavity, no birds in site. We leave.

# CN7—2009

## 28 May 2009

1840—Flam Crew arrives to tap cavities. DH and SC tap and enumerate cavities in the thick aspen grove above the road by the stream. KB and JG further down drainage.

1848—KB and JG tap the CN7\_2008 nest, no response (it is later peeped).

1945—Flam Crew leaves.

2015—KB, DH, SC arrive eastern end of CN7 to set up lure net (just E of where L Turkey Cr crosses the road, on a small ridge top—similar location as in 2008)..

16C, mostly clear, winds 0-5mph

2037—We set up lure net on west facing hill north of creek and near the road.

2052—Start playback.

2103—Net checked. Net empty.

2113—Net checked. Net empty.

2114—SC see bird in drainage flying from the east.

2115—M TC’s in vicinity of net.

2117—M stops hooting.

2119—Net checked. Net empty.

2120—M TC’s from south.

2122—DH walks up drainage to listen. For the next hour, moves up to the head of the creek,

and crosses to the southern end of the creek. He hears nothing. KB and SC listen on

northern ridge above creek.

2123—M stops hooting.

2133—KB and SC hear M TC’s from up drainage.

2135—M goes silent.

2213—Hear high pitched sound in drainage. May be F beg, but also may be pygmy owl. DH does not hear this due to sound of the creek. KB and SC continue to listen. Net checked.

Net empty.

2245—Hear M TC’s from southern ridge across creek. Hoots are very faint and then he stops.

2305—Stop playback.

2330—After hearing nothing we collapse net and listen spread out in drainage and on southern adjacent ridge.

2355—After hearing nothing, we leave.

## 4 June 2009

~2125—DH, KB, JG, and Matt in CN7 to set up lure to capture CN7 M and possibly another bird from a potential territory further up drainage. On ridge-top midway down on a finger-ridge coming off the main ridge where the road is, on the northern end of CN7. Mostly open, mature pipo, with a few psme and pipu. X: 478713, Y: 4330522, +/- 5m. Weather: 14C, 5-10mph wind, clear.

2146—Playback started.

2150—Bird gets caught in net. Entered totally silently. It escapes as we try to get it out of the net, but we can see that it is banded.

2151—TCs given in the area. The same bird that just escaped? Calls continue aggressively around net.

2156—Bird in net. M is previously banded **#64417** – this is the CN7\_2005 M.

59.5g P5: 93mm

-10.0g P6: 105mm

49.5g LWC: 132mm

Rect.: 58mm

We do not take blood, as blood has already been taken.

2205—M is released.

2207—TCs resume in the area, to the W of the lure.

2210—JG and Matt check net—empty—then proceed down to bottom of drainage to listen. They proceed down drainage to area of CN8\_2008 nest, listen for ~1.5 hours. They hear no nesting vocalizations, but some occasional TCs. See CN8 notes. DH and KB remain at net.

2218—KB checks net—empty.

2218—TCs cease. M leaves the area.

2230—KB checks net—empty. Switches the direction of broadcast from SW to E.

2231—TCs given in the area—approach from the E. Calls sound lower than the CN7 M.

2234—M leaves the area—calls dissipate to the E/SE.

2235—KB checks net—empty.

2237—KB moves to the SE within the drainage to listen. Listens for an hour in drainage, hears nothing. DH remains at net.

2245—DH checks net—empty.

2255—M gives TCs in the area, to the SE of the lure, w/in 100m. Does not come closer. Quickly goes quiet.

2258—DH checks net—empty.

2306—DH checks net—empty.

2307—TCs given in the area, again to the E/SE. Bird approaches and flies around net for awhile, calling. Perches get progressively farther from lure, fading to the SE.

2310—Calls stop.

2312—DH checks net—empty.

2329—DH checks net—empty.

2336—Playback stopped.

2349—We leave.

## 11 June 2009

1810—SY, JG, QB, and SR arrive in CN7 to peep cavities.

1925—SY, SR, and QB leave for CN5 territory, leaving JG to peep down drainage solo.

2258—JG and KB arrive in the NE side of CN7 (on the upperside of the drainage by the hairpin turn in the road) to listen for nesting vocalizations.

2312—KB thinks she heads one clear LC a ways up the drainage. I tap and listen by the potrs in the area and then continue up drainage.

2322—I hear a loud F food solicitation call, probably from off the cavity, near the V in the drainage. JG and I had been tapping a cluster of aspens and might have flushed her.

2342—Might hear more F begging, though the creek noise obscures it.

2348—We leave the area.

## 18 June 2009

1845—Flam Crew begins peeping the greater CN7 area. SY, DH, QB, and KB peep in upper CN7 area, above the road. BL, SC, SR, JG peep down towards the area of CN7\_2008 nest, which was peeped.

1915—SY, DH, and QB leave to radiotrack in CN5.

2002—Remaining crew leaves.

# CN7—2010

## 3 June 2010

2335—JSG & JV head east to tap and listen in CN10 next to the road. Nothing is heard or seen.

0005—JSG & JV leave the area.

## 11 June 2010

1541—SY, JV, and JG begin tapping/peeping CN7 from the S end.

1854—We finish peeping having found nothing in CN7, still needing to peep on the far S end across the road that passes over the creek up into/near the high-burn area.

## 6 July 2010

2349—JV, SY, & JG set up the lure net and start playback on the east end of Tanager Ridge in CN7 in attempt to capture the M.

Vegetation: small psme with some med. Psme mixed in

Weather: wind is <5 mph, partly cloudy with T-storms to the northwest, 14C

X: 4786450

Y: 4331002

+/- 6m

2417—After hearing nothing we stop the playback and take down the net.

## 19 July 2010

2320—DW, SY, and JSG arrive at CN7 to attempt to capture M with lure net

2343—Start playback

Weather: clear, calm, 19C

Vegetation: mixed Pipo/Psme, low burn intensity

X: 478732

Y: 4331048

+/- 5 m

2405—Bird gets caught in net but flies out before we can get to him

2414—Stop playback

2424—We leave CN7

# CN7—2011

## 17 June 2011

~1530—SY, JV, IJ, and AW arrive at CN7 to peep territory and search for 2011 nest.

~1730—Crew leaves, having peeped all known cavity trees and found nothing.

## 24 June 2011

2230—BL and IJ arrive at parking spot between CN10 and CN7 territories to listen in the CN10 area for evidence of a territorial male occupying the area. It is unclear whether or not the CN10 or CN7/8/9 territories are occupied by territorial males in the 2011 season. IJ stays on the ridge above road to listen in both directions of the different territories (E and W) and BL moves into CN10 area towards tree CN7\_1177 where one potential flam egg was peeped in a cavity earlier in the day.

2231—M TCs heard from N in the CN7/8/9 territories.

2244—M TCs/TECs heard from CN7 drainage to W; M sings for approximately 2.5 minutes.

2301—M responds to IJ’s calls (TCs) with TCs and TECs in W towards CN7 drainage.

2310—with nothing heard in the CN10 area for the entire listening period, BL and IJ end listening.

# CN7—2012

## 29 May 2012

2330—NS and AW arrive at the CN7 parking spot with SY, AP, and MD with the purpose of spot mapping and listening for nests. NS and AW leave to listen down drainage.

2332—NS and AW hear M giving TCs from S slope of drainage between high burn area and first section of large pipo and potr undergrowth. We pursue M as he continuously gives TCs and moves down drainage.

2357—M gives TCs from end of ridge between CN7 and CN8 territories for approximately 10 minutes.

2400—M gives a few TECs at same location for approximately 30 seconds.

2403—We leave and return to the vehicle.

## 12 June 2012

1522-1600—Crew peeps all of CN7.

2150—CC, AW, JV set up lure net on high slope off the road on Great Horned Ridge facing NW. While setting up the net we occasionally hear M giving TC’s from SW portion of CN7/CN8 drainage ̴ 50 m away.

Weather: Clear, calm, 14 C

Vegetation: High burn mixed w/ live young potr and some live medium-young psme

X:478237

Y:4330582

+/- 3m

2156—Playback started. After playback begins M goes silent and circles net for about 10 min before disappearing.

2217—Silent bird is not seen in the area. AW moves playback down slope to the NW.

2228—**Silent, unbanded M caught in 3rd shelf from S.** Bird is caught fairly badly in net and must be cut out. Has a large pterylosis but his behavior and mass indicate that he is a M. AW and JV unsuccessfully attempt to bleed both wings, no vocalizations given at any point and none heard from any direction. Bird appears to have a large pterelosis.

**Band # 1583-64875** (on R leg)

84.5 g LWC: 125 mm

- 29.5 g LLP(5): 96 mm

55.0 g LLP(6): 104 mm

Rect: 58 mm

2259—M released w/ strong flight downslope to N.

2309—JV, CC leave to spot map CN9 while AW stays at net.

2335—AW hears wing flaps and checks net to find same M is captured in 1st shelf from S. No vocalizations were made except for chittering while getting him out of the net.

2339—M released w/ strong flight S.

2400—JV and CC arrive back at net site. Playback stopped

2411—While breaking down the net M gives TC’s from ̴ 20m E of lure net.

## 19 June 2012

2159—As JV, CC, and PPS are setting up lure net to capture CN8 and surrounding MM, we hear a M giving TCs down drainage.

2211—Playback started. Lure net is set up on the upper slope of a spur of Digger Ridge, a ridge NE of the CN7\_2007 and CN7\_2008 nest. The net opens SW.

Weather: Clear, no wind, 20C

Vegetation: Mixed medium psme, pipo, low burn

X: 478689

Y: 4330522

+/-: 3m

2214—M comes in from SW, giving TCs.

2216—M gives HECs directly up slope from the net to the SE.

2217—M (probably CN7) begins flying in close to the net and then backing off giving mostly HECs and some TECs for the next ~15 min.

2222—JV moves playback around and makes additional hoots to try to catch M.

2230—A second M gives TCs about 100m N of net site (most likely the CN8 M). The CN7 M is still in the area giving TECs and HECs.

2236—**Unbanded M captured in third shelf from the SW**. **This is the suspected CN7\_2012 M.** Blacklight results: Both wings: P1-P2 none, P3-P6 strong pink, P7-P8 less pink, P9-P10 none. Processing slowed because JV and PPS had to extract a bat as well. JV bleeds right wing for genetics and smear. He has a large hematoma.

**Band # 1593-64900** (on L leg)

92.5 g LWC: 130 mm

- 34.0 g LLP(5): 95 mm

58.5 g LLP(6): 103 mm

Rect: 62 mm

2318—**Banded M caught in fourth shelf from the E**. **This is the suspected CN8\_2012 M caught in a lure net on 12 June 2012.** Blacklight results: Right wing P1-P5 medium pink, P6-P8 faint pink, P9 none, molting P10; left wing P1-P3 bright pink, P4-P8 medium pink, P9 none, P10 molting.

**Band # 1593-64875** (on R leg)

88.0 g LWC: 126 mm

- 34.0 g LLP(5): 100 mm

54.0 g LLP(6): 104 mm

Rect: 56 mm

2334—CN7 M released. Poor flight, low and horizontal, N to a psme about 4 ft off the ground. JV stays with bird. Over the next 5 minutes M makes very short flights to taller branches until he is eventually about 30 ft off the ground in an adjacent psme.

2339—M makes strong flight across a side drainage to the NNE.

2342—M came back into net area giving TCs and TECs.

2354—CN8 M released. Strong ascending flight to the NNE.

2355—Playback stopped. M still giving TCs.

2411—PPS, JV, and CC leave.

# CN7—2013

## 11 June 2013

Afternoon—Flam Crew peeps in CN7.

1500-1715: Flam Crew tap and peep cavity trees throughout CN7 and CN8 territories.

1657—SY peeps **cavity tree #1108 and a F is present in cavity. This is the CN8\_2013 nest!** Cavity is 14 feet up the W side of the tree. The tree is a full snag potr located ~40m upstream of the past CN8 nest tree in the drainage bottom on the N side of the creek. Tree is shared with a nesting MOCH; cavity is very shallow.

~1710—We leave.

2032—RC and BL arrive at the CN8\_2013 nest to attempt capture of F and possibly M. F not in

cavity entrance as we approach nest tree.

2037—**RC stealthily gets into capture position, and at this time the F flushes and is**

**captured as soon as the net touches the tree. F was previously unbanded—we give**

**her Band # 1783-64394.**

**Band # 1783-64394** (on r leg)

99.0 g

- 33.5 g

65.5 g

No measurements or blood are taken.

2042—RC releases F. **We then peep the cavity and find 2 eggs centered and touching.**

2044—We quickly exit the nest area, and move in up-drainage toward CN7 to find a suitable lure net location.

2052—While setting up lure net in area that is approximately 200 m up-drainage from the CN8\_2013 nest tree (near the confluence of Little Turkey Creek and a N side drainage that terminates at its head in a massive rock outcropping), we hear what seems to be the CN8 M calling off his roost ~ 80 m to our SW, on the lower N-facing slope on the S side of the creek.

2102—We complete setting up lure net.

Vegetation: One lure net set up between a 15 cm Pipo and some young Potr in a small meadow adjacent to Little Turkey Creek. The meadow is bounded by mature Pipo/Psme on the side slopes to the N and young Potr/Pipu in the creek bottom.

Weather: Clear, calm with light breeze on ridge tops (and hot/windy afternoon), 14 C.

X: 478348

Y: 4330656

+/- 3 m

2126—BL returns to the CN8 nest to attempt capture of M, while RC remains at the lure net.

2132—Playback begin.

2135—M heard giving TCs/TECs in net vicinity. No approach calls, but seems to have approached from S side of net (in drainage).

2139—Second M heard giving TCs 30m E of net.

2143—2nd M moves into net vicinity, and continues to give TCs/TECs. The 2 Ms call simultaneously for a short period, and then alternate for a bit, before the first M goes silent around 2145. 2nd M continues to call in net area, sticking mostly to the low slope of the R to the N of the drainage, and flies over net repeatedly.

2158—As SY and LL are leaving CN10, we hear an encounter between 2 Ms just downstream from the CN10 parking spot. We presume that we are hearing CN7 and CN10. CN7 appears to have a higher pitched voice. The 2 Ms are within 10m of eachother giving TCs and TECs.

2200—SY and LL mark songpost CN7\_1 (see data sheet) ~10m S of road, and ~50m W of the parking area for CN10.

2208—SY and LL mark songpost CN10\_1 (See data sheet), M is giving TCs and TECs, CN7 is calling farther to the W at this point.

2207—Higher-pitch M heard giving TCs/TECs 75m E of net and just across road to S. SY reports that this is the CN7 M. This M is not believed to be one of the original 2 birds at the net, but is never heard calling simultaneously with both. Presumed CN7 M continues to call, but never gets closer than 75m to playback.

2210—SY and LL mark general area songpost CN10\_2 (see data sheet). From this point the CN10 M moves up drainage in the direction of the nest. CN7 simultaneously moves W along the ridge with a small stringer of live trees just S of the road.

2210—BL leaves the nest to assist with raising the height of lure net.

2215—M in net vicinity goes silent. CN7 M still giving TCs/TECs.

2223—BL arrives at lure net site. Net raised to 5 poles.

2232—Playback stops. Batteries changed.

2239—Playback running again. BL leaves to locate new lure net site.

2240—M heard giving TCs S of drainage, 20m from net. M approaches W side of net, then bounces to E side.

2251—M goes silent.

2259—CN7 M still heard calling 75m E up drainage.

2301—M heard giving TCs 50m across drainage to S, upslope.

2304—M heard giving TCs in net vicinity on E side. All quiet until 2310, when M calls briefly once more in net vicinity.

2316—End playback. Net moved.

2332—BL and RC arrive at new net site. One net set up, opening NE/SW and adjacent to a stand of small (5-8m tall) pipo/psme. Net placed on low S-facing slope on the N side of Little Turkey Creek (50 m from creek bed), 150m down drainage from CN8-2013 nest.

2345—Playback begin. BL returns to the CN8 nest.

Vegetation: Mature pipo/psme on surrounding slopes. Net placed in open meadow on low S-facing slope with young-med pipo/psme.

Weather: Calm and clear, 8C

2355—M heard giving TCs/TECs in net vicinity, having approached from SW (drainage side of net). M seems to be one of the original two Ms from the first net site.

2401—M goes silent.

2410—CN8 M flies into the nest area, making one attempt to approach the nest tree before aborting and leaving the area (Note: this is the only time that the M entered the nest area in the time BL observed the nest).

2424—M gives TCs briefly 50m NW of lure net, but does not approach, and quickly goes silent.

2430—BL leaves the nest to assist RC with lure net breakdown.

2445—Lure net broken down; we leave.

## 19 June 2013

~2220—AW, RC, and CK begin setting up lure net 120m NNE on ridgeline extending NE from CN8\_2013 nest site. Net placed on upper slope, opening SE.

2230—Playback begin.

Vegetation: Net adjacent to dense stand of small dbh pipos. Surrounding area comprised of med-mature pipo/psme.

Weather: Clear sky, but hazy with smoke from fire to N. Steady wind swaying trees, 18C.

X: 478229

Y: 4330782

+/- 3m

2240—M heard giving brief TCs 60m S of net, downslope.

2304—AW and RC leave to listen in CN7.

2305—AW and RC hear CN7 M and CN8 M having territorial encounter 50m SE of net in drainage bottom.

Gen. area:

X: 478297

Y: 4330688

+/- 6 m

CN7 M moves E and goes silent. CN8 M moves across drainage to S, then briefly down drainage before moving SE up slope. RC pursues CN8 M.

2312—RC flags CN8\_1 in live psme, mid-slope S of drainage bottom and N of rd. M gives TCs here, then flies NE up slope and across road.

2317—RC flags CN8\_2 in live pipo. CN8 M is giving TCs, and CN7 M can be heard giving TCs ~75m to E. RC notices band on R leg of CN8 M before he continues to move SE up slope on Great Horned R.

2322—RC flags CN8\_3 in live psme on N slope of Great Horned R. CN8 M has crossed rd to S and continues to give TCs and occasional TECs. CN7 M cannot be heard at this point.

*Note: the next 5 songposts (CN8\_4-8) were obtained in the same general area on the N facing slope or Great Horned Ridge likely in a 50 m radius).*

2323—AW flags CN8\_4 in a live psme on low N facing slope of Great Horned R. M gave TC/TEC for ~4 min until 2326.

2326—RC flags CN8\_5 in live psme. AW hears CN7 M calling to E. CN8 M continues to move S and E.

2327—AW flags CN8\_6 in live psme. CN8 M gave TC/TEC for ~1-2 minutes while CN7 M was heard simultaneously giving TCs approximately 50 m to N-NE.

2331—RC flags CN8\_7 in full pipo snag. CN8 M stops flying SE at this point and turns back to the NW, still giving mostly TCs with occasional TECs.

2335—AW flags CN8\_8 in a live psme. CN8 M gives hoarse TCs for ~1-2 minutes before going silent.

2345—After giving a few hoots, AW and RC hear CN7 M ~100m up road to E, giving TCs from drainage bottom on N side of rd. AW and RC pursue into drainage bottom.

2353—RC hangs CN7\_1 in live psme, ~50 m W (down drainage) from where CN7 M was initially heard at 2345. AW hears another M (presumably CN10) giving lower-pitch TCs across rd to SE and pursues.

2359—RC hears CN7 M giving TCs across rd to S as well, and pursues in direction that AW is following lower pitch bird. RC stays on low slope of S side of rd while AW pursues on upper-mid slope. AW hears 2 territorial M FLOWs (most likely CN7 and CN10) singing S of road on the low slope.

2404-2414—AW spotlights CN7 M giving TC/TEC/HECs ~40’ up in a live pipo (songpost CN7\_2). M continues to call (mostly TCs) until 2414. During this time period, a second territorial M approaches CN7\_2 from the E. 2nd territorial M (presumably CN10) gives ~1 minutes of very fast HECs from a low perch to the E (this bird was never seen). While spotlighting the CN7 M (who has now gone quiet), AW observes a 3rd silent bird fly into a tree adjacent to CN7\_2 pipo and perch ~15-20’ up. This 3rd bird flew in from the W-NW. Immediately after CN10 territorial M stops vocalizng, the 3rd silent bird disappears to the NE. *Later this night it was learned that CN10\_2013 nest has failed. We assume the 2nd territorial M to be the CN10 M and the 3rd silent bird to be either 1) the CN10 F or 2) a CN10 floater/apprentice. It is more likely, however, that the 3rd bird was a floater since no F vocalizations were given from the 3rd bird and SY & LL had previously captured a few potential floaters at a lure net in CN10 earlier this summer.*

2410—RC heads SE up slope to assist.

2415—CK stops lure net playback and breaks down net to go pick the crew up from CN7.

2419—RC hangs CN7\_3 in live psme. CN7 left territorial encounter on mid-upper slope and flew E to here, giving TCs/TECs.

2423—AW hangs CN7\_4 in a live psme just S of the road and NE-E of CN7\_2 (where the 3 birds were observed/heard earlier). CN7 M gives ~4 minutes of TCs from this perch.

2424—RC hangs CN7\_5 in live pipo after CN7 M flies W from CN7\_4 slightly N down slope toward rd. AW and RC are joined by SY and BDG as CN7 M then flies N across rd.

2431—BDG hangs songpost CN7\_6 in a mature lightning struck pipo on the low slope of the N side of the CN7 drainage. CN7 gave TCs and possibly TECs for several minutes from high in the pipo.

2442—SY marks songpost CN7\_7. M is giving TCs in live pipo on northern CN7 ridge.

2450—SY, AW, BDG, and RC end songposting.

## 27 June 2013

2400—BDG and AW arrive at CN7 with the intention of luring for the CN7\_2013 M.

2409—M gives several TCs ~75m SSW of net area.

2412—Playback started on south facing slope of CN7 drainage on a spur R.

Vegetation: open, med-mature pipo/psme

Weather: scattered clouds, occasional light breeze, 16.5C

X: 478746

Y: 4330480

+/-?

2432—Three TCs given ~35m SSW of net.

2443—AW and BDG break down net and leave.

# CN7—2014

## 30 May 2014

2117—ER, AW, MC, and MC’s friends set up a lure net about 125m NNW of CN8\_2013 nest tree on the low slope out just NE of the drainage bottom. Play back begins!

**Vegetation**: Open mixed age pipo.

**Weather**: Very cloudy and rained earlier in evening, but as of 2117, the sky is mostly clear and calm with a temperature of 13C.

X: 478137

Y: 4330813

+/- 3m

2129—All hear territorial male (CN8) giving TC’s, TEC’s, and almost immediately HEC’s to the NW of the net. MC and ER see FLOW fly between pipos ~15 m SE of net.

2132-2139—The CN8 male continues to give territorial calls, going quiet briefly between 2132 and 2134.

2140—The CN8 male goes silent, inspiring MC to check the lure net to find an **unbanded male in the third shelf coming from the N. *Note: this M is later confirmed as the CN8\_2014 territorial M.*** Bled R wing to obtain genetics.

**Band # 1783-64456** (on L leg)

86.0 g LWC: 128 mm

- 34.0 g LLP(5): 96 mm

52.0 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 1.5 | 1.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | 0 | 0 |
| P3 | 0 | 0 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

2149—**While CN8 male is being processed, a second male is heard up drainage in vicinity of net giving TCs and TECs. M gives a few calls, before flying SE towards CN7 where he gives a few more TCs before going quiet. This is possibly the CN7 M, but because M is never heard again, his identity is unclear.**

2212—MC and friends release CN8 male. Strong flight to S.

2214—AW and ER split to wander up drainage by the 2013 nest tree to begin spot mapping and attempt to locate 2nd male. MC and friends stay near lure net to listen. AW and ER tap nest tree to no reaction.

2222—AW and ER hear a few TCs E up drainage and are able to spot male in pipo within 5m of 2013 nest tree.

2258—AW and ER do not hear any further vocalizations, and reconvene with MC and friends at lure net site.

2304—Playback stops, and all take down the lure net. AW and ER set off to listen near the confluence of the main CN7/CN8 drainage bottom and the side drainage leading up to CN9. MC and friends listen near the CN8\_2013 nest tree.

2325— After listening and giving occasional hoots, AW and ER hear nothing and walk to CN9 to tap 2013 nest tree.

2342—AW and ER tap 2013 cavity tree in CN9 and give a few hoots to no response. No vocalizations are heard by MC and friends during our listening efforts. We meet   
MC and friends at the vehicle and end observation.

## 5 June 2014

2250-2350: LL, MP, and BL arrive near the W terminus of Great Horned Ridge in hopes of setting up lure net to target CN7 and CN8 males, but an active lightning storm moves in and we wait it out in the vehicle.

2400—Due to lingering lightning and wind, we drive to the CN8 parking area with the intent of tapping trees/listening for nesting activity in the CN8/CN7 drainage.

2408—**As I approach the CN8\_2013 nest tree, I see the F in the entrance of last year’s nest cavity—this is the CN8\_2014 nest tree! Nest tree is a Potr snag (#1108), nest cavity is approximately 3.5 m high on the WSW side, and nest tree is approximately 40 m up-drainage from the original CN8\_2005, on the N side of the creek.**

2412—F descends in the cavity, indicating she is incubating.

2415—We leave to search for cavities upstream in CN7 territory (but still downstream from the original CN7\_2013 nest tree).

## 13 June 2014

2133—AW, MP, and ER set up lure net ~30m north of the CN7/CN8 drainage bottom , in the vicinity of the majority of CN7 potr cavity trees, with the purpose of luring for CN7 and CN8 Ms. Playback begins.

Vegetation: Young, medium Pipos. Open.

Weather: Calm, clear, 13C

X: 478537

Y: 4330597

+/-7m

2135—We hear supposed CN7 M giving TCs within 10m of the net, bouncing between surrounding pipos.

2138—With the CN7 M still giving TCs near the net, we hear a second bird coming up drainage from the W in CN8 territory. This second bird, CN8 M, has a lower pitched call that helps distinguish it from the CN7 M.

2142—CN8 M approaches the net from the W, but remains in drainage while the CN7 M continues to give TCs from E of net.

2144-2148—Both CN7 M and CN8 M continue to bounce around net site with CN7 M staying generally E of net on S-facing slope and CN8 M staying in drainage.

2148—CN8 M goes silent while CN7 M still responds from up drainage of net.

2155—CN7 M goes silent. AW decides to move the playback from small pipo to ground in between two nets to force birds to take a different flight path around net site. There is no bird in the net at this point.

2158-2159—CN7 M returns from E giving TCs within 30m of the net, then moves closer to net over the next two minutes.

2200—AW and ER decide to meander around drainage to listen and tap cavity trees.

2201—On the way downslope to drainage, AW and ER check net to find a **banded male in the 4th shelf on the W side**! *This male was previously banded as the CN8\_2014 M on 30 May 2014, but because he appeared to stay E (up drainage of net) this time, we think he may be the CN7\_2014 M instead. On 30 May 2014, we also had 2 birds responding to our playback (located just W of CN8\_2014 nest) and both birds were acting territorial on the E side of the net. This bird was “more” territorial in that he spent more time responding to the playback, leading us to believe he was the CN8 territory holder. Tonight’s capture of him further up drainage in CN7 changes his identity to the CN7\_2014 M. We now believe the bird with a deeper pitched call is CN8.* ***Note (8/1/14): this assumption is NOT correct. This captured M (#1783-64456) is actually the CN8\_2014 territorial M who was later captured at the CN8 nest.*** While processing this bird, we can hear a territorial bird calling near the net, but not in the immediate vicinity of the net. Presumably, this bird is CN10 because he does not appear to have a deeper pitched call like CN8. We do not take blood or blacklight due to processing earlier this year.

**Band # 1783-64456 (on L leg)**

73.5 g LWC: 130 mm

- 19.5 g LLP(5): 95 mm

54.0 g LLP(6): 104 mm

Rect: 55 mm

Note: CN7 M shed a few feathers while in hand.

2221—AW releases CN7 M who has a strong, ascending flight to the NW.

2225—Now AW and ER try to go to the drainage to tap and listen.

2229—While walking down to drainage, AW and ER notice a second **banded male in the 3rd shelf** on the western side! While we extract this second bird from the net, we can hear two territorial males calling from the E (most likely CN10) and SW (most likely CN7), leading us to believe the banding male in the net came in silently. **He was previously captured in CN10 by SY and LL on the night they captured 5 unbanded Ms. At this point, he was identified as a CN10 Floater. Our capture of him silently tonight confirms his identity as a CN10/7 Floater.**

**Band # 1783-64374 (on R leg)**

85.0 g LWC: 129 mm

- 29.0g LLP(5): 97 mm

56.0 g LLP(6): 108 mm

Rect: 55 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 1.5 |
| P2 | 2 | 1.5 |
| P3 | 2 | 1 |
| P4 | 1.5 | 1 |
| P5 | 2.5 | 2.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 3 | 3 |
| P5 | 1.5 | 1 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2242—While processing silent male, we hear a male giving TCs 5m S of the net from drainage, and AW hears a couple TCs up slope of our net.

2300—MP releases the silent male who has a short ascending flight to the W.

2305—Playback stopped. We take down net.

2320—AW ventures to CN9 to tap and listen near past nest trees while MP and ER hang in the CN7 drainage to tap cavity trees and spotmap. CN7 M gives TCs just down drainage to the W. MP walks up drainage to find past nest tree and ER walks down drainage to listen and tap.

2329—ER has CN7 M respond to hoots in drainage in live pipo and records songpost CN7\_1.

2340—CN7 M gives four more TCs from same pipo that was already songposted.

2400—MP and ER meet AW on road, and we leave.

## 24 June 2014

Afternoon—Flam crew peeps out CN7 and CN9 territories. We do not find any nests.

## 10 July 2014

2323—MC and ER set up a lure net in CN7 about 200m N of Cedar Mountain Rd on the S-facing slope in the same spot we lured for CN7 on 6/13. Playback begins.

Vegetation: Young, medium pipo. Open.

Weather: Clear, calm.

X: 478537

Y: 4330597

+/- 7m

2325—As we are finishing setting up the lure net, a M begins giving TCs/TECs to the W down drainage and approaches the net site from the drainage bottom. We assume this is the CN8\_M.

2335—With the presumed CN8\_M gives HECs just 10m W of the net in the drainage, we pick up a second territorial M giving TCs about 75m across the drainage to the SE and then comes into net site giving TCs.

2337—The M giving HECs at net site goes silent. The second territorial M is still giving TCs from his previous location at the net site.

2338—MC goes to check the net to find it empty. Second M giving TCs.

2340—**We hear wing flaps and check the net to find an unbanded M in the net! He is caught in the 4th shelf on the S side.** He is a CN7\_Floater.

**Band # 1783-64507 (on R leg)**

79.0 g LWC: 124 mm

- 25.5 g LLP(5): 96 mm

53.5 g LLP(6): 107 mm

Rect: 60 mm

Note: We bled the R wing for genetics and parasites. His P1-4 on both wings are in molt. LP1: 77mm LP2:62 LP3

2347—The territorial M to the W in the drainage is still hooting at the net and we hear the second territorial M giving HECs from the NE, while we have our captured bird in hand.

2352—Both birds silent.

2405—We release #1783-64507. He has a strong flight due S.

2408—While we start breaking down the net, the western M starts calling up from the drainage.

2409—PB off. We leave.

# CN7—2015

## 1 June 2015

2422—MC and ER cruise down into CN7 from the CN10 parking spot to listen. We give intermittent hoots, walking W until we get to the CN7\_2013 nest. We hear and see nothing.

2455—We leave.

# CN7—2017

## 22 June 2017

2034—LD and BL arrive at the CN10\_2017 nest to attempt capture of F, or M if F is not captured. F is not in cavity entrance when we arrive, and LD prepares to get in capture position with the brown pole. Weather: Skies with ~50% cloud cover, calm, ~16 C.

2047—LD in capture position.

2048—While LD makes minor adjustments to net position, F rises to cavity entrance and flushes into the top of the net, but extricates herself just as net is lowered and BL reaches for her. We back off from nest.

2052—M arrives in nest area, giving LC, then leaves in the direction the F flushed.

2054—F returns to nest cavity.

2058—We hear M giving TC approximately 50 m to the NE, across Little Turkey Cr.

2118—LD leaves to locate suitable site for lure net, down-drainage near the CN10 parking area and the Cedar Mtn Rd crossing.

2130—BL prepares to get in capture position at the nest to attempt capture of M. M makes an apparent PD at the cavity at this time.

2145—M arrives in nest area, briefly flies to the cavity entrance where he gives 2-3 LC (F responds with 2-3 FSC), and flies off—BL was uncertain whether PD was successful.

2210—LD begins PB ~30m down drainage of CN10 parking spot to the NE. Target trees are multiple young potrs and a broken top pipo snag. Net opens NE/SW.

Vegetation: Young potrs, mixed and snag pipos

Weather: Clear, calm, 14C, turned to breezy later in the night

X: 478763

Y: 4330230

+/- 3m

2215—M is seen flying around nest area, but is quiet and does not approach nest tree.

2225—LD hears M responding to PB from the SW of net ~20m away, giving TECs and HECs, presumed to be the CN10\_2017 M FLOW.

2232—LD hears second M FLOW responding simultaneously to PB ~60m W of lure net, presumed to be the CN8\_2017 M FLOW.

2234—LD approaches PB to switch from Track 42 to MEGA as CN8\_2017 approaches within 30m of net.

2238—Third M FLOW begins calling simultaneously to the N of the lure net’s position. This M FLOW does not have a presumed identity, however it is possible for him to be the CN7\_2017 M or a new territory.

2250—LD changes PB back to Track 42 from MEGA as presumed CN8\_2017 M FLOW and the unknown territorial M FLOW stop vocalizing.

2305—CN10 M goes quiet.

2308—CN10 M returns giving TECs/HECs.

2321—LD temporarily turns of PB per BL request.

2330—F flushes nest cavity, apparently of her own volition. BL backs away from capture position.

2334—F returns to nest cavity.

2337—LD no longer hears CN10 M FLOW vocalizations.

2353—BL: M returns to nest area and gives 1-2 LC as he lands in the cavity entrance. M does not go into the cavity, however, and he flushes as the net is raised.

LD: Restarts PB.

2405—LD hears M FLOW vocalizing NW of cavity 100m+ away, presumably CN8\_2017 M FLOW, Second M FLOW begins vocalizing at roughly the same time to the SW also at 100m+ away, presumed to be CN10\_2017 M FLOW.

2412—BL leaves the nest area.

2425—LD stops PB and breaks down net.

## 29 June 2017

1435—Flam crew arrives in CN7\_2017 territory to peep after LD heard vocalizations in response to a lure net. We peeped out the enumerated trees without finding any owls, starting from the CN10 parking spot and peeping N down the drainage until the CN8\_2015 nest tree. All enumerated trees have been peeped and many new trees were enumerated.

# CN7—2018

## 9 July 2018

2200—ON, AM, and ES arrive at the CN10/CN7 territory boundary to set up a lure net to attempt to capture birds from a possible CN10 or CN7 nest.

2220—We set up the lure net in the drainage bottom ~30m N of CN10 parking spot and start PB T42. The net is open N/S. M immediately starts giving TCs from NW ~75m but quickly goes quiet.

Vegetation: young potr, burned conifer snags

Weather: clear, calm, 18C

X: 478747

Y: 4330242

+/- 3m

2235—M comes in from SW ~30m giving HECs but quickly goes quiet.

2239—Change PB to HECs.

2241—ON spots a silent FLOW perched just adjacent to the net. We shine a light and see it flush in the direction of the net.

2243—**After hearing wing flaps, we check the net to find the unbanded bird captured in the bottom shelf on the S side of the net**. There are no signs of pinfeathers or a brood patch so based on earlier vocalizations we think he might be the CN7 M.

2246—AM extracts the bird.

**Band # 1833-32555 (on L leg)**

69.0 g LWC: 129 mm

- 16.0 g LLP(5): in shaft (both wings)

53.0 g LLP(6): 106 mm

Rect: 58 mm

**Notes:** Skin peeling on belly and both wings. P2, P3, and P4 in molt. Significant notching on secondaries on both sides. No sign of parasites. Bled both wings, moderate hematoma on L wing, no hematoma on R wing.

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | In molt | In molt |
| P3 | In molt with notch | In molt |
| P4 | In molt | In molt |
| P5 | In shaft | In shaft |
| P6 | 1 | 1 |
| P7 | 1 | 2 |
| P8 | 2.5 | 2 |
| P9 | 2 | 2.5 |
| P10 | 2.5 | 2.5 |

2327—Horizontal then ascending flight N.

2329—Cut PB.

2335—We break down the net and head out for the night. No other FLOWs are seen nor heard.

# CN7—2019

## 23 July 2019

2333—KA, KC, ML and JE arrive at CN7 with less time than anticipated to run PB and see if we can elicit any responses. We begin PB of T42 from the parking spot.

2342—The rest of the crew has driven up to meet us, so we stop PB, pack into the car and head out, having heard nothing.

# CN8—2005

## 14 July 2005

1600—**DF locates the CN8 nest while peeping in the E fork of the L Turkey Cr drainage**. Cavity is approximately 10 m above ground in a *Potr* snag, approximately 20m E of the main drainage in a side drainage that includes the CN7 nest about 250 m farther east. We mark/tag the tree and leave.

2030—MS, SY, and BL arrive at the CN8 nest (discovered in the afternoon) to attempt capture of adults and determine if some brood members have already fledged.

2038—MS and SY raises the net over the nest hole. The F later escapes out the cavity.

2110—BL hears one fledgling—possibly two—giving sporadic FSC approximately 50 to the NE, on lower S-facing slope of *Pipo*.

2125—BL finally captures one of the fledglings.

Band #: 64486

81.5 g LLP: 69 mm

29.5 g Rect: 35 mm

52.0 g Got blood.

NOTE: Based on the proximity to the nest and the primary measurements (~23 days old), this fledgling probably fledged on 13 July.

2145—Banding and bleeding completed. We hold on to fledgling, and proceed to set up small mist net around the staked fledgling to attempt capture of M, who has not made any appearances at the nest site.

2153—MS and SY capture the F. She is **given band #64475** on the L leg.

Band #64475

77.0 g LLP: 92 mm

- 27.0 g WC: 131 mm

50.0 g Rect: 60 mm

2207—F is released after bleeding is complete.

2245—The set up of the mist net stake-out is complete.

2309—MS locates and captures 2nd fledgling approximately 100 m to the NE of the nest, near the ridgetop.

Band #: 64476

68.0 g LLP: 73 mm

16.5 g Rect: 42 mm

51.5 g Got blood.

NOTE: Based on the proximity to the nest and the primary measurements (~24 days old), this 2nd fledgling likely either fledged on 12 or 13 July, and probably the former.

2345—We collapse mist net and leave, due to presence of steady, light rain (small storm cells have been passing by for the past hour). The two fledglings are placed on limbs next to the trunk of a mature *Pipo* adjacent to the mist net. **Note:** Brood division appears to be in place—only the F was observed at the nest site until SY left the nest at ~ 2330.

## 15 July 2005

2030—EE, Braden, MS, and BL arrive in the vicinity of the CN8 nest to attempt capture of the 2nd fledgling and the M, who has not yet been captured/banded.

2130—EE falls out of a *Psme* while attempting grabbing fledgling # 64486. Fearing she has broken her leg or worse, we carry her out and proceed to Penrose Hospital. We leave a shaken #64486 nearby on a low perch, who remained in EE’s determined grasp all the way to the ground.

## 16 July 2005

1201—BL returns to the seen of the accident and eventually locates **fledgling #64486** approximately 5 m from where we left it last night.

77.5 g LLP: 72 mm

- 29.5 g Rect: 37 mm

48.0 g

1210—I return the fledgling to a nearby sheltered location and leave. The owlet appears a bit more cognizant of its surrounding today, and the legs and wings at least appear to be okay.

# CN8—2006

## 7 June 2006

2013—SY, EM and BL arrive at CN8 to search for the nest. Light cloud cover, wind <5 mph, 20 C.

2016—SY taps on last year’s CN8 nest tree (CN8\_373, #373), F rises to cavity entrance. **THIS IS THE CN8\_2006 NEST.**

2017—F returns to cavity bottom. I prepare for a capture attempt.

2041—SY places net in position in front of nest.

2042—M gives 2 encounter calls to the East.

2103—F comes up to the hole.

2104—F leaves tree and evades the net. She flies due West.

2105—M gives encounter calls, F gives 3-note scolding calls.

2129—SY and EM arrive back at the nest tree to capture male.

2136—Prey delivery.

2138—Prey delivery.

2140—Prey delivery.

2144—SY nets male on prey delivery—NOT PREVIOUSLY BANDED (NOTE—IN RETROSPECT, THIS WAS THE FEMALE; 11/14/07).

Band #64503

81.0 g LLP: 89 mm

- 26.5 g WC: 132 mm

54.5 g Rect: 56 mm

Also, SY bled the left wing for genetic analysis

2203—Released M to the west.

## 16 June 2006

2037—EM and SY arrive at CN8 nest to attempt capture of the F. Weather: Recently rained, clear, calm, 14 C.

2040—Net in capture position. (30ft 3in.)

2041—M gives TCs to the NW for approx. 2min.

2055—I tap.

2056—F flushes into net but gets free.

2057—We peep: **3 eggs**. F scolds from the N. We leave.

## 30 June 2006

2044—BL arrives at the CN8 nest to attempt capture of F. I see her flush from the cavity as I approach. I get into capture position.

2127—After several aborted deliveries, and 3-4 successful prey deliveries by the M, we capture an adult. This individual was not previously banded, so it supposedly is the F, since the M was previously captured and banded (NOTE: SEXES APPARENTLY REVERSED—SEE ABOVE; 11/14/07).

Band #: 64498

78.0 g LWC: 124 mm

31.0 g LLP: 100 mm

47.0 g

Based on the lack of obvious incubation patch and the light mass, this owl appeared to be a M—it did not vocalize prior to capture. Could this individual actually be the resident M, while the previous bird captured on 7 June was actually the resident F?

2152—I release the owl and leave.

## 11 July 2006

1345—Jim Dandy and BL peep the CN8 nest and discover one well-developed owlet remaining in the nest (it appeared motionless with eyes open). Facial disk and remiges appear well formed. F not in cavity.

1350—We leave.

2035—Jim and BL return to the CN8 nest to attempt capture of adults. Mostly clear, calm, ~ 22 C.

2049—F approaches nest area giving FSC and SC, but not reach nest tree. Owlet appeared in entrance moments earlier, giving occasional begging calls. We attempt to raise net to capture position, but several dead limbs from adjacent trees—whose orientations have changed since the last nest visit apparently due to the recent rains—are nearly completely blocking the approach to the cavity. We spend several minutes attempting to achieve access, and then back off so F can deliver prey.

2126—F makes first prey delivery to the nest—she gives FSC as owlet begs from the cavity entrance (where he has been the entire time).

2131—Same.

2137—Same. BL gets into capture position.

2218—Nestling fledges into the capture net when the net comes close to touching the cavity entrance! We proceed to process it.

Band # 1593-64561

83.0 g LLP: 66 mm

- 29.5 g Rect: 31 mm

53.5 g

2246—We release the owlet, after bleeding it, placing it near the nest tree. **NOTE**: M not seen the entire night, and heard only once giving a few TC approximately 75 m NE of the nest. BL speculated that the oldest sib already fledged, and is being tended by the M. Given the relatively normal mass of the owlet that fledged tonight, it appears likely that its sibling also was alive.

# CN8—2007

## 31 May 2007

2005—BL, CB and SY begin peeping and tapping in the CN8 Terr. in search of a nest.

2035—Having found nothing, we stop peeping and begin listening for nesting vocalizations.

2218—From CN9 drainage BL hears CN8 M give TC/TECs for 4-5min.

2305—We leave.

## 8 June 2007

1810—Flam crew arrives to peep the CN8 Terr.

1902—KB peeps tree CN8\_373 (tag #373; 2005 + 2006 Nest Tree) F is present. We leave.

2021—EM and CB arrive at CN8 nest tree to attempt to capture F. Calm night, partly cloudy, 21 **C.**

2033—CB approaches nest tree and begins setting up net.

2046—CB has net in place, F rises to cavity entrance and about 1 min. later flies into net.

2058—We release F, strong flight to N.

Newly banded F: Band # 1593-64530 left leg

2105—CB and EM leave nest site to spot map CN8. Nothing seen nor heard.

2130—We leave.

## 15 June 2007

2115—KB and EE arrive to capture the CN8 M.

2120—F flies in 10 m east of nest and gives two FSC’s. M flies in and makes a PD in the cavity

2122—F returns to nest.

2128—We set up the nest. The F is up.

2134—F flushes after net gets caught on a nearby snag.

2136—Appears that F has returned to the cavity as we see a bird fly in direction of the nest.

2146—M makes a silent PD.

2153—Net back in capture position.

2206—M makes a silent PD.

2213—We capture the M. He was not already banded, so we band him, #64552. The F flushed, so we moved out of the way.

81.0 g LWC: 148 mm

- 27.0 g LLP (5): 98 mm LLP (6): 107 mm

54.0 g RECT: 63 mm

2223—Release.

## 21 June 2007

2315—KB and BL arrive at the CN8 nest to attempt capture of M so that we might attach a radio transmitter on him. KB gets into capture position.

2319—M arrives in nest area, giving LC.

2320—M flies to cavity entrance to attempt PD, and escapes the capture net.

2350—M enters nest area, and while flying past the nest tree nearly entangles himself in the net.

2417—M flies to cavity entrance to attempt PD, and again escapes the capture net. The capture net sustains serious damage in the process, and we leave.

## 26 June 2007

2035—BL arrives at CN8 nest to attempt capture of M for attaching radio transmitter (SY is at CN7 nest to attempt the same—we plan to radio tag the 1st M captured). F at the entrance when I arrive. Overcast, calm, 19 C.

2046—I raise the peeper, and the F flushes as the peeper approaches. **Nest contains 2 unhatched eggs.**

2107—F returns to cavity.

2108—M delivers prey to F in cavity.

2113—Same.

2126—F flushes as I raise the capture net close to cavity. I lower net.

2129—F back in cavity.

2134—M delivers prey to F in cavity.

2140—I leave for CN7 nest, where SY has captured the M.

## 28 June 2007

2406—While radio tracking the CN7 M, CB and SY observe a territorial encounter between CN8 and CN7 Ms. I mark 2 songposts on the CN8 M (see data sheet).

2412—I leave.

## 10 July 2007

2105—SY and KB arrive at the CN\_8 nest site with the intent to capture and radio tag the M. It is calm, mostly clear, 15C. We immediately peep and find two nestlings, both with gray plumage.

2109—PD by F.

2110—PD (unknown, silent)

2112—PD (unknown)

2114—PD (unknown)

2115—PD (unknown)

2116— PD (unknown)

2117— PD (unknown)

2118— PD (unknown)

2120— PD (unknown)

2121— PD (unknown)

2122— PD (unknown)

2123— SY gets the net in position.

2127— M captured, **band #64552**. KB and SY put the radio transmitter on the owl, we have to adjust it. The transmitter is frequency is 164.8940.

2155— M is released and we begin to track him.

2208—SY marks CN8\_1 – M is in a lg. *pipo*.

2210—KB marks fix CN8\_2, M is in a *PIPO* - SY observes M fly out of tree..(see data file for location)

2235—KB tracks the M to a mature *PIPO* in which I hear wing fluttering (foraging?) – CN8\_3. (see data file for location)

2252—KB marks a general area fix (CN8\_4) I am confident he was within 7m. (See data file for location)

2255—CN8\_5 – M is perched <1m off ground on a dead branch of *pipo*. Tree is lightly burned on lower portions. Direct flight to CN8\_6. (See data file for location.)

2256—CN8\_6 – M perched ~1m off ground in a *pipo*. Direct flight ti CN8\_7. (See data file for location.)

2258—CN8\_7 – M perched ~1m off ground in a *pipo* for ~1min. M then flies up to trunk ~0.5m above perch and appears to glean an insect off the trunk of the tree. M the flies in direction of the nest siste. (See data file for location.)

Note: The specific perches used by the M for fixes CN8\_5, 6 and 7 are flagged.

2310—We leave.

## 16 July 2007

2106—EM and SY arrive at the CN8 nest to attempt capture of the F for bleeding. Nestling is in the entrance when we arrive. He remains there for ~1min. Weather: Clear, breeze ~5mph, ~25 C.

2110—Net in capture position.

2112—PD – M?

2114—PD – failed cap. attempt.

2115—PD

2124—PD – F is captured, she is previously banded.

Band #64530

68.5g LP(5): 92mm

-11.5g LP(6): 98mm

57.0g Rect.: 53mm

WC: 119mm

Primaries 1-3 on the left wing are abnormally short, likely the result of molting.

P1: 67mm

P2: 54mm

P3: 49mm

We bleed the F from the R Wing.

2140—Release, strong flight W. We leave the nest site and begin radio tracking the CN8 M

2238—CN8\_1 Gen area fix (w/in 15m). See data file for location.

2255—CN8\_2 Gen. Area fix (w/I 20m). See data file for location.

2311—CN8\_3 Gen. Area fix (w/I 10m). See data file for location.

2315—We leave.

## 17 July 2007

1950—EM and SY arrive at CN8 to find M roost and radio track the M. Note: See data file for all locations.

2015—While searching for the roost SY flushes M. 95% sure the M came from psme ~10m from ridge top.

2035—CN8\_2 Live psme ~20m from first roost. M perches for several minutes about halfway up the 15 m tree on the east side then flushes and begins moving around the nest rapidly.

2057—CN8\_3 – G.A. fix, w/I n15m.

2101—CN8\_4 live psme. EM sees owl fly in and out of tree quickly. Possibly a gleen?

2121—CN8\_5 – G.A. fix w/I 5m. Flyover?

2138—CN8\_6 – M perhed ~1.5m from ground on dead branch of a *pipo*. Makes a glean attempt off the ground then flies directly to CN8\_7

2140—CN8\_7 – M perched ~1.5m from ground on dead branch of a *pipo*. Makes a glean attempt off trunk of tree, then flies NW.

2203—BL arrives at CN8 nest site to observe nest activity. Owlet begging loudly in the cavity entrance (heard even above stream noise).

2204—CN8\_8 – M not seen but sp. Tree flagged. Behavior unknown.

2207—F arrives in the nest area, and makes a PD at the cavity entrance.

2212—CN8\_9 gen. area, w/in 20m.

2225—CN8\_10 gen. area w/in 15 m. On a ridgetop N of nest site in a mature, live pipo forest.

2230—We begin tracking the M up the CN7 drainage into and eventually through CN7 terr.

2244—F arrives in the nest area, and makes a PD at the cavity entrance.

2251—CN8\_11 – very general area fix marking part of the M’s path. This is where the M turned NNE and left the drainage bottom. Accurate only w/I ~50m

2252—F arrives in the nest area, and makes a PD at the cavity entrance.

2306—BL leaves nest site. Note: M never appeared in the nest area during the 63 min of observation, while the F made a total of 3 PDs at the cavity entrance.

2308—CN8\_12 – M gleans within crown of lg. *pipo*. Remains in tree for ~1min. This is E of the Rd.

2322—CN8\_13 – M is not seen but sp. Tree identified, *pipo*. M continues NE but we stop tracking.

Note: CN8\_11 – 13 represent an extra-territory movement by the CN8 M. The M moved up the CN7 drainage, mainly in the dr. bottom. Just past the CN7 nest site he began to zig zag N up the slope taking me past the 7/16/2007 CN7 roost site (see field notes). Possibly searching for the CN7 M’s sub-group? Near the R top the M began moving in a more consistent NE direction again along the top of the broad ridge that the rd. runs along. The M was still moving away from his territory when we stopped tracking but at the last fix he was ~1300m away from the roost site found earlier in the night.

## 23 July 2007

1535—Flam Crew peeps the CN8\_2007 nest cavity to assess status of owlets—we find one owlet remaining, with adult coloration on primaries and side of facial disk. F was not roosting in nest cavity.

1540—We leave.

1600—We find CN8\_M roost approximately 40 m E of nest, directly upstream from the nest and about 10 m S of the creek bottom, in a subdom *Pipo* (12 cm dbh). We also locate the fledgling roosting in the same tree, approximately 1 m above the ground. We leave without flushing either one—we will come back tonight and capture both using a mist net.

1932—Flam crew arrives at roost of CN8 M (found earlier in the day) in order to capture and bleed him in addition to the fledging below him.

1943—M escapes mist net, we capture fledgling.

New Band #64549

52.0g LP(5): 65mm

-11.0g LP(6): 64mm

41.0g Rect.: 19mm

WC: 89mm

We bleed the fledgling.

NOTE: Based on the fledgling’s specs and the distance of its roost from the nest, it likely fledged either last night or the night before.

2030—We open mist net w/ fledgling tethered below it.

2107—M found in lure net—he was previously banded.

Band #64552

77.5g LP(5): 100mm

-27.0g LP(6): 103mm

50.5g Rect.: 54mm

WC: 132mm

Blood Sample taken

2135—M is released, we leave.

Also 23 July in CN8

2012—EM arrives at CN8 nest to observe nesting activity and possible fledging.

2015—Nestling begs once.

2024—Nestling begins to beg about every 30 seconds.

2030—Nestling rises to cavity entrance and continues to beg.

2044—Prey delivery, unclear to whether it is M or F.

2045-- Prey delivery, unclear to whether it is M or F.

2053-- Prey delivery, unclear to whether it is M or F.

2055-- Prey delivery, unclear to whether it is M or F.

2059-- Prey delivery, unclear to whether it is M or F.

2115-- Prey delivery, unclear to whether it is M or F.

2116-- Prey delivery, unclear to whether it is M or F.

2117-- Prey delivery, unclear to whether it is M or F.

2130—EM leaves nest site, no fledging occurred.

# CN8—2008

## 29 May 2008

2058—SY, KB, DH and NH set up mist net and start playback in CN8. Clear, calm <5mph, and 15C. Site is N of the 2007 nest site. Very open pipo forest mostly medium sized trees. Low on the slope.

2114—M enters net site giving TECs – does a lot of flying around the site – occasionally “buzzing” the speakers.

2121—SY finds a bird caught in the top shelf of the net. **He is previously banded**.

**Band #64552—this is the CN8\_2007 male.**

78.0g LP(5): 97mm

-26.0g LP(6): 105mm

52.0g Rect.: 58mm

LWC: 130mm

SY tags the M with **transmitter #853**

2155—M is released and SY follows him around the net area with the transmitter. The male does not seem to mind his new backpack.

2220—The call is turned on again at the net site.

2228—The male returns to the net site and is very vocal.

2250—We collapse the net and leave the CN8 area.

## 5 June 2008

2020—DH and SY begin radio-tracking the CN8 M.

2024—KB approaches the 2007 CN8 nest tree to find a F in the CN8\_2007 nesting cavity—**this is the CN8\_2008 nest tree.**

2039—DH locates the M supposed roost (DH flushed a possible flam a few minutes before locating the CN8 M – it is possible that this site is a rest perch and not a roost). Perch is on a low limb of a lg. pipo. Site is on the low slope of Main CN8 R.

Dbh: 56.0

X: 477891

Y: 4330825 +/- 25m

2039—Capture net is up at the nest tree in attempt to capture the F.

2041—M flushes to the E, up drainage – in the direction of the nest site.

2049—M enter nest site from the W and gives LC’s. No response from F and he leaves the area.

2054—M reenters nest sire, giving LC’s.

2056—F flushes and is captured in the net. **She is a previously banded bird**:

**Band #64475—this is the CN8\_2005 female.**

84.5g LP(5): 97mm

16.0-g LP(6): 108mm

68.5g Rect.: 62mm

LWC: 132mm

She had debris in her eyes that I tried unsuccessfully to remove.

2105—F is released.

2108—**The cavity is peeped and three centered, touching eggs are found.** Both M and F are vocalizing in the area, giving LC’s and FSC’s.

2111—KB leaves the nest site.

2300—We stop tracking having located no further posts.

Note: We tracked the M far to the NE to the upper slopes of the principle R that the rd. runs on (R that bounds the NE side of CN7 as well). While no posts were marked I am cofident that the M was in this vicinity approximately. This represents and extension of the territory.

## 13 June 2008

1947—SC and SY begin radio tracking the CN8 M.

2007—SY locates the CN8 M’s roost tree – CN8\_1 – specific perch was not identified. Tree is a large (dbh: 46.5 cm) pipo mid-slope of Roost R.

**CN8\_1** - Roost

X: 477950

Y: 4330845 +/- 6m

2100—Having been unable to identify the specific perch I recheck the radio – M has apparently left the tree undetected. We restart tracking.

2131—**CN8\_2** – Behavior unknown.

Pipo dbh: 39.0

X: 477977

Y: 4330761 +/- 8m

2151—**CN8\_3** – General Area, behavior unknown.

X: 478275

Y: 4330785

2155—We stop tracking and leave.

## 19 June 2008

2015—DH and SY begin radio tracking the CN8 M.

Weather: Mostly clear, wind <5mph, T-storms to the N and S.

2024—**CN8\_1** – roost.

Live pipo dbh: 27.5cm

X: 477956

Y: 4330820 +/-7m

Tree in on the low slope or Roost R. M is ¾ of the way up the tree facing N on the E side of the tree. Next to the trunk. Bunch of needles of his head and L shoulder.

CONTINUE ENTRY SY/DH

## 26 June 2008

1945—Abby Pyle and SY begin searching for the CN8 M roost via radio-tracking.

Weather: Partly cloudy, wind <5mph, 22C.

2001—We locate the CN8 M roost on a med. Live pipo on the far E end of Roost R.

**CN8\_1** – Roost

Pipo dbh: 39.0cm

X: 478098

Y: 4330733 +/-5m

2029—We leave the roost site and head for the nest area to meet DH.

2029—DH arrives at CN8 nest to peep—she is down.

2054—M enters nest site, gives LCs, flies to the cavity entrance, flies away. F is still not up.

2056—M flies to cavity, perches at entrance, flies away.

2057—**She flushes, we peep: 1 egg and 1 nestling <5 days old, >1 day.**

2100—After peeping the nest site SY and DH restart tracking the M. Abby remains at nest site to observe the M’s PDs.

2121—SY marks a fix in the M as he flies past w/i 5m of me. Abby simultaneously reports the M leaving the nest site and heading N (exactly my direction). M is flying low to the ground (~1m up) heading due N.

**CN8\_2** – Flight

X: 478121

Y: 4330717 +/-7m

2137—**CN8\_3** – General Area, w/i 15m. – probable forage.

In a group of sm. to med. Pipo.

X: 478110

Y: 4330794 +/-7m

2201—**CN8\_4** – probable forage, 90% certain on the tree.

Live psme dbh: 46.0cm

X: 478267

Y: 4330766 +/-7m

On low slope of one of the northeastern ripples.

2252—**OP\_1** marked.

X: 478236

Y: 4330929 +/-5m

VERY general area. Maybe w/in 50m.

2316—**OP\_2** marked.

X: 478595

Y: 4330913 +/-6m

Very general area. He zig-zagged very far N; possibly extra-territorial movt. Was still moving NW when marked.

2217—We stop tracking and leave.

## 30 June 2008

2025—CB and SY arrive in CN8 and begin searching for the CN8 M’s roost.

2035—We locate the M’s roost.

**CN8\_1** – roost.

Live pipo dbh: 44.0cm

X: 478102

Y: 4330662 +/-8m

Tree is in the drainage bottom ~4m E of the CN8 nest. M is ¾ of the way up the tree against the trunk on the N side. M is preening when we locate him. F is in cavity entrance while we search for the M.

2042—We leave.

## 1 July 2008

2025—QB and SY arrive in CN8 territory and begin searching for the CN8 M’s roost.

2037—We locate the M’s roost.

**CN8\_1** – roost.

Live beoc dbh: 4.0cm

X: 478107

Y: 4330681 +/-28m

M is perched ~2m off the ground in te drainage bottom ~12m N of the nest tree. He is on the upstream side of the tree. Specific branch he was perched on is flagged.

2044—M flushes. We head to nest tree.

2050—We tap on the nest tree, no response. We peep: **2 nestling present** 1 in all white natal down, the other has some gray plumage showing under the white down. Heads are not visible on either bird.

2057—We leave the area.

## 7 July 2008

2020—SY begins searching for the CN8 M’s roost.

2035—Roost (or post-roosting perch) located. M is in a pipo ~15-20m SE of the nest. The M flushes (unseen) while I confirm the tree he is in.

**CN8\_1** – roost(?)

live pipo dbh: 38.5cm

X: 478083

Y: 4330643 +/-7m

2043—While collecting data on roost tree I observe the M make a PD at the nest. Confirms that he has flushed this tree.

2049—SY peeps the nest: 2 nestlings present, oldest is in mostly gray juvenile plumage w/ some white down hanging on. Youngest in 50/50 white and gray. I back out of nest site and resume tracking.

2120—KB begins tracking the CN8 M.

2128—KB marks two foraging posts. The M presumably travels directly from CN8\_2 to CN8\_3, two pipos about 10 m apart.

**CN8\_2** – probable forage, 80% certain on tree

Large, live Pipo. Dbh: 63.0cm

X: 478139

Y: 4330750 +/-5m

2130—**CN8\_3** – probable forage,

Live pipo dbh: 43.5cm

X: 478141

Y: 4330746 +/-10m

2134—SY leaves CN8 area and heads to CN7 to assist.

2159—KB marks two posts up drainage to the east on the East Fork of Little Turkey Creek. After marking these two posts, I hear him giving TCs to the SE for three minutes, then several TCs very close to these posts, (just up slope), then he took off in the direction of the nest site.

**CN8\_4** – probable rest,

Live Pipo. Dbh: 43.5cm

X: 478255

Y: 4330709 +/-4m

2200—**CN8\_5** – probable rest,

Live pipo dbh: 39.0cm

X: 478267

Y: 4330697 +/-5m

2205—M giving TCs to the SE of CN8\_5 (as mentioned above).

2233—QB arrives at CN8 nest site to monitor.

2237—silent bird (F?) makes PD

2238—M giving LCs to W of nest area

2241—silent bird in nest site

2242—silent bird (M?) gives PD

2248—silent bird (M?) flies away from cavity (PD?) to the N/NW

2251—silent bird (M?) makes PD, flies away to W/SW

2250—KB tracks the M to the S of the nest site.

2255—QB and KB stop tracking and leave area.

## 10 July 2008

2048—DH and KB arrive at CN8 nest to capture M and replace radio tag. F is up when we arrive. Weather: partly cloudy, calm, 21C.

2052—F flushes, flies W.

2053—M calls off roost, NW of nest tree, ~20m away. We peep: 2 nestlings not quite with a facial disc. Comparable to the CN7 nestlings from earlier today, maybe a bit younger. One of them has more grey than the other.

2058—Net in capture position.

2059—M and F both in the area. M PD.

2100—F. PD, then M. PD—missed him with net.

2103—F leaves site, flies SW.

2107—M. back in the site.

2108—M vocalizes one TC, then makes PD—missed him. Flies off NE. **Note:** F appears to be coming and going from the SW between each PD, and the M seems to be coming and going from the NE.

2113—F makes PD, this time flies off due N.

2114—F. PD, flies off SW.

2116—M captured. He appears to be molting—primaries 1 and 2 on both wings are very small. On the L wing #1 and 2 are roughly the same size; on the R wing #2 is smaller than #1, almost looks like a covert. We remove old tag—the L strap wore on some of the scapulars or coverts on the junction of the L wing and the body. No scabbing though. We fix him w/ **tag #164.9120**.

71.0g WC: 131mm

-16.5g LLP(5): 94mm

54.5g (weight w/ tag on) LLP(6): 104mm

Rect: 62.0mm

2153—M is released – very strong flight S.

2158—DH tracks the M through the nest site and on to the N.

2234—M in nest site.

2242—M PD, F in the area.

2254—We leave.

## 15 July 2008

2100—SC, QB, and DH arrive at CN8. Weather: clear, calm, 18C. SC and QB **peep nest: at least one nestling, another possibly behind it.**

2106—F arrives, and gives scolding calls.

2112—We pull peeper out, F aborts PD.

2114—F aborts PD.

2115 – 2312—Refer to PD sheet for CN8 on 15 July 2008.

2134—**CN8\_1** – probably forage

*Psme*, live crown dbh: 24.5cm

X: 478115

Y: 4330642 +/-9m

Flew down W to nest site after this fix, where SC and QB observe PD.

2200—**CN8\_2** – behavior unknown

*Psme* snag, dbh:48.0cm

X: 478069

Y: 4330566 +/-6m

Drainage bottom, right next to creek. Flew off due S.

????—**CN8\_3.3** – extra-territorial movt?

X: 477964

Y: 4330535 +/-25m

Very general area. I tracked him up drainage to the S across the road, over the ridge, and down into CN9 drainage. I backtracked my steps afterward and placed these 3 points (3.3, 3.2, and 3.1) to show where he had been.

????—**CN8\_3.2** – extra-territorial movt

X: 477953

Y: 4330473 +/-8m

????—**CN8\_3.1** – extra-territorial movt

X: 477995

Y: 4330425 +/-9m

2235—**CN8\_3** – singing

*Psme*, live crown dbh: 24.0cm

X: 478057

Y: 4330503 +/-8m

Just upslope of the road to the S, the wild goose chase ended with him singing in this tree, maybe a border with CN9? At this point I stop tracking to rest and wait for GPS. SY radios that there is a UFO at the CN7 nest site, and that the CN8 signal is unusually close to him.

2300—DH hears M calling up the E slope of CN9 canyon. Radiotelemetry indicates it is not the CN8 M, but the CN8 M is unusually close to the area.

## 18 July 2008

2130—DH and SY peep the CN8 nest: **1 very well developed owlet present. F scold us while we are peeping.**

2131—M gives possible LCs to the E. We move to the area and try to locate a fledgling.

2143—Nothing heard (creek noise is making it nearly impossible), we leave.

## 22 July 2008

1935—FC arrives at CN8 to capture the M and remove his radio tag as well as to find and process any fledglings we may find.

1952—DH finds M roost in a medium sized pipo on an open S-facing slope (low slope).

**CN8\_1** – M roost

live pipo dbh: 31.5

X: 478246

Y: 4330720 +/-6m

M is 2/3 of the way up the tree, next to the trunk on the SW side.

2005—Fl located

**CN8\_2** – Fl roost

Live pipo dbh: 42.5

X: 478247

Y: 4330726 +/-9m

Fl is 1/2 of the way up the tree, ~5ft from the trunk on the SE side.

2010—Fl flushed off his roost – flies to the E. He hits the ground ~30m from his roost. He is captured.

New Band #64665

75.5g P5: 86mm

-17.0g P6: 86mm

58.0g Rect.: 45mm

LWC: 104mm

We bleed the FL’s L wing.

2037—We have mist net set up around the fledgling—one side running N and the other running W, w/ the fledgling tethered in a pipo sapling at the pivot point.

2038—Fl somehow escapes tether, gets caught in net.

2029—M begins calling off his roost.

2043—Fl re-tethered. We back off to ~10m to wait.

2044—Fl tries to fly away—keeps hanging upside down from the sapling. We re-tether him to the ground at the base of the sapling.

2045—M flushes—SE.

2105—DH, KB and Kate Dawson move approx. 25m southwest of the mist net to observe.

2106—SY checks the net while passing, empty.

~2112—From the E end of Roost R. SY observes the F fly from the NW (along N facing slope of R.) to the SE (towards the vicinity of the nest. The make a return flight (using same flight path) in the reverse direction.

2118—We check mist net—empty. M gives TCs at us from nearby.

2120—SY follows a F (intermittently scolding) from the E end of Roost R. to the W along the N facing slope. I lose her at the edge of a suspected IFA (based on telemetry data from 2007).

**Note:** This area is in the direction the F was observed flying to and from ~10min. earlier. It is likely that she is using this area as an IFA and that the suspected Fl is located near the nest site to the SE.

2126—DH checks the net and finds a bird, the CN8\_2008 M, **band #64552.**

74.0g LWC: 131mm

-17.0g LLP(5): 101mm

57.0g (mass w/ tag on) LLP(6): 105mm

Rect: 68.0mm

71.5g

-17.0g

54.5g (mass w/ tag removed)

**Note:** This M is in the process of molting. P1, P2, P3 are all growing in, similar in length. P4 is gone and a new shaft is present

2149—M is released.

2200—Fl released into pipo in the rough area where he was found, ~6ft up, perched against the trunk.

2201—M giving TCs NW of the Fledgling’s roost.

2215—Nothing further heard, we leave.

# CN8—2009

## 28 May 2009

1850—Flam Crew arrives to tap and peep cavities. Nest is not found.

1945—Flam Crew leaves.

2018—QB, JG, and SY complete lure net setup on ridge on E boundary of the Basin.

2042—Begin playback after TCs heard in the area. NEED GPS. M and F fly into vicinity of net from the area of the previous year’s nest cavity, or slightly up drainage from it. Both are calling (M giving TCs and TECs).

2047—Catch unbanded F in shelf 2 on W side. CN8?

**New Band #64663**

We don’t mass her because she was so tangled in the lure net that it took over five minutes to get her out, so we release her as soon as possible, at 2054.

2051—Catch 64552, banded M in shelf 3 on W side. CN8?

**Band #64552**

70.5g P5: 96mm

-12.0g P6: 106mm

58.5g Rect.: 54mm

LWC: 131mm

2100—Release 64552

2101—Catch unbanded M in shelf 4 on W side. Possibly CN7?? Another M (CN8?) is giving TCs in the area but does not fly into net.

**New Band #64659**

67.0g P5: 95mm

-17.0g P6: 101mm

50.0g Rect.: 62mm

LWC: 131mm

SY attempts blood sample on right wing first, then switches to take it from the left wing.

2121—Release 64659

2128—QB heads out to look for CN8 nest, SY heads out to look for CN9 nest, JG remains at lure net. QB listens, taps, and observes near last year’s nest site and working up the drainage.

2141—Catch 64659 in shelf 2 on N side.

2143—Release him.

2155—Catch 64659 in shelf 2 on E side . He is giving HECs in the area.

2159—Release him.

2259—Lure net packed up. SY, QB, and JG head out to look for CN8 nest by listening, observing and giving quiet LCs near the previous nest cavity and up the drainage.

0015—We leave.

## 4 June 2009

2210—JG, Matt head from CN7 lure net and DH and KB to tap and listen in CN8 for nest.

2230—TCs heard up drainage from us for one minute. Possibly CN7 male.

2310—We head back to lure net to break down for the night.

## 11 June 2009

1730—BL, SC, and KB begin peeping the area around last years CN8 nest tree. We find nothing, but there are several trees that require listening.

2213—DH arrives in CN8 after breaking off from KB and JG in CN9 to listen for nesting activity. I make my way toward vicinity of the 2008 nest.

2254—I hear M TCs coming from upstream of 2008 nest.

2303—I am at CN8\_1107 to tap/listen. The M is calling from ridge upslope to the E.

2315—I move upslope to W to avoid creek noise, but lose silhouette. M is still calling from opposite slope.

2328—M goes quiet.

2332—I am at CN8\_1131, which says “partially peeped” on flagging.

2340—Having seen and heard no nesting activity, I leave.

# CN8—2010

## 28 May 2010

2036—BG, JSG, JG, SY, and Sarah have lure net set up in CN8 near the W end of CN7. We are set up on an unnamed ridge about 200 meters north of the road about mid-slope.

X: 478242

Y: 4330791

+/-: 5 m

Weather: 21 C, wind less than 5 MPH, partly cloudy.

Vegetation: Mixed-age Pipo, moderately open, low-intensity burn area.

2050—Begin playback.

2055—TCs heard in the direction of CN7 one ridge to the E. M approaches the net area and respond for 3 minutes in immediate vicinity of the net.\

2056—JSG works way up creek to the S to attempt to find nest tree.

2058—M leaves the area, last heard in the direction of CN7.

2059—JSG hears TCs from the SE near the drainage.

2121—JG turns volume up on playback.

2150—JG turns speakers toward CN8/down drainage.

2204—TCs heard in the net area. This M began responding down drainage/in the direction of CN8 and approached the net.

2206—The same M circles the net and is now on the same ridge as the M we heard at 2055.

2215—After having circled the net and responded aggressively and in close proximity to the net, the M leaves the area. At exactly the same time, BG hears female begging down by creek.

2252—TCs heard directly up the ridge from the net area for less than a minute, then stop.

2306—End playback and leave the area.

## 3 June 2010

2020—BL, JSG, DW, & JV arrive at Crossbill Ridge to set up the lure net.

2103—Playback is started. Position is 10 m south of the road just east of where the road turns to go down to Little Turkey Creek. On the edge of low-burn and moderate- to high-burn areas. Slope angle is 35-40 degrees.

X: 478204

Y: 4330612

+/- 5 m

Weather: Mostly cloudy with no wind. 18C

Vegetation: Mostly Psme with some Pipo around the net

2122—M TCs (4-6 of them) are heard from the northwest in CN8.

2133—M TCs are heard again from the northwest in CN8.

2139—BL & JSG head north to listen in CN7 and CN8.

2148—M comes from northwest giving TCs in the net area.

2149—M goes quiet.

2151—M is heard to the southeast giving TCs.

2205—Playback is moved so that it is facing northeast.

2240—Two TCs are heard from the direction of CN9 in the distance.

~2240—JSG heads E to where the creek crosses the road to tap cavity trees and listen.

2248—Playback is moved back to facing west.

2314—Playback is stopped and taken down.

2330—JSG and JV head N along road to listen where the creek crosses the road on the E side.

2359—JSG and JV hear a couple TCs in the distance to the E.

0005—We leave the area.

# CN8—2011

## 17 June 2011

~1530—BL, JG, BG, PS, and JR arrive at CN8 to peep and hopefully find 2011 nest.

~1730—We leave, having peeped almost every tree except for a few in the S-curve at the bottom and finding nothing.

# CN8—2012

## 29 May 2012

2330—NS and AW arrive at the CN7 parking spot with SY, AP, and MD with the purpose of spot mapping and listening for nests. NS and AW leave to listen down drainage.

2332—NS and AW hear M giving TCs from S slope of drainage between high burn area and first section of large pipo and potr undergrowth. We pursue M as he continuously gives TCs and moves down drainage.

2357—M gives TCs from end of ridge between CN7 and CN8 territories for approximately 10 minutes.

2400—M gives a few TECs at same location for approximately 30 seconds.

2403—We leave and return to the vehicle.

## 12 June 2012

1600-1655—Crew peeps much of CN8 in afternoon, some trees left around tree 1281.

2150—CC, AW, JV set up lure net on high slope off the road on Great Horned Ridge facing NW. While setting up the net we occasionally hear M giving TC’s from SW portion of CN7/CN8 drainage ̴ 50 m away.

Weather: Clear, calm, 14 C

Vegetation: High burn mixed w/ live young potr and some live medium-young psme

X:478237

Y:4330582

+/- 3m

2156—Playback started. After playback begins M goes silent and circles net for about 10 min before disappearing.

2217—Silent bird is not seen in the area. AW moves playback down slope to the NW.

2228—**Silent, unbanded M caught in 3rd shelf from S.** Bird is caught fairly badly in net and must be cut out. Has a large pterylosis but his behavior and mass indicate that he is a M. AW and JV unsuccessfully attempt to bleed both wings, no vocalizations given at any point and none heard from any direction. Bird appears to have a large pterelosis.

**Band # 1583-64875** (on R leg)

84.5 g LWC: 125 mm

- 29.5 g LLP(5): 96 mm

55.0 g LLP(6): 104 mm

Rect: 58 mm

2259—M released w/ strong flight downslope to N.

2309—JV, CC leave to spot map CN9 while AW stays at net.

2335—AW hears wing flaps and checks net to find same M is captured in 1st shelf from S. No vocalizations were made except for chittering while getting him out of the net.

2339—M released w/ strong flight S.

2400—JV and CC arrive back at net site. Playback stopped

2411—While breaking down the net M gives TC’s from ̴ 20m E of lure net.

## 19 June 2012

2159—As JV, CC, and PPS are setting up lure net to capture CN8 and surrounding MM, we hear a M giving TCs down drainage.

2211—Playback started. Lure net is set up on the upper slope of a spur of Digger Ridge, a ridge NE of the CN7\_2007 and CN7\_2008 nest. The net opens SW.

Weather: Clear, no wind, 20C

Vegetation: Mixed medium psme, pipo, low burn

X: 478689

Y: 4330522

+/-: 3m

2214—M comes in from SW, giving TCs.

2216—M gives HECs directly up slope from the net to the SE.

2217—M (probably CN7) begins flying in close to the net and then backing off giving mostly HECs and some TECs for the next ~15 min.

2222—JV moves playback around and makes additional hoots to try to catch M.

2230—A second M gives TCs about 100m N of net site (most likely the CN8 M). The CN7 M is still in the area giving TECs and HECs.

2236—**Unbanded M captured in third shelf from the SW**. **This is the suspected CN7\_2012 M.** Blacklight results: Both wings: P1-P2 none, P3-P6 strong pink, P7-P8 less pink, P9-P10 none. Processing slowed because JV and PPS had to extract a bat as well. JV bleeds right wing for genetics and smear. He has a large hematoma.

**Band # 1593-64900** (on L leg)

92.5 g LWC: 130 mm

- 34.0 g LLP(5): 95 mm

58.5 g LLP(6): 103 mm

Rect: 62 mm

2318—**Banded M caught in fourth shelf from the E**. **This is the suspected CN8\_2012 M caught in a lure net on 12 June 2012.** Blacklight results: Right wing P1-P5 medium pink, P6-P8 faint pink, P9 none, molting P10; left wing P1-P3 bright pink, P4-P8 medium pink, P9 none, P10 molting.

**Band # 1593-64875** (on R leg)

88.0 g LWC: 126 mm

- 34.0 g LLP(5): 100 mm

54.0 g LLP(6): 104 mm

Rect: 56 mm

2334—CN7 M released. Poor flight, low and horizontal, N to a psme about 4 ft off the ground. JV stays with bird. Over the next 5 minutes M makes very short flights to taller branches until he is eventually about 30 ft off the ground in an adjacent psme.

2339—M makes strong flight across a side drainage to the NNE.

2342—M came back into net area giving TCs and TECs.

2354—CN8 M released. Strong ascending flight to the NNE.

2355—Playback stopped. M still giving TCs.

2411—PPS, JV, and CC leave.

## 12 July 2012

~1700—Crew arrives in CN8 to finish the trees in the S-curve that had not been peeped the last

time we were in the area.

~1745—Crew leaves CN8 after peeping the remaining trees and finding nothing.

# CN8—2013

## 11 June 2013

Afternoon—Flam Crew peeps in CN8.

1500-1715: Flam Crew tap and peep cavity trees throughout CN7 and CN8 territories.

1657—SY peeps **cavity tree #1108 and a F FLOW is present in cavity. This is the CN8\_2013 nest!** Cavity is 14 feet up the W side of the tree. The tree is a full snag potr located ~40m upstream of the past CN8 nest tree in the drainage bottom on the N side of the creek. Tree is shared with a nesting MOCH; cavity is very shallow.

~1710—We leave.

2032—RC and BL arrive at the CN8\_2013 nest to attempt capture of F and possibly M. F not in cavity entrance as we approach nest tree.

2037—**RC stealthily gets into capture position, and at this time the F flushes and is captured as soon as the net touches the tree. F was previously unbanded—we give her Band # 1783-64394.**

**Band # 1783-64394** (on r leg)

99.0 g

- 33.5 g

65.5 g

No measurements or blood are taken.

2042—RC releases F. **We then peep the cavity and find 2 eggs centered and touching.**

2044—We quickly exit the nest area, and move in up-drainage toward CN7 to find a suitable lure net location.

2052—While setting up lure net in area that is approximately 200 m up-drainage from the CN8\_2013 nest tree (near the confluence of Little Turkey Creek and a N side drainage that terminates at its head in a massive rock outcropping), we hear what seems to be the CN8 M calling off his roost ~ 80 m to our SW, on the lower N-facing slope on the S side of the creek.

2102—We complete setting up lure net.

Vegetation: One lure net set up between a 15 cm Pipo and some young Potr in a small meadow adjacent to Little Turkey Creek. The meadow is bounded by mature Pipo/Psme on the side slopes to the N and young Potr/Pipu in the creek bottom.

Weather: Clear, calm with light breeze on ridge tops (and hot/windy afternoon), 14 C.

X: 478348

Y: 4330656

+/- 3 m

2126—BL returns to the CN8 nest to attempt capture of M, while RC remains at the lure net.

2132—Playback begin.

2135—M heard giving TCs/TECs in net vicinity. No approach calls, but seems to have approached from S side of net (in drainage).

2139—Second M heard giving TCs 30m E of net.

2143—2nd M moves into net vicinity, and continues to give TCs/TECs. The 2 Ms call simultaneously for a short period, and then alternate for a bit, before the first M goes silent around 2145. 2nd M continues to call in net area, sticking mostly to the low slope of the R to the N of the drainage, and flies over net repeatedly.

2207—Higher-pitch M heard giving TCs/TECs 75m E of net and just across road to S. SY reports that this is the CN7 M. This M is not believed to be one of the original 2 birds at the net, but is never heard calling simultaneously with both. Presumed CN7 M continues to call, but never gets closer than 75m to playback.

2210—BL leaves the nest to assist with raising the height of lure net.

2215—M in net vicinity goes silent. CN7 M still giving TCs/TECs.

2223—BL arrives at lure net site. Net raised to 5 poles.

2232—Playback stops. Batteries changed.

2239—Playback running again. BL leaves to locate new lure net site.

2240—M heard giving TCs S of drainage, 20m from net. M approaches W side of net, then bounces to E side.

2251—M goes silent.

2259—CN7 M still heard calling 75m E up drainage.

2301—M heard giving TCs 50m across drainage to S, upslope.

2304—M heard giving TCs in net vicinity on E side. All quiet until 2310, when M calls briefly once more in net vicinity.

2316—End playback. Net moved.

2332—BL and RC arrive at new net site. One net set up, opening NE/SW and adjacent to a stand of small (5-8m tall) pipo/psme. Net placed on low S-facing slope on the N side of Little Turkey Creek (50 m from creek bed), 150m down drainage from CN8-2013 nest.

2345—Playback begin. BL returns to the CN8 nest.

Vegetation: Mature pipo/psme on surrounding slopes. Net placed in open meadow on low S-facing slope with young-med pipo/psme.

Weather: Calm and clear, 8C

2355—M heard giving TCs/TECs in net vicinity, having approached from SW (drainage side of net). M seems to be one of the original two Ms from the first net site.

2401—M goes silent.

2410—CN8 M flies into the nest area, making one attempt to approach the nest tree before aborting and leaving the area (Note: this is the only time that the M entered the nest area in the time BL observed the nest).

2424—M gives TCs briefly 50m NW of lure net, but does not approach, and quickly goes silent.

2430—BL leaves the nest to assist RC with lure net breakdown.

2445—Lure net broken down; we leave.

## 19 June 2013

2042—AW, CK, and RC arrive in CN8 with intent to mist net for CN8\_2013 M at nest site. AW and CK approach nest area and begin erecting net.

Weather: Clear sky, but hazy due to fire to N. Light breeze in drainage, gusty on ridge tops. 18C.

2100—F heard giving FSCs 65m NW of nest.

2101—Net upright, but collapsed. Crew leaves to grab gear and wait 30m N of nest for F to go back on.

2109—F returns to nest.

2111—M makes PD in cavity.

2120—AW and CK approach nest to raise net.

2130—Net up to 4 poles on one side, but new pole will not fit with old pole on side closest to nest. CK backs off. AW grabs second set of poles and returns to net.

2139—As AW is completing net setup, F flushes into 3rd shelf from bottom on S side of net.

**Band # 1783-64394** \*\*Positive ID as CN8\_2103 F

2142—F released. Strong ascending flight to S. Crew backs out of nest area.

2149—Crew breaks down net and leaves.

~2220—AW, RC, and CK begin setting up lure net 120m NNE on ridgeline extending NE from CN8\_2013 nest site. Net placed on upper slope, opening SE.

2230—Playback begin.

Vegetation: Net adjacent to dense stand of small dbh pipos. Surrounding area comprised of med-mature pipo/psme.

Weather: Clear sky, but hazy with smoke from fire to N. Steady wind swaying trees, 18C.

X: 478229

Y: 4330782

+/- 3m

2240—M heard giving brief TCs 60m S of net, downslope.

2304—AW and RC leave to listen in CN7.

2305—AW and RC hear CN7 M and CN8 M having territorial encounter 50m SE of net in drainage bottom.

Gen. area:

X: 478297

Y: 4330688

+/- 6 m

CN7 M moves E and goes silent. CN8 M moves across drainage to S, then briefly down drainage before moving SE up slope. RC pursues CN8 M.

2312—RC flags CN8\_1 in live psme, mid-slope S of drainage bottom and N of rd. M gives TCs here, then flies NE up slope and across road.

2317—RC flags CN8\_2 in live pipo. CN8 M is giving TCs, and CN7 M can be heard giving TCs ~75m to E. RC notices band on R leg of CN8 M before he continues to move SE up slope on Great Horned R.

2322—RC flags CN8\_3 in live psme on N slope of Great Horned R. CN8 M has crossed rd to S and continues to give TCs and occasional TECs. CN7 M cannot be heard at this point.

*Note: the next 5 songposts (CN8\_4-8) were obtained in the same general area on the N facing slope or Great Horned Ridge likely in a 50 m radius).*

2323—AW flags CN8\_4 in a live psme on low N facing slope of Great Horned R. M gave TC/TEC for ~4 min until 2326.

2326—RC flags CN8\_5 in live psme. AW hears CN7 M calling to E. CN8 M continues to move S and E.

2327—AW flags CN8\_6 in live psme. CN8 M gave TC/TEC for ~1-2 minutes while CN7 M was heard simultaneously giving TCs approximately 50 m to N-NE.

2331—RC flags CN8\_7 in full pipo snag. CN8 M stops flying SE at this point and turns back to the NW, still giving mostly TCs with occasional TECs.

2335—AW flags CN8\_8 in a live psme. CN8 M gives hoarse TCs for ~1-2 minutes before going silent.

2345—After giving a few hoots, AW and RC hear CN7 M ~100m up road to E, giving TCs from drainage bottom on N side of rd. AW and RC pursue into drainage bottom.

2353—RC hangs CN7\_1 in live psme, ~50 m W (down drainage) from where CN7 M was initially heard at 2345. AW hears another M (presumably CN10) giving lower-pitch TCs across rd to SE and pursues.

2359—RC hears CN7 M giving TCs across rd to S as well, and pursues in direction that AW is following lower pitch bird. RC stays on low slope of S side of rd while AW pursues on upper-mid slope. AW hears 2 territorial M FLOWs (most likely CN7 and CN10) singing S of road on the low slope.

2404-2414—AW spotlights CN7 M giving TC/TEC/HECs ~40’ up in a live pipo (songpost CN7\_2). M continues to call (mostly TCs) until 2414. During this time period, a second territorial M approaches CN7\_2 from the E. 2nd territorial M (presumably CN10) gives ~1 minutes of very fast HECs from a low perch to the E (this bird was never seen). While spotlighting the CN7 M (who has now gone quiet), AW observes a 3rd silent bird fly into a tree adjacent to CN7\_2 pipo and perch ~15-20’ up. This 3rd bird flew in from the W-NW. Immediately after CN10 territorial M stops vocalizng, the 3rd silent bird disappears to the NE. *Later this night it was learned that CN10\_2013 nest has failed. We assume the 2nd territorial M to be the CN10 M and the 3rd silent bird to be either 1) the CN10 F or 2) a CN10 floater/apprentice. It is more likely, however, that the 3rd bird was a floater since no F vocalizations were given from the 3rd bird and SY & LL had previously captured a few potential floaters at a lure net in CN10 earlier this summer.*

2410—RC heads SE up slope to assist.

2415—CK stops lure net playback and breaks down net to go pick the crew up from CN7.

2419—RC hangs CN7\_3 in live psme. CN7 left territorial encounter on mid-upper slope and flew E to here, giving TCs/TECs.

2423—AW hangs CN7\_4 in a live psme just S of the road and NE-E of CN7\_2 (where the 3 birds were observed/heard earlier). CN7 M gives ~4 minutes of TCs from this perch.

2424—RC hangs CN7\_5 in live pipo after CN7 M flies W from CN7\_4 slightly N down slope toward rd. AW and RC are joined by SY and BDG as CN7 M then flies N across rd.

2431—BDG hangs songpost CN7\_6 in a mature lightning struck pipo on the low slope of the N side of the CN7 drainage. CN7 gave TCs and possibly TECs for several minutes from high in the pipo.

2442—SY marks songpost CN7\_7. M is giving TCs in live pipo on northern CN7 ridge.

2450—SY, AW, BDG, and RC end songposting.

## 27 June 2013

~2120—AW and BDG arrive at CN8\_2013 nest with the intention of mist netting for the M.

2137—As we are setting up the mist net, AW observes F return from flush. We never observed

her leave the cavity, so she must have flushed on our approach. We pause our set up.

2153—M makes a PD as we are standing in the nest area. AW decides to attempt to capture M

with a capture pole rather than the mist net.

2200—M makes a PD.

2202—F up.

2204—M makes a PD.

2210—F down.

2212—Male flies into nest area.

2214—AW has net up.

2243—M lands in tree adjacent to nest tree and flutters at cavity entrance.

2244—**M makes a PD and is captured. He is previously banded and is one of the silent**

**birds SY and LL captured in a lure net in CN10 on 7 June 2013. He was captured at 2332 and was the last unique bird captured out of 5 unbanded birds captured that night.** We do not take blood.

**Band # 1783-64372** (on R leg)

74.0 g LWC: 128 mm

- 21.5 g LLP(5): 99 mm

52.5 g LLP(6): 108 mm

Rect: 61 mm

**He has interesting molt and blacklight patterns.** On the R wing, he is in molt on P2, P3, and P4. On the L wing, he is in molt on P2 and P3. When SY blacklighted him on 7

June 2013, he was NOT in molt and blacklight showed low fluorescence on P1-5 and no

fluorescence on P6-10 on both wings.

R wing L wing

LLP(1): 81 mm LLP(1): 80 mm

LLP(2): 39 (18 shaft) mm LLP(2): 42 (19 shaft) mm

LLP(3): 36 (19 shaft) mm LLP(3): 35 (25 shaft) mm

LLP(4): 24 (20 shaft) mm

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 (15%) | 2.5 (40%) |
| P2 | Molt | Molt |
| P3 | Molt | Molt |
| P4 | 1 | Molt |
| P5 | 0.5 | 0.5 |
| P6 | 0.5 | 0.5 |
| P7 | 0.5 | 0.5 |
| P8 | 0 | 0.5 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

*Note: On the L wing, porphyrin was very intense just at the base of the feather shaft (15%) but was not widespread. On the R wing, porphyrin was also very intense at the base of the feather shaft but came up higher (about 40% feather) than it did on P1 on the L wing.*

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | Molt | Molt |
| P3 | Molt | Molt |
| P4 | 1 | Molt |
| P5 | 1 | 1 |
| P6 | 1 | 1 |
| P7 | 1.5 | 2 |
| P8 | 1.5 | 2 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

2311—M released with strong ascending flight to NE.

2325—We leave CN8 to lure in CN7.

## 11 July 2013

2402—MC, BDG and AW arrive at CN8\_2013 nest tree with the intention of capturing and bleeding the F.

2404—AW puts net up and an eggshell is seen at the base of the nest tree. We also locate an adult FLOW who is perched silently near the nest tree.

2405—We peep and see two nestlings.

2412—PD aborted.

2414—PD and M is captured and held. **Band confirmed CN8 male.**

**Band # 1783-64372**

72.0 g

- 22.0 g

50.0 g

2420—F aborts PD.

2421—F makes a PD.

2431—Net down.

2433—M released. We leave.

## 12 July 2013

1549—AW and RC arrive at the CN8\_2013 nest intending to capture F and process owlets.

Capture pole is up. We peep and find the F still on.  **F flushes into capture net a few**

**minutes after peeper is removed. She is confirmed as the CN8 F. Female bled for genetics and parasite smear.**

**Band # 1783-64394** (on R leg)

81.0 g LWC: 121 mm

- 30.5 g LLP(5): 95 mm

50.5 g LLP(6): 106 mm

Rect: 59 mm

1603—F is released with strong flight. AW begins climbing ladder and enlarging cavity

entrance.

Cavity Dimensions:

Entrance Dim.(HxV): 5.0 x 6.0

Entrance Thickness: 4.5

Horiz. Depth: 14.5

Vert. Depth: 9.0

DOH: N/A

1618—Nestlings removed from cavity

**1783-64412** (on L leg)

57.5 g

- 16.5 g

41.0 g

P#5: 21 mm (18 in shaft)

P#6: 21 mm (19 in shaft)

Rect: 4 mm (4 in shaft)

Band#: 1783-64412

Notes: Bled L wing; no hematoma. Very lethargic.

**1783-64413** (on x leg)

59.0 g

- 16.0 g

43.0 g

P#5: 20 mm (16 in shaft)

P#6: 20 mm (15 in shaft)

Rect: 10 mm (9 in shaft)

Band#: 1783-64413

Notes: Bled R wing; small hematoma. Parasite collected from L talon.

1706—Nestlings replaced in cavity.

## 23 July 2013

2132—JV and BDG have lure net set up and start playback for a geolocating attempt W of the CN8 picnic spot where BDG and BL had captured two territorial Ms earlier in the season.

Vegetation: mature pipo/psme at ecotone w/ mountain mahogany

Weather: clear, calm, 14C

X: 477647

Y: 4330935

+/- 3m

2135—a M (who may have been heard while setting up the net just upslope to the W) comes into the net site from the SSW giving rapid fire TECs.

2144—After flying over the net the M goes W upslope giving TCs. Then goes silent.

2148—BDG turns down playback a smidge and the M is still giving TCs from the W.

2200—Capture a silent bird in the top shelf (w/ 5 poles) coming from the SE.

2210—Have the bird out of the net. **This is the CN8\_2013 F.** According to our capture progress, we don’t have any blood for her so we take measurements and blood (genetics and smear). ***We later find out that we already had blood on her.***

**Band # 1783-64394 (on R leg)**

88.5 g LWC: 125 mm

- 29.5 g LLP(5): 94 mm

59.0 g LLP(6): 105 mm

Rect: 60 mm

2231—BDG releases F while JV is with SY geolocating CNG2\_2013M. She has a strong flight ~25ft up in a mature pipo.

2250—F give FECs 20m S of net.

2258—F scolds the playback from just W of the net.

2310—JV and BDG walk around for a bit trying to solicit any scolds from the F after switching the playback to FSCs but nothing.

2340—Switch playback to original TC/TEC calls.

2349—a M responds to the playback with TCs over 150m to the SSW (possibly CN9?).

2410—Turn off playback and take down net.

# CN8—2014

## 30 May 2014

2117—ER, AW, MC, and MC’s friends set up a lure net about 125m NNW of CN8\_2013 nest tree on the low slope out just NE of the drainage bottom. Play back begins!

**Vegetation**: Open mixed age pipo.

**Weather**: Very cloudy and rained earlier in evening, but as of 2117, the sky is mostly clear and calm with a temperature of 13C.

X: 478137

Y: 4330813

+/- 3m

2129—All hear territorial male (CN8) giving TC’s, TEC’s, and almost immediately HEC’s to the NW of the net. MC and ER see FLOW fly between pipos ~15 m SE of net.

2132-2139—The CN8 male continues to give territorial calls, going quiet briefly between 2132 and 2134.

2140—The CN8 male goes silent, inspiring MC to check the lure net to find an **unbanded male in the third shelf coming from the N.** Bled R wing to obtain genetics.

**Band # 1783-64456** (on L leg)

86.0 g LWC: 128 mm

- 34.0 g LLP(5): 96 mm

52.0 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 1.5 | 1.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | 0 | 0 |
| P3 | 0 | 0 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

2149—**While CN8 male is being processed, a second male is heard up drainage in vicinity of net giving TCs and TECs. M gives a few calls, before flying SE towards CN7 where he gives a few more TCs before going quiet. This is possibly the CN7 M, but because M is never heard again, his identity is unclear.**

2212—MC and friends release CN8 male. Strong flight to S.

2214—AW and ER split to wander up drainage by the 2013 nest tree to begin spot mapping and attempt to locate 2nd male. MC and friends stay near lure net to listen. AW and ER tap nest tree to no reaction.

2222—AW and ER hear a few TCs E up drainage and are able to spot male in pipo within 5m of 2013 nest tree.

2258—AW and ER do not hear any further vocalizations, and reconvene with MC and friends at lure net site.

2304—Playback stops, and all take down the lure net. AW and ER set off to listen near the confluence of the main CN7/CN8 drainage bottom and the side drainage leading up to CN9. MC and friends listen near the CN8\_2013 nest tree.

2325— After listening and giving occasional hoots, AW and ER hear nothing and walk to CN9 to tap 2013 nest tree.

2342—AW and ER tap 2013 cavity tree in CN9 and give a few hoots to no response. No vocalizations are heard by MC and friends during our listening efforts. We meet   
MC and friends at the vehicle and end observation.

## 5 June 2014

2250-2350: LL, MP, and BL arrive near the W terminus of Great Horned Ridge in hopes of setting up lure net to target CN7 and CN8 males, but an active lightning storm moves in and we wait it out in the vehicle.

2400—Due to lingering lightning and wind, we drive to the CN8 parking area with the intent of tapping trees/listening for nesting activity in the CN8/CN7 drainage.

2408—**As I approach the CN8\_2013 nest tree, I see the F in the entrance of last year’s nest cavity—this is the CN8\_2014 nest tree! Nest tree is a Potr snag (#1108), nest cavity is approximately 3.5 m high on the WSW side, and nest tree is approximately 40 m up-drainage from the original CN8\_2005, on the N side of the creek.**

2412—F descends in the cavity, indicating she is incubating.

2415—We leave to search for cavities upstream in CN7 territory (but still downstream from the original CN7\_2013 nest tree).

## 13 June 2014

2133—AW, MP, and ER set up lure net ~30m north of the CN7/CN8 drainage bottom , in the vicinity of the majority of CN7 potr cavity trees, with the purpose of luring for CN7 and CN8 Ms. Playback begins.

Vegetation: Young, medium Pipos. Open.

Weather: Calm, clear, 13C

X: 478537

Y: 4330597

+/-7m

2135—We hear supposed CN7 M giving TCs within 10m of the net, bouncing between surrounding pipos.

2138—With the CN7 M still giving TCs near the net, we hear a second bird coming up drainage from the W in CN8 territory. This second bird, CN8 M, has a lower pitched call that helps distinguish it from the CN7 M.

2142—CN8 M approaches the net from the W, but remains in drainage while the CN7 M continues to give TCs from E of net.

2144-2148—Both CN7 M and CN8 M continue to bounce around net site with CN7 M staying generally E of net on S-facing slope and CN8 M staying in drainage.

2148—CN8 M goes silent while CN7 M still responds from up drainage of net.

2155—CN7 M goes silent. AW decides to move the playback from small pipo to ground in between two nets to force birds to take a different flight path around net site. There is no bird in the net at this point.

2158-2159—CN7 M returns from E giving TCs within 30m of the net, then moves closer to net over the next two minutes.

2200—AW and ER decide to meander around drainage to listen and tap cavity trees.

2201—On the way downslope to drainage, AW and ER check net to find a **banded male in the 4th shelf on the W side**! *This male was previously banded as the CN8\_2014 M on 30 May 2014, but because he appeared to stay E (up drainage of net) this time, we think he may be the CN7\_2014 M instead. On 30 May 2014, we also had 2 birds responding to our playback (located just W of CN8\_2014 nest) and both birds were acting territorial on the E side of the net. This bird was “more” territorial in that he spent more time responding to the playback, leading us to believe he was the CN8 territory holder. Tonight’s capture of him further up drainage in CN7 changes his identity to the CN7\_2014 M. We now believe the bird with a deeper pitched call is CN8.* While processing this bird, we can hear a territorial bird calling near the net, but not in the immediate vicinity of the net. Presumably, this bird is CN10 because he does not appear to have a deeper pitched call like CN8. We do not take blood or blacklight due to processing earlier this year.

**Band # 1783-64456 (on L leg)**

73.5 g LWC: 130 mm

- 19.5 g LLP(5): 95 mm

54.0 g LLP(6): 104 mm

Rect: 55 mm

Note: CN7 M shed a few feathers while in hand.

2221—AW releases CN7 M who has a strong, ascending flight to the NW.

2225—Now AW and ER try to go to the drainage to tap and listen.

2229—While walking down to drainage, AW and ER notice a second **banded male in the 3rd shelf** on the western side! While we extract this second bird from the net, we can hear two territorial males calling from the E (most likely CN10) and SW (most likely CN7), leading us to believe the banding male in the net came in silently. **He was previously captured in CN10 by SY and LL on the night they captured 5 unbanded Ms. At this point, he was identified as a CN10 Floater. Our capture of him silently tonight confirms his identity as a CN10/7 Floater.**

**Band # 1783-64374 (on R leg)**

85.0 g LWC: 129 mm

- 29.0g LLP(5): 97 mm

56.0 g LLP(6): 108 mm

Rect: 55 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 1.5 |
| P2 | 2 | 1.5 |
| P3 | 2 | 1 |
| P4 | 1.5 | 1 |
| P5 | 2.5 | 2.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 3 | 3 |
| P5 | 1.5 | 1 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2242—While processing silent male, we hear a male giving TCs 5m S of the net from drainage, and AW hears a couple TCs up slope of our net.

2300—MP releases the silent male who has a short ascending flight to the W.

2305—Playback stopped. We take down net.

2320—AW ventures to CN9 to tap and listen near past nest trees while MP and ER hang in the CN7 drainage to tap cavity trees and spotmap. CN7 M gives TCs just down drainage to the W. MP walks up drainage to find past nest tree and ER walks down drainage to listen and tap.

2329—ER has CN7 M respond to hoots in drainage in live pipo and records songpost CN7\_1.

2340—CN7 M gives four more TCs from same pipo that was already songposted.

2400—MP and ER meet AW on road, and we leave.

## 19 June 2014

2124—MC and AW arrive at CN8\_2014 with intent to capture the M. We sit back to see if F is on cavity.

Weather: No breeze, partly cloudy, 15C

2126—We hear FSCs from on cavity, we give her five minutes then proceed to put the mist net up.

2146—M TCs up drainage ~100m.

2148—AW begins to walk in front of cavity with the net, F pops up. We crouch down and stay silent.

2153—F flushes so we pack up and leave for CNG2.

## 24 June 2014

2035—AW and MC arrive at the CN8\_2014 nest intending to capture F on flush. MC has net in capture position. F remains down throughout approach.

Weather: calm, partly cloudy, 14C

2038—M calls off roost to SE of nest ~60m.

2057—M gives single hoarse TC to W ~25m. F rises in cavity entrance.

2059—**F flushes and is captured. She is unbanded. We band her with #1783-64501 (R leg).** No measurements are taken. ***Note: This is a new F using the same cavity that was used as the CN8 nest in 2013. Also, given that the CN8\_2014 male also was previously unbanded when he was captured on 7/1/2014, the use of this same cavity by a new pair suggests that cavity availability may have become a limited resource in this territory (BL—9/14/2014).***

**Band # 1783-64501 (on R leg)**

2102—F released with strong flight.

2103—**We peep and find 2 eggs, centered, and almost touching. There are no signs of hatching.**

## 30 June 2014

2039—RC, MC, and ER arrive in CN8\_2014 nest area with intent to peep nest and capture M. F down on arrival. We wait for F to flush.

Weather: overcast, calm, 17C.

2053—FSCs in cavity followed immediately by PD.

2055—M LCs to E.

2056—F up, begging.

2057—PD in entrance.

2058—F flushes W. **Peep reveals apparently 1, but possibly 2 nestlings (second may be in use as a step stool). Previous peeps showed 2 eggs and we do not see evidence of ejection at base of tree. Nestling is getting in gray feathers, but still has egg tooth. N is standing and moving with eyes open and head up. Eggshell fragments are noted. We suspect nestling(s) is approximately 5 days old, but this is a very rough estimate. Hatching date of 6/25±1.**

2102—LCs in nest area.

2103—F on. We do not see her leave cavity again.

2105—More LCs in nest area.

2106—Flutter in cavity entrance, then PD.

2108-2117—4 PDs.

2119—ER has net at height.

2121—PD. **Bird in net. Previously banded. This is the CN8\_2014 F. F must have somehow exited cavity unseen and been giving PDs.**

**Band # 1783-64501 (on x leg)**

2123—F released. We leave for CN10 then CNG2 and return later in the night.

~2428—RC, MC, and ER arrive back at CN8\_2014 nest site for another capture attempt on M.

2435—ER has net at height. M makes PD and is captured, but escapes.

2437—Rain, passing and fairly light.

2450—M makes PD and is captured again! Net gets stuck on nest tree while being lowered, F flushes, and M escapes net. We leave, downtrodden by our poor fortune.

## 1 July 2014

2217—SY arrives at the CN8\_2014 nest to attempt to capture the M.

Weather: ~12C, cloudy, calm

2223—F rises to cavity entrance as I raise the net. She stares at me for a few minutes before I try to back off – as soon as I move she flushes. I bring net down and back out of the site.

2234—I return to the site – F is still off the cavity, perched in a pipo ~5m W of the nest. M is in adjacent pipo and starts giving TECs

2238—F flies back to cavity and goes to cavity bottom. I get net in capture position. Twice, the M made aborted PDs and was in the site nearly constantly. He remained mostly quiet and the F only gave FSCs when the M actually got to the cavity entrance (2 times). The M appeared to want to make a PD but seemed hesitant to do so with me in the site.

2307—MP and JV arrive at the net site. SY brings the capture pole down and we begin setting up a 4-pole mist net.

2320—Mist net up in capture position.

2410—We add a pole to the net and bring it up to 5 poles on each side.

2417—We hear wingflaps. Net check reveals a FLOW captured in the 4th shelf on the W side. **This is the CN8\_M and was previously banded by AW, MC and ER on 5/30/14 in a lure net ~125m NNW of the nest. He was subsequently captured in a lure net acting territorially by AW and ER on 6-13 in CN7 and then believed to be the CN7\_2014 M as he stayed E of their net, he is now confirmed as the CN8\_2014 M.**

**Previously banded M - Band #1783-64456**

72.5 g LWC: 129 mm

- 21.5 g LLP(5): 95 mm

51.0 g LLP(6): 104 mm

Rect: 55 mm

2437—We release the M – strong flight SE. We break down the net and leave.

## 10 July 2014

2240—MC and ER arrive at CN8\_2014 with intent to capture the F to take a blood sample. We sit down to observe. The M immediately begins giving TCs/TECs/HECs and flying around the nest site. We hear FSCs from on cavity.

2300—The F is still on cavity so we tap to peep. The F flushes. **Peep reveals one nestling with a prominent facial disk and in all gray. He appears ~16-17 days which is consistent with our current estimate.**

2305—We leave to put up a lure net in CN7 with intent to return later as the nestling is old enough for her to be giving PDs. As we leave the F is giving short and consistent FSCs off cavity.

2423—MC and ER return to CN8 with intent to capture the F. As we arrive there is no bird in the site and the F is off cavity.

2425—We get the net up.

2429—A FLOW comes into the site.

2430—Attempted PD, MC spotlights bird and it flies off, giving HECs, this was apparently the M.

2435—No more birds come in the site, we leave to rendezvous with AW and RD.

## 21 July 2014

1700—LL, JS, and SY arrive at the CN8\_2014 nest to band and bleed the Ns.

**We peep: cavity is empty – Ns must have already fledged (predicted date was 7/18).**

We leave.

2040—BL arrives in the vicinity of the CN8\_2014 nest area to listen for possible fledgling activity/vocalizations. Earlier in the afternoon, the nest cavity was peeped and found to be empty.

Weather: Mostly clear, calm, 21 C (hot day).

2050-2235: Over this time interval, I move up to 150 m from the nest in nearly all directions (SW, W, NW, N, NE, and E), listening for several minutes in particular locations before moving on.

2240—I leave. Nothing seen or heard.

# CN8—2015

## 1 June 2015

2030—DL and BL arrive in CN8 territory to lure net and listen for nesting activity. We set up lure net approximately 80 N of the CN8\_2014 nest tree on the lower S-facing slope of the ridge.

Vegetation: Mature, open stand of pipo/psme, with scattered clumps of young conifers

Weather: Mostly clear, calm, 14 C

X: 478378

Y: 4330766

+/- 14

2045—After completing set-up of the lure net, we go down to the drainage containing the CN8\_2014 nest and spread out to listen for nesting activity.

2115—Nothing heard or seen. We return to the lure net.

2120—We start playback. (Note: *BL leaves area from 2125-2200 to deliver mist net to MC at CN10*).

2200—BL remains at the nest while DL returns to the CN8\_2014 nest tree to listen.

2202—M starts giving TC approximately 20 m ESE of the lure net. He then quickly approaches the net, and passes over (and especially under) the mist net multiple times over the next half-hour.

2233—DL and BL lower the mist net to 3 poles (from 4).

2234—**We capture M in net—2nd shelf from bottom, W side. We quickly extricate him—he is unbanded.**

**Band # 1833-03243 (on l leg)**

56.0 g LWC: 132 mm

- 6.5 g LLP(5): 101 mm

49.5 g LLP(6): 107 mm

Rect: 59 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 3 |
| P2 | 2.5 | 3 |
| P3 | 2.5 | 3 |
| P4 | 2.5 | 2.5 |
| P5 | 1.5 | 1.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 0.5 | 0.5 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 0.5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 3 | 3 |

Genetic blood sample is taken—l wing. Small hematoma.

2314—Released him; M showed strong, ascending flight to the W.

2324—We stop playback and begin break down.

2334—Net broken down. We leave to listen in the E end of CN8 territory in drainage.

2408—DL hears 2 TC ~ 15 m to the W of her position, which was approximately 100 m E of the CN8\_2014 nest tree (at confluence of small side drainage and main drainage). M goes quiet thereafter.

2424—We leave CN8 territory for CN9.

## 19 June 2015

2150—LP and SY arrive in CN8 to briefly tap and listen. We tap the CN8\_2014 nest tree (tag #1108). We see and hear nothing – we depart.

# CN8—2016

## 7 June 2016

Afternoon—Flam Crew arrives in Hayman to selectively peep past nest trees and particularly nice-looking cavities in CN5, CN10, CN11, and CN14. **We found the CN5\_2016, CN14\_2016, and CN8\_2016 nests.**

~1600—DL and BL arrive in CN8 territory to cherry peep cavity trees. We peep the CN8\_2015 nest tree, but the nest cavity contains grass. After peeping cavity trees elsewhere along the creek, DL moves to the upper, S portion of the CN8 territory just below the road to peep several conifer cavities near the live PIPO/PSME/high burn ecotone.

1702—**As DL begins peeping a full snag, unenumerated PIPO (*This tree was later enumerated and is tag #1612*), she observes a F FLOW in a shallow, sapsucker-sized cavity—this is the presumed CN8\_2016 nest tree! Camera was just above the scapulars and head of the F, indicating the cavity is ~10-12 cm deep. Nest tree has a 34.5 cm dbh, and the nest cavity is ~9 m high. Nest cavity is the lowest cavity on N side of the tree, and is located a few cm beneath a 1.5 m-long dead limb. Nest tree is located ~5 m W of the edge of the high burn, 5 m N (below) road, and ~60 m E of last turn in the road before one drops into the bottom of the CN8/9 drainage.**

Nest coordinates:

X: 478259

Y: 4330621

+/- 5 m

1710—DL and BL leave area to meet up with Flam Crew.

2037—BL arrives at the CN8\_2016 nest site to observe the F flush and to peep the nest. F down. Weather: Mostly cloudy, calm, 14 C.

2043—M calls from roost ~ 40 m downslope (N).

2052-2057: M gives several SC ~20 m from nest (not observed), then moves into nest area where he gives LC from trees adjacent to nest tree. He then leaves without making PD.

~2100—DL joins BL.

2111—M returns to nest area. He makes 6 flights among trees adjacent to nest tree without making PD, but stays in nest area.

2116—**F flushes downslope (M follows), and we peep. There are 3 eggs off to one side of the cavity and nearly touching.**

~2120—We leave nest site to listen in CN9.

2235—DL and BL arrive ~100 m N of the CN8\_2015 nest on the S-facing mid-slope to set up lure net targeting the CN8 M.

Vegetation: Mature-old PIPO/PSME

Weather: 9C, clam, clear

X: 478131

Y: 4330795

+/- 3

2245—Begin playback. BL hears a M giving TCs to the NE. DL believes that she hears a few TCs to the distant S.

2248—The M from the E approaches the net site while giving TCs and TECs.

2255—M still in site giving TCs/TECs/HECs and circling the nest site. DL moves the playback around to the other side of the net.

2303—**Capture unbanded M. 3rd shelf from the bottom from the W.**

**Band # 1833-03380 (on L leg)**

62.0 g LWC: 133 mm

- 7.5 g LLP(5): 100 mm

54.5 g LLP(6): 110 mm

Rect: 60 mm

**Notes: M bled successfully on L wing (small hematoma)**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2 | 2.5 |
| P4 | 1 | 1.5 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1.5 | 1.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2339—Release. Strong ascending flight. DL also hears a bird hit the net just as the M is being released. **Capture a silent, banded bird in the bottom shelf from the W.**

**Band # 1783-64388 (on R leg)**

93.0 g

- 7.5 g

86.5 g

Note: **This is the CNG1\_2013 Female!**

2342—Release. Strong ascending flight.

2347—M from the NE is back in site. We believe that this is the same bird that we already captured. He gives TCs/TECs on and off until we turn off the playback. DL may have heard a few more TCs from the S during this time as well.

2407—Playback off. We break down the net.

2415—We leave to run the playback in a different location.

2425—We start the playback on the road ~150m S of the nest tree. After hearing nothing we approach the nest tree and get within ~50m, but we don’t hear anything.

2447—Playback off. We leave to meet flam crew.

## 17 June 2016

2030—MC approaches CN8\_2016.

2035—MC raises net over the cavity.

2111—M calls ~75m NE and approaches the nest. The M gives 3 and 4 note low calls for ~5 minutes ~30m to the to the NE, then flies off to the NW.

2130—After no sign of activity at the nest **DL peeps the cavity to find 3 eggs, centered but not touching, with no F present.** We back off to observe.

2145—After no more action at the nest we leave. With no nesting activity observed, **we assume the nest has failed** and we move up the slope to the S to attempt and lure for the failed pair.

~2200—DL and MC set up a net ~100m S of the CN8\_2016 nest tree on the steep slope on the edge of high burn.

2209—Start PB

Vegetation: High burn, open, mature PSME

Weather: clear, calm, 15C

X: 478295

Y: 4330513

+/- 12

2212—M enters site giving HECs and makes frequent flights around the site.

2216—**Capture banded M in the 3rd shelf from the S. This is the M that DL and BL caught and banded on 6/7. This is presumed to be the CN8\_2016 M.**

**Band # 1833-03380 (on L leg)**

80.0 g LWC: 135 mm

- 20.0 g LLP(5): 100 mm

60.0 g LLP(6): 110 mm

Rect: 66 mm

**Notes: Did not take blacklight and wear data as that was taken on 6/7 by BL and DL.**

2226—Release. Strong ascending flight N.

2228—After silently perching in a nearby tree for a couple of minutes after release, M begins giving HECs and flying around the net site again.

2232—MC returns to the nest tree to listen for any activity in the area.

2252—Capture same M again and release him. He remains calling and flying around the site.

2311—MC returns to the net. Playback off. We break down the net and leave and meet flam crew. M remains in the site calling even after PB is turned off.

# CN8—2017

## 1 June 2017

2350—ES and BL arrive in CN8 territory to tap historic nest trees and listen for courtship behaviors. ES starts by listening in the vicinity of the CN8\_2016 nest tree, and BL moves to the CN8\_2015 nest area. Weather: Mostly clear, light breeze, 13 C.

2354—ES hears TCs coming from upslope and due E of CN8\_2016 nest tree. ES ascends to road and follows TCs SE along road for ~2 min. TCs quiet and ES returns to vicinity of CN8\_2016 nest tree.

2405—ES taps CN8\_2016 nest tree and sees no movement in previous nest cavity.

2415—We leave; no nesting behaviors detected.

## 6 June 2017

2340—BL and JE arrive at parking spot and begin walking NE into the territory.

2344—BL begins PB of T42 while walking.

2347—BL and JE hear M TCs come in from SW, maybe from CN8\_2016 nest, and M follows us as we walk N/NE through territory. JE sees M fly and perch in tree just above/next to our position.

2350—A lure net is attempted to be set up but

2406—Halt lure net set up to pack up and head out.

2411—BL taps CN8\_2015 nest tree. Nothing is seen or heard so BL and JE leave.

2418—BL begins approaching CN8\_2016 nest tree to tap, just N of the Cedar Mtn Road in a PIPO full snag, but JE and BL hear LCs coming just downslope, approximately 10-15 m to the E.

2420—BL and JE listen to F FSCs and M LCs being exchanged for a couple minutes.

2422—Mating vocalizations are no longer heard so we leave.

## 16 June 2017

2330—BL stops on the Cedar Mountain Rd near the CN8\_2016 nest tree, a PIPO full snag with tag # 1612. BL taps on the cavity tree, with no response. BL leaves.

## 22 June 2017

2034—LD and BL arrive at the CN10\_2017 nest to attempt capture of F, or M if F is not captured. F is not in cavity entrance when we arrive, and LD prepares to get in capture position with the brown pole. Weather: Skies with ~50% cloud cover, calm, ~16 C.

2047—LD in capture position.

2048—While LD makes minor adjustments to net position, F rises to cavity entrance and flushes into the top of the net, but extricates herself just as net is lowered and BL reaches for her. We back off from nest.

2052—M arrives in nest area, giving LC, then leaves in the direction the F flushed.

2054—F returns to nest cavity.

2058—We hear M giving TC approximately 50 m to the NE, across Little Turkey Cr.

2118—LD leaves to locate suitable site for lure net, down-drainage near the CN10 parking area and the Cedar Mtn Rd crossing.

2130—BL prepares to get in capture position at the nest to attempt capture of M. M makes an apparent PD at the cavity at this time.

2145—M arrives in nest area, briefly flies to the cavity entrance where he gives 2-3 LC (F responds with 2-3 FSC), and flies off—BL was uncertain whether PD was successful.

2210—LD begins PB ~30m down drainage of CN10 parking spot to the NE. Target trees are multiple young potrs and a broken top pipo snag. Net opens NE/SW.

Vegetation: Young potrs, mixed and snag pipos

Weather: Clear, calm, 14C, turned to breezy later in the night

X: 478763

Y: 4330230

+/- 3m

2215—M is seen flying around nest area, but is quiet and does not approach nest tree.

2225—LD hears M responding to PB from the SW of net ~20m away, giving TECs and HECs, presumed to be the CN10\_2017 M FLOW.

2232—LD hears second M FLOW responding simultaneously to PB ~60m W of lure net, presumed to be the CN8\_2017 M FLOW.

2234—LD approaches PB to switch from Track 42 to MEGA as CN8\_2017 approaches within 30m of net.

2238—Third M FLOW begins calling simultaneously to the N of the lure net’s position. This M FLOW does not have a presumed identity, however it is possible for him to be the CN7\_2017 M or a new territory.

2250—LD changes PB back to Track 42 from MEGA as presumed CN8\_2017 M FLOW and the unknown territorial M FLOW stop vocalizing.

2305—CN10 M goes quiet.

2308—CN10 M returns giving TECs/HECs.

2321—LD temporarily turns of PB per BL request.

2330—F flushes nest cavity, apparently of her own volition. BL backs away from capture position.

2334—F returns to nest cavity.

2337—LD no longer hears CN10 M FLOW vocalizations.

2353—BL: M returns to nest area and gives 1-2 LC as he lands in the cavity entrance. M does not go into the cavity, however, and he flushes as the net is raised.

LD: Restarts PB.

2405—LD hears M FLOW vocalizing NW of cavity 100m+ away, presumably CN8\_2017 M FLOW, Second M FLOW begins vocalizing at roughly the same time to the SW also at 100m+ away, presumed to be CN10\_2017 M FLOW.

2412—BL leaves the nest area.

2425—LD stops PB and breaks down net.

2428—**BL stops on the Cedar Mountain Rd near the CN8\_2016 nest tree, a PIPO full snag with tag # 1612. BL taps on the cavity tree, and a FLOW F rises to the entrance—this is the CN8\_2017 nest tree! Nest cavity is the lowest cavity on N side of the tree, and is located a few cm beneath a 1.5 m-long dead limb. Nest tree is located ~5 m W of the edge of the high burn, 5 m N (below) the Cedar Mtn Road, and ~60 m E of last turn in the road before one drops into the bottom of the CN8/9 drainage. *On returning to the tree on 6/29, MC notes that the cavity is actually the highest of the two cavities on the N side of the tree, ~11m high, just below and to the right of a small stob on the tree. This is the cavity above the 2016 cavity.*** F peers down at BL for about a minute, then descends in the cavity, and BL leaves.

Nest coordinates:

X: 478259

Y: 4330621

+/- 5 m

## 29 June 2017

1710—While flam crew is peeping in the CN8 territory MC walks by the CN8\_2017 nest and the F is up in the entrance.

2047—LD and JE arrive in CN8\_2017 nest tree to watch for the F flush while MC parks the vehicle. MC will attempt a M capture at the CN8\_2017 nest site.

2053—MC arrives and approaches the CN8\_2017 nest tree in an attempt to capture F FLOW instead of M FLOW due to arrival time and lack of flushing from the F.

2057—M approaches nest site giving HECs as MC has his net near the cavity.

2102—There is a silent bird in the site, and with concerns that we may have missed an early flush LD taps on tree to see if F is on cavity. No F rises to the cavity entrance.

2104-2109—M makes first successful PD of four, view PD sheet for the rest of PD information.

2113—After not seeing the F FLOW flush, MC peeps cavity. F has not left cavity. MC will now attempt to capture the M FLOW on a PD instead of the F FLOW.

2115—M attempts PD, MC swings, but M FLOW backs off nest site. Failed PD.

2117—M fails PD as MC swings.

2120—M fails PD as MC swings.

2121—M fails PD as MC swings. F FLOW flushes.

2123—MC peeps to show **2 owlets in natal down with their eyes closed, 1 with its head up and moving a tiny bit. No eggs could be seen on the quick look, but it is possible they were covered due to the size of the cavity. We leave the site as quickly as possible—although it was the first F flush of the night it seems as though the F was intending to stay on cavity, and in our haste we do not get a good enough look to confirm that there was not an egg or third owlet in the cavity.**

2124—F FLOW returns to CN8\_2017 nest cavity.

2127—LD, MC, and JE leave CN8\_2017 nest cavity as the F FLOW had flushed under what appeared to be our doing.

## 7 July 2017

2028—LD, JE, and MC arrive at the CN8\_2017 nest tree to attempt to capture both the M and F FLOWs while they deliver PDs.

2036—MC begins approach to capture M pre-flush.

2044—MC has net in capture position nearby to CN8\_2017 cavity. Net is at ~32 ft.

2050—F appears at cavity entrance.

2052—F flushes.

2053—JE attempts to peep nest cavity.

2056—M enters nest site giving soft vocalizations.

2059—MC gets peep into nest cavity and we back off of site. **Peep shows 2 nestlings in ~70-80% juvenile plumage, with the oldest likely ~11-12 days old. Neither show facial discs.**

2105—MC backs off M capture attempt to allow for PDs.

2107—M enters site giving LCs.

2108—M attempts PD, but aborts.

2109—M makes 16 PD attempts between 2109-2148. View CN8\_2017 7/7/2017 PD sheet for more details.

2117—After 6 PDs, MC gets back into capture position.

2128—MC captures the M but he escapes from the net.

2134—M is captured again but once again escapes.

2137—F gives 2 SCs so MC lowers net for a few free PDs to be made.

2142—F makes LCs downslope from the nest cavity in the drainage. M responds with LCs.

2144—F makes a few more LCs.

2145—MC raises net again and captures the M. He escapes for a 3rd time.

2148—**M makes PD, MC captures M FLOW at CN8\_2017 nest site. M FLOW was the CN8\_2016 M FLOW**, banded in a lure net ~ 50m S of the nest in a lure net after the nest had failed**.** JE watches the nest as MC and LD process the bird.

**Band # 1833-03380 (on x leg)**

81.0 g LWC: 135 mm

- 28.5 g LLP(5): 102 mm

51.5 g LLP(6): 111 mm

Rect: 62 mm

**Notes: M is molting LP2, questionably LP1. LP1 appeared to be much shorter than other feathers, potentially newly molted.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.0 | 2.0 |
| P2 | MOLT | MOLT |
| P3 | 1.5 | 1.5 |
| P4 | 1.0 | 1.0 |
| P5 | .5 | .5 |
| P6 | .5 | .5 |
| P7 | .5 | .5 |
| P8 | .5 | .5 |
| P9 | .5 | .5 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.0 | 1.0 |
| P2 | MOLT | MOLT |
| P3 | 1.5 | 1.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1.5 |
| P6 | 2.0 | 2.0 |
| P7 | 2.5 | 2.5 |
| P8 | 3.0 | 3.0 |
| P9 | 3.0 | 3.0 |
| P10 | 3.0 | 3.0 |

2208—JE sees and hears nothing from the F to indicate she has made any PDs or come back onto the cavity. She stops watching the cavity to watch the processing.

2222—M FLOW released. Strong horizontal flight after release to the NE. JE, MC, and LD pack up and leave nest cavity.

## 20 July 2017

2040—John O’Neill (birder) and BL arrive at the CN8\_2017 nest to assess status of fledging. **I peep the nest and find the contents empty**. Given the extent to which owlets showed juvenile plumage when last peeped on 7/7/2017, owlets may well have fledged.

2050—While preparing to leave the site, we hear persistent calls from several DEJU engaged in mobbing behavior ~ 40 m downslope in the vicinity of several large conifers. I do not pursue, but was left suspecting that an adult and/or fledgling FLOW may have been involved.

# CN8\_2018

## 14 June 2018

2036—KM drops ON off near the CN8\_2017 nest tree to listen for vocalizations. I drive down to the CN8 parking spot and trot over to the past nest site in near the creek and listen. All is silent for a while. We both tap trees in our areas.

2106—KM hears a M giving TCs from a very large pipo about 30m NW of the past nest tree in the drainage. He flies into a young psme near the creek. I check to see if he is banded and do not see anything. He silently flies into a clump of dense psme youngsters, an impenetrable wall of flora that I did not attempt to navigate. I see his eye-shine until he flies off SE. I hear some LC’s near the creek. There are at least two decent cavity trees in that area, including the past nest tree #1108. I call ON over to the area to tap on some trees. We get a solid view of all of the cavities on each tree and tap. Goose eggs. We listen for about 25 more minutes, looking for cavity trees and new excavations. We do not hear nor see anything.

2245—We set up the lure net on the SW-facing ridge 100m NW of the cavity trees in the creek and start PB T42. The net is open NE/SW. KM returns to the creek where vocalizations were heard. I gave the cavity trees a thorough second look. Tree #3030 was the closest tree to the LCs—I spent a long time looking up and down the tree in case I missed something. Meanwhile ON stays at the net site to watch and listen for FLOW activity.

Vegetation: mixed age psme/pifl/pipo

Weather: clear, calm, 20C

X: 478022

Y: 4330775

+/- 3m

2248—Two distinct M’s give TCs from the distance – one from the E and one from the WSW. Both M’s continually approach the net site.

2255—ON hears a third M approaching the net from the NE. At this point three M’s are in the net site giving TCs and HECs at the PB.

2301—Amidst all the activity, **ON hears wing flaps in the net and finds an unbanded M in the second shelf. She thinks he may have flown in from the SW as one of the birds was perched in a tree just S of the net, but he was very tangled so we couldn’t tell which direction he came from.**

2315—KM extracts M from net. Other M TCs and HECs continue S of the net throughout extraction and processing.

**Band # 1833-32533 (on L leg)**

80.0 g LWC: 129 mm

- 22.0 g LLP(5): 94 mm

58.0 g LLP(6): 104 mm

Rect: 62 mm

**Notes:** Bled, no hematoma.

2334—ON releases the M and he has a SAF S. We cut the PB. Two unbanded FLOWs are perched in a psme just S of us while we break down the net. One of them is silent while the other gives HECs. KM also makes some vocalizations of her own. All three of them have an important conversation about the state of the union.

2356—We leave the CN8 territory to meet up with the rest of the crew

## 28 June 2018

2215—DL and KM arrive at tree #1612 (CN8\_2016/CN8\_2017 nest tree). We investigate and tap tree but do not see any signs of FLOWs. The past nest cavity appears to be destroyed. We spend ~10 minutes in that area giving hoots and tapping that tree but it is silent so we leave to set up a lure net.

2234—Begin playback. Lure net is located ~50 upslope on the S side of the road ~150m SE down the road of past nest tree #1612.

Vegetation: high burn area, some standing snags and some young potrs.

Weather: breezy (making the net sail out), partly cloudy, 18C

X: 478407

Y: 4330459

+/- 3

2236—KM leaves to tap trees in the main CN7 drainage.

2300—KM returns, neither of us have heard anything in the area. We turn off the playback, break down the lure net and leave to meet flam crew.

# CN8—2019

## 6 June 2019

2045—AM, ON, KA, ES, and ML arrive at CN8\_2019 territory to listen and lure net. ES and ML listen near past nest tree 1612 directly adjacent to the road. AM listens directly N of confluence past the hairpin turn near fallen past nest 373. KA and ON follow the drainage E towards fallen past nest tree 1108 and spread out to listen. All quiet.

2135—ES and ML leave for CNG1.

2145—No signs of FLOW activity seen or heard. We group up to set up a lure net, joining ON where she and KM successfully lured last year.

2208—PB starts. T42. Net located on ridgetop of the ridge directly N of the creek confluence. Ridge parallels the road on the W side of the dry drainage. Net is ~150 m N of listening location, 30 m E of the creek running along the road, and it is open N/S.

Vegetation: mixed age pipo, psme, pifl

Weather: calm, 10% cloud cover, 12 C

X: 478044

Y: 4330789

+/- 3m

2213—M TCs ~200m SW, in the direction of CNG1. M calls on and off, for 10 mins, never coming within 100 m W of the net.

2234—Same M from the SW calls, ~150 m away. It appears that he is located in between our net and the net that ES and ML have running in CNG1, never coming close to either net.

2242—We switch to Psiloscops AZ track. We have an immediate response from a M giving TCs ~40 W down near the road. For the next 20 mins, this M comes into the net site (within 10 m). Continues giving TCs and a few TECs. At one point, M bounces to S of the net, then goes quiet.

2259—M has gone quiet so ON give some hoots. The same M reappears from 20 m to the N responding with TECs. We walk the PB around the ridge, and drop the PB to the ground.

2309—M has hung around net site but never directly next to net. We switch tracks again to megascops. M responds, but never comes into the net.

2318—We decide to call it a night and cut PB. M continues giving TCs and ON gives some hoots back at him.

2326—While AM and KA pack up the net, the M continues TCs within 5 m SW of net site. ON catches sight of him about 3 m up in a fully live psme and notices that he is unbanded. After shining her light on him for a minute, he takes off to the S and goes quiet for the rest of the night. **ON marks Songpost CN8\_2019\_1.** This is a fully live psme with a 26 cm DBH. Note that this songpost was prompted by playback, rather than independent territorial singing.

X: 478020

Y: 4330785

+/- 3 m

2330—We head out to meet up with ES and ML. No signs of FLOW activity are seen nor heard for the rest of the night.

## 27 June 2019

1500—Flam Crew minus BL arrives at CN8 and CN9 to full peep the 2 territories in search of a nest. We divide and send people towards all known cavity trees while also looking for new cavity trees.

Weather: 27 C, slight breeze, 30% cloud cover

1525—I start to peep past nest tree #1612.

1543—**With ES spotting, ML finds the CN8\_2019 nest tree! F is completely still and facing face down in the cavity.**

**Tree #1612, a full snag pipo with < 50% of its limbs retaining full horizontal extent. It was the CN8\_2016 and 2017 nest. The cavity is a NOFL hole approximately 35 ft up and is facing N / slightly NE. The cavity is directly below a broken branch and there is a smaller cavity 2 feet below. The tree is ~10 m off the road.**

X: 478264

Y: 4330384

+/- 8 m

1555—SL, ON, KA, and JE join at the nest tree and observe. F still down.

1605—We leave the territory and head to CNG1 to attempt to find a 2019 nest.

## 1 July 2019

2155—ON, KC and JE arrive at CN8\_2019 nest to observe PDs and attempt a M capture. Upon arrival F is down.

Weather: Clear (lightning visible on horizon), calm, 12 C

2226—All is quiet. No sign of either M or F on cavity or in nest site. ON still prepares to get into capture position.

2236—ON creeps to the nest tree and begins to raise the capture net.

2238—ON has capture net in position in front of cavity.

2251—JE sees M fly up to the net and check out the capture pole. No PD is made.

2314—JE comes to switch out with ON at the capture net after no PDs are made. F pops up to the cavity entrance for ~30 seconds and we realize the pole had been at the wrong height. Pole is raised to height of correct cavity.

2338—All is quiet. We lower capture net and we leave after having observed zero PDs and hearing no FLOW vocalizations.

## 11 July 2019

2030—AM, ON, KC and JE arrive at CN8\_2019 to attempt a F capture. F is down on arrival.

Weather: 70% cloud cover, calm, 21C

2036—Before AM can even begin an approach to get into capture position, the F pops up and checks us out.

2037—The F flushes.

2040—**Peep shows 2 wiggly owlets looking at the camera. Both are very white but one has grey starting to cover the scapulars. Owlets are estimated to be ~8 days old.**

2045—We leave to head to CNG1 to lure in hopes of a migration pinpoint recovery.

2245—AM, ON, KC and JE return to CN8\_2019 after some success in CNG1 to attempt a M capture at the nest. F is down on arrival.

Weather: clear, slight breeze, 16 C

2252—M is heard making TCs ~30m E of the cavity.

2305—After waiting 20 minutes to observe, AM begins an approach.

2316—AM gets the net into capture position.

2335—A silent FLOW approaches the cavity and enters. AM swings but the bird slips out the side. The bird flushes E.

2336—F scolds are heard just E of the cavity, where the silent bird had seemingly flown towards, indicating that either we missed the F flushing upon our arrival or we missed the flush in response to the capture attempt.

2338—We get out of the site and begin our trek home.

## 23 July 2019

2040—ON and BL arrive at CN8\_2019 nest tree to observe nest activity and attempt M and F capture. As ON approaches the tree from the road ~20 m away, the F scolds from off cavity, ~5 m NE of nest tree. With the F off cavity, **we peep to find two nestlings. One appears to be all gray and the other appears to be ~80% gray, but it is difficult to distinguish the two because they are not moving. We estimate their age to be about 18 days.** As we peep, the F continues to aggressively scold us in site. After peeping, ON gets the net to height in preparation for a capture attempt then leans it against a nearby snag as we begin observing nest activity ~15 m downslope of the nest tree.

Weather: 50% cloud cover, slight breeze, 18C

2110—We back off even farther downslope of the nest tree as the F continues to hop around the site following us while aggressively scolding. Meanwhile, all is quiet at the cavity as there are no signs of nestling begging despite no PDs so far.

2120—F stops scolding.

2124—F continues scolding us in site.

2126—ON moves back in to our original observation sit spot while BL stays farther downslope. F continues scolding.

2137—F goes quiet.

2141—BL rejoins ON closer to the nest tree. F is seemingly out of the site.

2157—F continues scolding us in site.

2202—After no signs of the M in site, no PDs, and no begging heard from the cavity all night, **we peep again to find the two nestlings in the same position as earlier in the night. They are still not moving and there is now some debris on top of them (see photos in Dropbox folder for detail). We unfortunately presume the owlets to be newly dead, especially since there are no signs of arthropods in the cavity. Nest failure is noted for CN8\_2019, with the owlets having died presumably of starvation or disease. The fact that the M was never heard or seen raises questions about his possible role in nest failure.**

2210—We leave the CN8 territory with the F still scolding us to go set up a lure net in CNG2.

# CN8—2020

## 20 July 2020

2045—SL and ON arrive in CN8 territory to lure for potential territorial M pinpoint/geolocator recipients. We set up the lure net on the upper SW facing slope ~75m N of the CN8 pull off and ~50m N of the creek. The net is open NE/SW.

Vegetation: mixed age pipo/psme/pifl

Weather: 40% cloud cover, calm, 22°C

X: 0478027

Y: 4330787

+/- 3m

2120—Start PB TC track.

2127—M TCs ~75m SW.

2130—M comes in hot giving TCs/TECs/HECs ~15m SW of the net.

2135—M goes silent.

2136—TCs and HECs back in the net site.

2142—HECs ~30m W/SW.

2153—We hear a second M give TCs ~25m E of net.

2158—ON switches track to Megascops after one of the Ms goes quiet.

2202—The other M goes silent.

2205— **ON does a net check and there is an unbanded bird in the net! We presume him to be one of the territorial M’s that had been calling in our net site although we are unsure which M he might be. He is in the first shelf on the S side. We cut PB and drive him down to BL to process and receive a migration pinpoint.**

2216—ON hears three TCs from another M as we approach the car with our captured bird.

**Band # 1833-32686 (on L leg)**

79.0 g LWC: 129 mm

- 20.0 g LLP(5): 90 mm

59.0 g LLP(6): 84 mm

Rect: 28 mm

**Notes: P7 in molt on both wings: LP7 is 47 mm (15 shaft) and RP7 is 56 mm (19 shaft). P1-6 are all clearly very new on both wings and are relatively short and much darker than P8-10. S1 also in molt on both wings. Retrices in molt as well. Migration pinpoint #49664 attached. No blood sample taken.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3.0 | 3.0 |
| P2 | 3.0 | 3.0 |
| P3 | 3.0 | 3.0 |
| P4 | 3.0 | 3.0 |
| P5 | 3.0 | 3.0 |
| P6 | 3.0 | 3.0 |
| P7 | Molt | Molt |
| P8 | 0 | 0 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 0.5 | 0.5 |
| P7 | Molt | Molt |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

**Secondary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| S1 | Molt | Molt |
| S2 | 0.5 | 0.5 |
| S3 | 0.5 | 0.5 |
| S4 | 0.5 | 0.5 |
| S5 | 1.0 | 1.0 |
| S6 | 1.5 | 1.5 |
| S7 | 1.5 | 1.5 |
| S8 | 2.0 | 2.0 |
| S9 | 2.0 | 2.0 |
| S10 | 2.0 | 2.0 |

2250—BL attaches pinpoint #49664.

2305—After BL deploys migration pinpoint #49664 on the M, we drive him back to CN8 to release him.

2311—We arrive back in CN8 and hear another M giving TCs NE of the CN8 parking area. We hear TCs throughout the remainder of our time in CN8, although it’s unclear if we kept hearing this M or if we also heard the pinpoint M after his release.

2314—M gives a SHF NW into nearby young psme perch. He watches us as we head up the ridge to break down our lure net, but he doesn’t appear to be preening at all with his new device.

2340—We break down our lure net and head out after a successful night in Hayman!

# CN9—2007

## 31 May 2007

2155—BL leaves the vicinity of the known, marked cavity trees in CN8 territory to travel up the steep, narrow drainage to the SW (just N of where the Cedar Mtn Rd crosses the S Fork of Little Turkey Cr).

2212—I hear a M giving TC, in response to my calling, near where the area of high burn intensity transitions into low burn intensity, approximately 400 m WSW of the Cedar Mtn Rd. I pursue and mark one songpost in the general vicinity of where he was calling, about 100 m into the low burn intensity forest. I call this male CN9. Shortly thereafter, a F starts giving SC at me—over 5-8 minutes she gives 5-7 such calls. I attempt to locate her but she is perched within the needle foliage of a mature *Pipo*. I spend the next half hour searching for cavity trees, but find none.

2218—The CN9\_M moves down the drainage in the direction of CN8 territory, where I hear another M giving TC/TEC. I hear both M’s calling for approximately 4-5 minutes.

2256—M returns to the vicinity of where the F was heard, and he gives LC, to which the F responds with FSC—I presumed a PD occurred. Another presumed PD at 2258, near the boundary of the high intensity burn and low intensity burn.

2315—I leave.

## 8 June 2007

1930—**Flam Crew finds the CN9\_2007 nest** while peeping *Potr* cavity trees in the drainage near where the M and F were heard on 5/31/07 (see previous entry). *Potr* cavity tree, which is a ~ 22 cm dbh snag, is located in a high intensity burn area, approximately 50 m down drainage from the boundary of the low intensity burn area. Nest cavity is ~ 8.5 m above ground on the NNE side, and was probably excavated by NOFL. F remained in the bottom of the cavity while the cavity was peeped, and the Sandpiper peeper was necessary to discern the size/shape/color of what turned out to be an *Otfl,* while the Fieldcam (1st used) provided only an equivocal, provocative image.

2015—SY arrives at the CN9 nest to attempt cap. of F. Weather: clear, wind < 5mph, 16 C.

2030—Net in capture position.

2053—M enters the site. He moves around the site giving LCs and TCs for approx. 22 min. while F remains at cavity bottom. I try to pull the net from the cav. ent. to allow a PD but M never approaches the cavity and F never comes to the ent.

2115—I back off to allow F out of the cav.

2152—EM and SY return to capture positions to attempt to capture the M.

2222—We leave having observed no PDs.

## 15 June 2007

2036—EM, CB and SY arrive at CN9 nest tree to attempt cap. of F. Weather: clear, calm 22 C.

2038—Net in cap. pos.

2045—EM taps – no response.

2100—We peep: F is present.

2110—We back off from cap. pos.

2112—M enters site from W – gives a few TCs around nest site for 3 min.

2127—F rises to cav. ent. – gives a few FSCs.

2128—F flushes to the N.

2130—We peep – 3 eggs center and touching.

2152—We back off to allow F back in cav.

2157—M calls from R N of CN9 Dr.

2202—TCs to the E – second bird, farther E, responds with TCs and TECs. Continues for approx. 4 min.

2210—We return to nest site.

2218—M enters site.

2220—We leave.

## 21 June 2007

2040—EM arrives at CN9 nest site to attempt to capture F or M. Cloudy, wind gusts ~10mph, 22C.

2044—net in place for F.

2050—M calls from W.

2054—M in area, circles around nest tree but never approaches cavity. Several TCs and LCs.

2110— M in area, circles around nest tree but never approaches cavity. Several TCs and LCs.

2123-- M in area, circles around nest tree but never approaches cavity. Several TCs and LCs.

2134—EM moves net away from cavity hoping M will make an actual PD.

2144—M approaches cavity and flutters outside but never actually delivers prey.

2149—M makes TCs and LCs and approaches cavity.

2155—EM leaves nest site to allow some prey deliveries.

2210—EM returns to cavity to try to capture M.

2250—M in area.

2254—M approaches cavity, enters, and makes PD. EM captures M, last year’s CN8 M!

**Band # 1593—64498**

71.5 g LLP: 85 mm

- 11.5 g Rect: 61 mm

60.0 g LWC: 130 mm

2309—EM releases M, strong flight to N.

## 28 June 2007

2032—EM and KB arrive at CN9 to try to capture F. 18C, cloudy, wind < 5mph.

2033—KB raises net.

2052—EM taps nest tree. No response from F.

2109—M flies into nest tree area and gives several LCs

2112—M flies away from site to S.

2115—M in area 25m SE and gives several LCs.

2116—M perches and gives LCs 3m E of the nest tree then flies away to S.

2130—M calls from the S.

2145—EM peeps cavity. F still tight in cavity covering the bottom. Nothing visible indicating hatching has occurred.

2147—We leave the nest site.

## 10 July 2007

2104--EM and CB arrive at CN9 nest site to capture F. Both F and M are in area, the M gives TCs and the F scolds continuously. Temp: 16C, cloudy, wind gusts around 10mph.

2106—EM peeps cavity. One peeper light is out so it was hard to see bottom of cavity. Looks like 3 nestlings hatched, covered in white natal down and motionless.

2115—net in place.

2120—M PD, F still scolds from around cavity.

2121-- M PD, F still scolds from around cavity

2131-- M PD, F still scolds from around cavity .

2132-- M PD, F still scolds from around cavity .

2140—F still scolding and circling nest, we decide to back off for a while to let her return to cavity.

2204—we return to capture F. the F still scolds while the M gives TCs.

2215—PD, net over cavity. Owl stays down for a while.

2117—Owl caught. Band # 64498, the M ☹ .

2125—We release M and leave nest site.

## 16 July 2007

2232—CB and KB arrive at the CN9 nest site with the intent to capture the F. **We peep and find what appears to be 2 gray owlets**, though it is a deep cavity and we have bad visibility.

2236—F is in the area, very vocal.

2242—F makes a PD. CB then sets up the net.

2244—Net is up and in place.

2250—An owl comes into make a PD silently. It was very skittish, but when it comes in to the cavity, CB catches it in the net. As the net is lowered, the bird escapes.

2255—F in the area again and very vocal, but will not come near the nest tree.

2308—We leave the area.

## 17 July 2007

2032—BL arrives at the CN9 nest to attempt capture of F. Overcast, calm, ~22 C. I get in capture position.

2041—F arrives in nest area, giving FSC (she apparently had already been off the cavity when I arrived.

2044—F attempts PD, but aborts due my presence.

2053—F successfully attempts PD, and then escapes the net as it is lowered.

2109—F successfully attempts PD, and I capture her—she is unbanded. I give her band #64596.

**Female—Band # 64596**

81.5 g LP(#5): 97 mm

- 30.5 g LP(#6): 106 mm

51.0 g Rect: 57 mm

LWC: 131 mm

F is clearly underweight. Her incubation patch is filling in with pin feathers, but the epidermis appeared to be bruised, as it is dark blue-green colored. I bleed her.

2131—F is released.

2135—I leave.

24 July 2007

0900—Flam crew peeps the CN9 nest tree before quantifying the area. We find the cavity empty. No signs of fledglings or dead owlets in the immediate area.

# CN9—2008

## 5 June 2008

2120—KB enters the CN9 territory with intent to listen for nest vocalizations and/or songpost.

2129-2200—I listen and observe near the 2007 nest tree. Nothing is heard.

2255—I leave the territory.

## 13 June 2008

2106—DH and KB enter CN9 with intent to listen for nesting activity.

2152—We leave the territory, all is quiet.

## 19 June 2008

2030—SC and EM arrive in CN9 to attempt to capture M with lure net and put radio on him.

Weather: cloudy, thunder in distance, approx 5mph wind, 19C

2036—Set up lure net on slope west of 2007 nest tree, near ridge top. Mostly open with some snags and a few large pipos.

GPS coordinates: X—477859; Y—4330459

2100—Start playback.

2102—EM gets visual on owl flying near lure net from the south.

2111—We hear TCs from M and quiet calls from F.

2121—We get visual on bird silently flying over net.

2133—EM check net. No activity.

2204—SC gets visual on a bird silently flying near net.

2210—Capture FLOW. This is an unbanded male.

2216—We get bird out of the net. **Band # 64621**

Mass 86.0g LLP(5) 99mm

- 30.0g LLP(6) 107mm

56.0g LWC 135mm

RECT 63mm

He is bled.

2230—BL arrives at the CN9\_2007 nest tree to tap and listen for nesting activity. I find the flagging on the ground, evidence of bear-claw marks going up the trunk, and when I flash my light on the 2007 nesting cavity I observe that it has been recently bear-torn. **NOTE: This observation, in addition to the captures of the CN9\_2007 M and an accompanying F (previously unbanded), raise the possibility that the CN9\_2008 nest was preyed upon by a bear. Peeping of the CN9\_2007 nest tree is needed, in addition to a thorough nest search in the territory.**

2245—Release M.

2300—M TC;s near net.

2302—Catch FLOW. This is an unbanded F.

Band # 64622

Mass 86.0g

-30.0g

56.0g

2307—Release F.

2309—Capture another FLOW in net, and it was previously banded—# 64498. This is the CN8\_2006 M, and the CN9\_2007 M..

Band # 64498

Mass 71.5g LLP(5) 95mm

- 15.5g LLP(6) 103mm

56.5g LWC 130mm

RECT 57mm

Because nest may have been predated, we avoid putting a radio on him.

2321—Release M.

2330—Collapse net and leave.

## 26 June 2008

1935-2005: Flam Crew peeps cavities in the lower portion of the drainage where the CN9\_2007 nest tree is located, and as far up the drainage as the CN9\_2007 nest tree. No evidence of nesting is found. **NOTE: The recently bear-torn nest cavity of the CN9\_2007 tree was empty and contained no egg fragments—whether or not the bear activity on this tree resulted in nest failure of the CN9 pair in 2008 remains uncertain.**

## 15 July 2008

2155—BL and QB arrive in CN9 to listen for possible nesting activity. We hear 2 males giving TCs N of us (main drainage of Little Turkey Cr; we are on N-facing slope to the S. of creek), one of which may possibly have been the CN9 male. We listen upstream in the drainage where the CN9\_2007 nest was located, and along the ridge tops to the S and W of the drainage, but do not hear anything.

# CN9—2009

## 28 May 2009

2138—SY arrives in CN9 territory to listen for nesting vocalizations.

2151—CN9 M begins giving TECs ~1/2 way up CN9 drainage. SY marks songpost CN9\_1.

2208—SY hears F give FSCs slightly up drainage from songpost.

2210—Locate nest in past nest tree (cavity is now bear torn). F is in entrance when I arrive and appears agitated at my presence – I leave immediately. **This is the CN9\_2009 nest.**

## 4 June 2009

2033—KB and DH arrive at CN9 nest to attempt capture of the F. Weather: 15C, clear, 5mph wind.

2035—The F is up in the cavity, as KB approaches with capture net.

2038—The F is down.

2041—Net in position, KB on net. JG and Matt join us with peeper.

2047—M calls off roost.

2048—M enters site, silent at first. Then gives LCs, and we hear the F give FSCs. The M gives a few TCs at us, the net.

2050—F caught in net. She is unbanded. We give her band #64677.

**Female—Band # 64677**

89.0 g

- 27.0 g

62.0 g

2056—We release her, and leave.

## 11 June 2009

2030—KB, JG, and DH approach the CN9 nest tree with intent to capture the M. Weather: clear, calm, 16C.

2035—The F is up as we approach the tree.

2040—F goes down.

2043—F is back up in the cavity.

2046—F almost falls out of the cavity. She goes down. As JG approaches the tree, she comes immediately back up.

2048—F flushes and we hear the M call off roost.

2050—**We peep and see 3 eggs**, nearly centered and touching. We back off to observe the cavity once the peeper is down.

2056—The F is back on.

2100—F begs from the cavity.

2102—M gives LCs.

2105—F is up in the cavity begging, we see a PD.

2106—M is still in the area.

2107—Another PD, F begs.

2110—M still in area, F is up.

2112—M gives LCs, hear F begging *off* the cavity. We back off even farther since we never saw her leave. DH leaves towards CN9 to listen.

2153—We approach the nest tree again.

2155—F is up

2156—F is down.

2158—F is up and then back down.

2207—JG raises the net.

2210—Bird enters cavity using perches we previously saw the male using. JG attempts to capture. Bird flies away, perches nearby and is silent the entire time.

2212—We leave and remove the net. We decided it was possible the F flushed without us seeing and that could have been the F re-entering the cavity. We would have expected to flush her with the capture attempt, but there was no sign of her in the cavity. We leave CN9.

## 18 June 2009

2045—JG and KB arrive at the CN9 nest to capture the male and peep the cavity. We sit to wait for the female to leave. Weather: overcast, breezy (0-15 mph),

2048—M calls off roost.

2052—F is up and leaves the cavity. We then hear the M give LCs in the area.

2055—**We peep and find 3 nestlings**, all in white down. The larger two have a visible egg tooth, the bottom owlet is hidden.

2056—F is back on the cavity.

2058—M makes a PD. F is up in the cavity a lot, so we back off to wait.

2123—JG approaches the nest with the capture net.

2125—M makes a PD.

2126—F flushes without notice. We back off out of sight to wait.

2200—JG approaches the nest tree, the F is down.

2201—The F is up, M makes a PD, and the F goes back down. JG begins raising the net.

2204—F is back up.

2206—F goes down.

2208—Capture net is in position.

2209—M makes a PD, the net is a bit too low and he escapes.

2213—M attempts another PD, he is caught in the top of the net, doesn’t fall into the bag, and he escapes as JG lowers the net.

2219—M attempts a PD, not captured.

2221—M makes another PD, is once again caught in the net, but escapes.

2226—M makes a PD. He looks at us from the cavity, crawls above the cavity opening.

2228—The M leaves the cavity, is caught in the net, but then escapes!

2230—JG begins observing and KB takes the capture pole.

2241—M returns to area.

2243—M make a PD.

2245—M caught, previously banded, **64498**, **this is the CN9 2009 Male** (originally banded as CN8 2006 Male).

78.0 g LP5: 99 mm

27.0 g LP6: 109 mm

51.0 g LWC: 130 mm

RECT: 64 mm

2254—Released.

2305—We leave CN9.

## 30 June 2009

2034—QB, DH, and JG arrive at CN9 nest to attempt capture of F in order to assess progress of nestling development and bleed F. She is down when we arrive. She is previously banded on **4 June 2009, Band #64677**. Weather: Clear, 0-5 mph breeze, 12C.

2040—JG has net in position. Tree is bumped in process of raising net and F does not rise. **Capture height 27’11’’**

2049—F up in cavity.

2049—Capture F after she flushes into the net.

2049—DH peeps cavity. It is difficult to tell what the status is. One owlet is lighter colored, but with significant graying on wings. The other two owlets are so dark that they are practically indistinguishable from cavity bottom. Only the white owlet moved. Unable to discern any facial disk on any owlet. **Band # 64677.** This is the previously banded CN9 F.

73.0 g LP5: 95 mm

17.0 g LP6: 100 mm

56.0 g LWC: 120 mm

RECT: 61

DH bled her right wing.

2056—M giving LCs in the area.

2058—M PD.

2106—Release F, strong flight.

2107—Owlets begging from cavity, F begging off-cavity, M giving TCs.

2108—We leave to set up a lure net in CN5.

# CN9—2010

## 3 June 2010

2350—DW and BL walk up the drainage in the CN9 territory, tapping cavity trees and listening for nest activity. At this time we approach the CN9\_2009 nest tree (CN9\_1167, tag # 1167), and observe the F perched in the entrance of the 2009 nest cavity. **This is the CN9\_2010 nest tree. See CN9\_2009 for cavity description.** She begins giving rather low-pitched FSC, to which we then hear the M respond with LC in an adjacent snag Psme.

2354—We leave, with the F still perched in the cavity entrance.

## 11 June 2010

2029—M LC off roost up drainage.

Weather: 16C, humid, light breeze, cloudy

2032—BL and DW arrive at CN9 nest tree to attempt to capture CN9 M and observe. F is up in entrance to cavity when we arrive.

2035—F back down in cavity.

2036—F LC from cavity.

2045—M heard giving LCs nearby. F LC in response from bottom of cavity.

2049—M brings PD preceded by LCs. F in bottom of cavity.

2051—BL goes in to raise capture pole in case M tries to make another prey delivery before F flush.

2052—F flushes.

2058—**BL finishes peeping cavity. Finds two eggs.**

2108—F receives PD from M on branch next to nest tree.

2109—F goes back on cavity. BL re-raises capture pole.

2117—M makes PD to F down in cavity. BL does not attempt capture in hopes of calming his apparent skittishness.

~2125—DW becomes aware of two males in the nest tree area and alerts BL. One M is quiet while the other is vocal. DW remembers the following: M1 alights on a small snag ~5 m above DW who stands about 10 m down drainage from the nest. A couple minutes later M2, believed to be the territorial male, alights on a higher branch on a different tree nearer the cavity with LCs. M1 joins M2 on his branch. M1 we believe approaches the cavity.

~2130—BL attempts to capture territorial M but M escapes underneath net.

~2135—Territorial M issues hoarse TEC barrage on intruding male.

~2140—Both males leave the area.

2210—One hoot heard in nest vicinity.

2212—BL issues three hoots.

2218—One hoot heard in distance.

2223—3 hoots heard to the right looking up drainage. BL calls back. M continues TCs.

2227—F issues FSCs.

~2230—We leave the nest area.

Weather: Foggy and mist with lightning turned to rain by 2230.

## 18 June 2010

2032—JV and BL arrive at the CN9\_2010 nest to attempt capture of one of the adults. F is not in the cavity entrance when we arrive.

2034—F rises to the cavity entrance as JV prepares to raise capture pole.

2036—F descends in the cavity (initially we did not know if she had flushed or descended). JV continues raising the capture pole.

2038—Capture net in place. BL taps on tree but no response.

2049—BL starts to raise peeper.

2051—F flushes into capture net as peeper approaches cavity entrance. F was previously unbanded. She is banded with band # 1593-64772.

2058—F is released.

2059—**We peep and find just 2 eggs, same as last visit.**

2101—We leave the nest area, moving approximately 25 m downslope.

2111—We hear the CN9 M arrive in the nest area giving LC. After 20-30 sec, these become TCs.

2115—M moves farther up-drainage, where he continues giving a few TC before quieting.

2120—We leave the area to go to CN10.

## 29 June 2010

2152—BL and DW arrive in at CN9 parking spot.

2201—We arrive at nest site to attempt capture of M.

2202—BL moves in with capture pole.

2206—Net up, F comes up.

2211—F down.

2212—Hear M up drainage giving TCs.

2214—M comes into nest area.

2216—PD attempt (he may not have gone all the way in the cavity) preceded by LC, FSC.

2217—PD attempt (same) preceded by LC, FSC. M leaves.

2220—M in site.

2222—DW shines light and M flies off.

2227—TCs heard in distance.

2247—M flies by cavity.

2248-2250—M perches on cavity entrance and flies off four times. Then flies off.

2259—M in area.

2300—M perches on cavity entrance two times.

2306—PD possibly.

2309—M perches on cavity entrance two times.

2312—F comes up while we adjust net.

2314—M TC TEC on right hillside looking up drainage.

2317—F down, back up when we touch tree.

2322—F down, we hear high pitched pulsing vocalizations indicating the eggs have hatched.

2326—BL brings down capture pole and we leave.

## 12 July 2010

2320—JV and JG arrive at the CN9\_2010 nest tree to attempt to capture the male – he has not yet been captured this year. The M and the F are adjacent to the nest tree and delivering TECs at us.

2322—M PD

2329—F PD – JG has the capture net in position, **capture height is 27’**

2332—M PD, miss capture.

2334—F PD

2335—M PD, we capture him. He is previously banded as the CN8\_2006 male. He moved to this nest tree and the CN9 territory in 2007. He is banded with **band #1593-64498** on the right leg.

61.0 g LWC: 131 mm

- 13.5 g LLP(5): 100 mm

47.5 g LLP(6): 107 mm

Rect: 63 mm

JV takes a blood smear on the right wing.

Primaries 1 and 2 are growing in on both wings.

Lots of wear on primaries 5 and 6 on both wings.

2338—JV peeps the nest cavity and sees 2 nestlings with very prominent facial disks and very little white natal down.

2403—We release him and he flies not very strongly in a Potr ~ 5 meters away.

2404—After perching for ~ 1 minute he flies strongly away past the nest tree.

2406—We leave.

## 16 July 2010

2055—SY and BG arrive in truck at CN9. We are hoping to capture M and F to put a geolocator on the M and take blood smear from F.

2106—**We peep cavity: there is nothing but feces. Owlets have fledged.** We spread out on opposite sides of drainage to listen for fledgling begs or adult vocalizations.

~2108—BG hears fledgling begging upslope in high burn area. SY and BG spread out to listen in this more specific area.

**Need SY notes on finding fledgling.**

2202—SY goes to get band for fledgling. BG remains with bird to keep track of him and observe any interactions with M or F.

2207—M gives LC/TCs nearby, seemingly looking from response from fledgling, who responds with a couple of quiet, squeaky begs. This means fledgling is probably under the M’s care and is part of his brood division. M stops giving calls after ~10 mins of calling on and off near nest where fledgling was found by SY.

**We band fledgling with band # 1593-64793 (on R leg)**

72.5 g LWC: 95mm

- 17.0 g LLP(5): 74mm (13 in shaft)

55.5 g LLP(6): 74mm (14 in shaft)

Rect: 38mm (11 in shaft)

2305—We release fledgling (“Carlos”).

2315—We arrive back at vehicle and leave.

## 19 July 2010

2023—JG, BG, TM arrive in CN9 hoping to find fledgling #64793 and use him to lure M into mist net for capture, then fit him with geolocator. We spread out in main drainage to listen.

2104—BG hears F scold up side drainage to SW of main drainage. BG continues up drainage toward noise checking trees.

2118—BG finds F. JG comes to help locate fledgling.

2127—We find fledgling in live psme after PD from F.

Tree info (fledgling roost): DBH – 22.0, X: 477821, Y: 4330383 +/- 9m

2140—F gives PD, JG returns with capture pole, we attempt to nudge fledgling out of tree. He flies far away and we lose him. We then resume search.

2210—JG leaves to meet TM and set up lure net on ridgetop to the W of the main drainage.

2223—F calling in original fledgling roost w/ prey, then flies far away after giving LCs for

~3min. BG then tracks F around in circles hearing occasional LCs from different areas in

~75m X 75m square.

2310—JG and TM begin playback on ridgetop to the W of the main CN9 drainage.

Vegetation: High burn

Weather: Calm, partly-cloudy, 15 C

X: 477918

Y: 4330498

+/-: 5m

2331—BG and TM catch fledgling after finding him in live psme and nudging him out of two

more live psmes with capture pole.

**Fledgling is unbanded, we band with # 1593-64810 (on L leg)**

77.0 g LWC: 107 mm

- 18.0 g LLP(5): 78 (8 in shaft) mm

59.0 g LLP(6): 79 (10 in shaft) mm

Rect: 48 (8.5 in shaft) mm

Notes: We bleed R wing for genetics and smear, clots well and quickly. Fledgling was found with F so appears to be part of her brood division.

0000—We release him by placing in small psme as high as TM can reach. Perches nicely.

0005—BG and TM go to join JG at lure net.

0010—End playback, break down net, and leave. We did not hear any vocalizations or responses to the playback all night.

# CN9—2011

## 17 June 2011

~1530—JG and JR begin peeping CN9 looking for 2011 nest.

~1630—They leave, having peeped all trees in territory and found nothing.

# CN9—2012

## 12 June 2012

2323—JV & CC arrive in CN9 near 2010 nest tree to listen. The playback on Great Horned Ridge can be heard. JV discovers the 2009 and 2010 nest tree is down.

Weather: clear, calm, 13 C

2350—JV and CC leave after hearing nothing.

# CN9—2013

## 11 June 2013

2257—SY and LL start playback in CN9. We are in CN9 with the intention to identify if there is a CN9\_2013 M and capture him, as well as to tap and listen for nest vocalizations. We set up a single lure net in the lower part of the canyon going into CN9 ~100m W of road.

Vegetation: Young potr, mature pipo/psme, open, high burn, lots of deadfall

Weather: Clear, mostly calm with a light breeze, 14 C

X: 478010

Y: 4330457

+/- 3m

2300—M TCs from ~75m up-canyon (SW) of the net.

2305— SY leaves the lure net site to listen and tap on trees. CN9 M is calling to the SW way up slope on the S side of the canyon. Well beyond the past nest tree. I approach the M and as I get within ~50m he begins giving TECs. I look around for cavities and spot a cavity in a previously unenumerated broken top psme. As I approach a F rises to the cavity entrance – **this is the CN9\_2013 nest!** Cavity is near the top of the tree on the N side of a broken top psme, Psme is ~25m out of the canyon bottom on the W side. Tree needs enumeration – I flag but do not enumerate.

X: 477917

Y: 4330349

+/-4m

2313—LL hears M TCs from ~50m up drainage SW of net.

2320—LL goes to turn off playback, hears M TCs from ~30m N of net. We believe this is the CN8\_2013 M.

2322—LL hears presumed CN8\_M gives TCs within ~10m of net before going silent. From the nest site, SY hears a single hoot to the S.

2325—F rises to entrance as SY hangs the flag on the tree.

2326—LL hears TCs from up drainage SW of net as SY hears M give a few TCs just S of the nest site.

2327—SY sees F go back down.

2333—LL hears TCs from up drainage SW of net, while SY hears same TCs just E of nest.

2335—SY leaves nest site and returns to lure net.

2342—We stop playback, take down net and move further up-canyon, closer to the nest.

2400—Right as we’re finishing setup at new lure net site, M TCs and TECs ~20m up drainage.

2402—We start playback. M still giving TCs and TECs from up drainage.

Vegetation: Mature pipo/psme, severely burnt, young potr, open

Weather: Clear, a bit breezy, 12 C

X: 477947

Y: 4330394

+/- 3m

2404—M goes silent.

2405—M TECs directly adjacent to net, flies over net, and continues TCs and TECs in net area.

2407—M now giving TECs ~10m E of net.

2414—M gives TCs, TECs in net area again after being silent for ~5mins.

2428—M goes silent after calling continuously since 2414.

2434—We stop playback, breakdown the net, and leave.

## 19 June 2013

~2025—SY and BDG arrive at the CN9 territory with the intention of catching the F, peeping and possibly attempting a capture of the M.

2036—SY gets capture pole in position.

2048—M begins giving TC’s ~100m to the W of the nest tree. He moves progressively closer, moving to the SSW of the tree and giving TECs.

2010—SY removes capture pole to allow M to make a PD. M flies into the nest area from the W and perches just E of the nest tree.

2011—M gives LCs and F flushes immediately.

2012—**BDG peeps. Two eggs and a nestling are seen in the center of the cavity.** We move ~20m NW of nest.

2015—M flushes to the E and F flushes to the NE.

2016—M gives TCs/TECs E of nest.

2117—TCs heard down drainage.

2124—TECs SSW of nest. We move an additional 40m NW of nest.

2146—We approach nest site with M giving us TECs.

2150—M flies into tree adjacent to nest tree and does not appear prey laden.

2158—M flushes to S and gives TCs.

2203—M returns prey laden and begins giving TECs.

2204—M makes PD.

2205—M leaves nest.

Weather: clear/smoky, occasional light breeze, 18C

2226—F up at entrance. M makes PD at the entrance.

2238—CN8 lure net audible from nest site. CN9 M heads down drainage giving TCs, TECs and HECs.

2308—After ~5 aborted PDs, M makes a PD and is captures. **M is previously banded.** . He is previously banded as the CN8\_2006 male. And is presumably the territory holder in CN9 since 2007. **He is at least 8 years old.**

**Band # 1593-64498**

71.0 g LWC: 133 mm

- 17.0 g LLP(5): 97 mm

54.0 g LLP(6): 108 mm

Rect: 53 mm

Notes: P5 on the M is damaged slightly on both wings. Rachis seems to be intact on both – measurements measured to the end of the rachis. We bleed L wing for parasite smear.

2332—M is released, strong flight to the E.

2340—BDG and I spread out to attempt to spotmap the CN9 M. He, however, just keeps calling from the immediate vicinity of the nest.

Weather: 13c, clear/smoky, wind <5mph

2407—SY marks songpost CN9\_1.

2415—We leave.

## 27 June 2013

2033—AW and BDG arrive in CN9\_2013 nest intending to capture the F on flush.

Weather: calm, clear, warm 26C

2053—M gives TCs up drainage of the nest.

2057—**F flushes into the capture net and is captured. She is previously banded and is the CN9\_2009 F!!**

**Band # 1593-64677** (on R leg)

**She is at least 5 years old. We peep and find 3 nestlings, all with eyes slightly open. Body posture is standing/vertical. They display little movement. Nestlings still in natal down – one nestling may have the beginnings of grey juvenile plumage although the video does not show it very well. Video is saved as CN9 (27 June 2013) in Hayman Videos. Our estimated hatch date is 6/18 (1 hatchling and 2 eggs observed on 19 June 2013). Therefore, at least 1 nestling is > 9 days old.** Prior to capture, M flew into nest area and gave LCs. While processing F, M perched overhead giving us HECs.

2104—F released with strong ascending flight.

## 11 July 2013

2315—AW, MC and BDG arrive at CN9\_2013 with intent to capture the female.

2316—BDG puts the capture net up, female is not in the cavity so we peep. **Peep reveals that the cavity** **is empty**. Male is giving TCs NW of cavity. We follow him in hopes of finding fledglings. We follow him for approximately 15 minutes as he flies between patches of live conifers, giving TCs and TECs but we never pick up the female or see any fledglings.

~2330—We leave for CN8\_2013.

# CN9—2014

## 30 May 2014

2325— After listening and giving occasional hoots in CN8, AW and ER hear nothing and walk to CN9 to tap the 2013 nest tree.

2342—AW and ER tap 2013 cavity tree in CN9 and give a few hoots to no response. We meet   
MC and friends at the vehicle and end observation.

## 13 June 2014

2338—AW arrives at the CN9\_2013 nest tee to tap and listen for nesting vocalizations. AW taps with no response.

2345—AW gives hoots and hears CN8 M responding from drainage bottom.

2355—AW leaves CN9 without hearing anything.

## 24 June 2014

Afternoon—Flam crew peeps out CN7 and CN9 territories. We do not find any nests.

2332—MC and AW begin playback in CN9. Lure net is located on the ridgetop to the W of the CN9 upper drainage bottom ~125m W of the CN9\_2013 nest.

Vegetation: edge of high burn and unburned; young to old psme/pipo

Weather: windy becoming calm, clear, 14C

X: 477841

Y: 4330461

+/- 5m

2351—AW leaves to listen on the slope to the S-SW of the CN9\_2013 nest.

2402—MC (from his position at the net) and AW (from her position ~125m SE of the net) hear TCs from down drainage to the NE. M appears very far away, ~150m. We assume this is the CN8 M. M calls continuously until we end playback, but never approaches net. M seems to be calling from just S of the road on the CN9 side of the drainage and does not move any further S. **We do not hear any response from a CN9 M. Based on 3 nights of observation and not hearing anything, we assume the CN9 territory is unoccupied this year.**

2420—End playback. We leave.

# CN9\_2015

## 1 June 2015

2430-0104: DL and BL listen, call, and tap cavity trees in the CN9 territory (up on the primary CN9 slope). Nothing is seen nor heard.

# CN9—2016

## 7 June 2016

~2135-2215—DL and BL spread out along the CN9 drainage to listen for vocalizations and tap the few trees that are remaining in the area. DL stays near the bottom of the drainage while BL walks up the drainage. We do not hear or see anything. We leave to set up a mist net in CN8.

# CN9—2019

## 27 June 2019

1500—Flam Crew minus BL arrives at CN8 and CN9 to full peep the 2 territories in search of a nest. We divide and send people towards all known cavity trees while also looking for new cavity trees.

Weather: 27 C, slight breeze, 30% cloud cover

1525—I start to peep past nest tree #1612.

1543—**With ES spotting, ML finds the CN8\_2019 nest tree! F is completely still and facing face down in the cavity.**

**Tree #1612, a full snag pipo with < 50% of its limbs retaining full horizontal extent. It was the CN8\_2016 and 2017 nest. The cavity is a NOFL hole approximately 35 ft up and is facing N / slightly NE. The cavity is directly below a broken branch and there is a smaller cavity 2 feet below. The tree is ~10 m off the road.**

X: 478264

Y: 4330384

+/- 8 m

1555—SL, ON, KA, and JE join at the nest tree and observe. F still down.

1605—We leave the territory and head to CNG1 to attempt to find a 2019 nest.

# CN10—2010

## 18 June 2010

1533—Flam Crew begins peeping CN10, N of where the creek crosses the road into CN7.

1719—We finish peeping CN10 having not found any nests in marked cavity trees.

2130—BL & JV arrive at CN10 to listen for nesting vocalizations.

2240—After BL and JV have intermittently given TCs in the drainage, a M (CN7 ?) comes into   
the area from the W giving TCs and TECs for about 7 minutes just E and S of where the creek crosses the road. BL places two songposts in this area before the M goes quiet.

2305—Nothing else is heard and we leave the area.

# CN10—2011

## 24 June 2011

1555—Flam crew arrives and begins peeping CN10 hoping to find CN10\_2011 nest.

1715—We leave having peeped CN10 territory and found nothing except one suspicious egg in a

cavity. This will need nighttime listening.

2230—BL and IJ arrive at parking spot between CN10 and CN7 territories to listen in the CN10 area for evidence of a territorial male occupying the area. It is unclear whether or not the CN10 or CN7/8/9 territories are occupied by territorial males in the 2011 season. IJ stays on the ridge above road to listen in both directions of the different territories (E and W) and BL moves into CN10 area towards tree CN7\_1177 where one potential flam egg was peeped in a cavity earlier in the day.

2231—M TCs heard from N in the CN7/8/9 territories.

2244—M TCs/TECs heard from CN7 drainage to W; M sings for approximately 2.5 minutes.

2301—M responds to IJ’s calls (TCs) with TCs and TECs in W towards CN7 drainage.

2310—with nothing heard in the CN10 area for the entire listening period, BL and IJ end listening.

## 8 June 2012

2303—JV, NS, and MD arrive in CN10 drainage to listen for nesting vocalizations. NS hangs by the confluence of the drainage and the road, JV goes about 60m up the drainage and MD goes up slope to the upper ridge on the south-facing slope.

Weather: mild, clear, 18 C

2318—JV hears TCs and one TEC in response to her calls south across the drainage closer to NS. NS crosses over to the south.

2326—JV moves to the drainage bottom about 30m from the road and gives a couple of quiet TCs. M flies silently about eye level with JV and 15 ft away in some shrubs. Begins giving extremely quiet HECs. *There are several likely cavity trees in the area.*

~2333—MD tracks M to pipo approximately 15 m from the tree JV peeped. M is observed singing and hawking from this tree. MD songposted CN10\_1.

2336—JV peeps tree CN10\_1021. Empty in both cavities that are peeped.

2340—Team leaves.

# CN10—2012

## 12 June 2012

1510—Crew arrives in CN10 to peep.

1517—**AW peeps CN7\_768l and finds a F Flam with 1 visible egg. This is the CN10\_2012 nest tree! Cavity is located approximately 23 ft from the ground and is N facing. Cavity tree is a potr snag located in the drainage bottom approximately 40 m from the CN7 parking spot to the E. Cavity is extremely shallow and F was barely in focus during the peep. When peeper is removed, F goes up.**

1521—F goes down, and we leave

2023—JV, AW, and CC arrive at the CN10\_2012 nest attempting to capture the F (at first) and the M if F capture is unsuccessful.

2032—JV has net in capture position. As net is placed against tree, F goes up and immediately flushes into the net. She escapes through a gap between the net and the net rim.

2034—**We peep and find 2 eggs, touching.**

2044—F returns from flush.

2059—M gives a few TECs and delivers a PD to F who responds with encounter calls from within the cavity.

2100—F flushes as JV lights up cavity entrance. We back off to the N-NW approximately 50-70 m.

2102—F follows us and scolds from a large psme just N of the parking spot and approximately 15 m from us to the W.

2104—We decide to leave and abandon our capturing efforts because of the reaction by the F to our presence.

2108—While at the parking spot, CC and AW observe M foraging in group of live psme just E of road approximately 30 m N-NW of parking spot. F flies to psme 10 m N-NE of parking spot and gives begging calls.

2110—We leave.

## 19 June 2012

2049—As JV is creeping into the nest site at CN10\_2012, F comes up.

2050—PPS hears soft calls from the nest area (unclear if it is M or F).

2055—F goes down.

Weather: mostly clear, calm, 21 C

2059—JV is at the base of the nest tree and starts to put the net up. M gives TCs about 20m S of the nest.

2103—M comes into nest site.

2104—M gives TCs. F gives encounter calls from on the cavity. JV covers the cavity entrance and F flushes into net. She is unbanded. JV bands and takes a mass. **This is the CN10\_2012 F.**

**Band # 1593-64899** (on left leg)

91.0 g

- 8.0 g

83.0 g

2106—CC peeps cavity. **There are two eggs in the center.**

2114—CC releases F. Strong flight down slope to the SW.

2124—M follows team to the car giving TCs.

## 29 June 2012

2050—JV and NS at CN10\_2012 nest site in attempt to capture the M. Rain begins. We wait out rain in vehicle.

Weather: Cloudy, showers, calm, 21°C.

2113—JV has net in position. M in adj. potr. M makes a PD.

2114—JV has M in net. **We take M out of net, he is banded (#64900). Band is not in banded birds record, so we decide to take blood and smear. Upon later checking, he turns out to be bird previously captured in CN7 lure net. NS attempts to bleed L wing unsuccessfully, bleeds R wing and gets enough blood for smear and genetics. Mild hematoma on R wing, no hematoma on L wing.**

NS has blacklight pictures:

This is the first time using the blacklight flashlights (the blacklight wand did not work very well, the pictures are from the flashlight). On a 0-5 scale for both left and right wings:

P1-2 = 1, P3-7 = 3, P7-9 = 2, P10 = 1

(**Note:** Slight discrepancy in field note – P7 is assigned 2 different ratings: 3 and 2. Given that we are unsure which is correct, we cannot assign either rating. ON 8/1/2018)

**Band # 1593-64900** (on L leg)

85.5 g LWC: 129 mm

- 34.0 g LLP(5): 96 mm

51.5 g LLP(6): 106 mm

Rect: 64 mm

2208—JV releases M. Flight upwards to psme is weak, JV continues to observe M for a few minutes. He makes 5-10 ascending flights upslope. We leave site.

## 12 July 2012

1515—SY arrives at the CN10\_2012 nest to peep. I tap, F rises to cavity entrance.

1518—I flush F and peep: **1 well developed N is present. Facial disk developing, all gray juv plumage. ~18-20 days old?** Video recorded on unit 4, video,= #TVREC028

1520—I leave.

2025—PPS has capture net up at CN10\_2012 nest in attempt to capture the F.

2030—JV peeps cavity (almost decapitating nestling). No F is on. **There is one nestling. He is fairly old with clear facial disc. He is fairly active looking up at the camera.**

2035—JV and JR spread out to listen for any fledglings.

~2050—JR sees a silent bird fly from the E to the W, perching in a low branch in a water birch, look at JR then fly off to the W as JV approached.

2100—Unknown bird aborts a PD.

Weather: clear, breeze ~5mph, 19 C

2104—Unknown aborted PD.

2106—Unknown PD.

2110—Unknown PD.

2114—Unknown PD.

2122—Unknown PD.

2128—Two birds are in the nest site an both abort a PD.

2133—PPS captures the M in the net on a PD.

**Band # 1593-64900** (on left leg)

79.0 g LWC: 128 mm

- 28.5 g LLP(5): 98 mm

50.5 g LLP(6): 106 mm

Rect: 59 mm

|  |  |  |  |
| --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Wear, L wing, 0-5 |
| 1 | 0 | 1 | 3 |
| 2 | 0 | 1 | 3 |
| 3 | 2 | 3 | 4 |
| 4 | 2 | 3 | 4 |
| 5 | 2 | 3 | 4 |
| 6 | 2 | 3 | 3 |
| 7 | 2 | 3 | 1 |
| 8 | 2 | 3 | 1 |
| 9 | 1 | 2 | 1 |
| 10 | 1 | 1 | 1 |

2140—PPS has net back in position to capture the F.

2144—F PD. She escapes PPS’ net.

2148—PPS captures F on a PD.

**Band # 1783-64899** (on L leg)

96.0 g LWC: 129 mm

- 34.0 g LLP(5): 103 mm

62.0 g LLP(6): 110 mm

Rect: 60 mm

|  |  |  |  |
| --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Wear, L wing, 0-5 |
| 1 | 0 | 1 | 3 |
| 2 | 2 | 3 | 4 |
| 3 | 2 | 3 | 3 |
| 4 | 1 | 1 | 3 |
| 5 | 1 | 1 | 2 |
| 6 | 1 | 0 | 2 |
| 7 | 0 | 0 | 1 |
| 8 | 0 | 0 | 1 |
| 9 | 0 | 0 | 1 |
| 10 | 0 | 0 | 1 |

2202—M released, ok flight to a live psme, perches good. PPS watches, M then flies W with a

stronger flight.

2225—F released, good flight, ascending but only about 20m. F performs some light preening,

then flies off to the W.

## 13 July 2012

~1500—BL, JV, JR, CC, AW, MD, PPS, NS and two visitors arrive at CN10\_2012 nest to band/bleed nestling, clear vegetation, and set up ladder. **We peep cavity—no F present, but owlet is.**

Cavity dimensions: 50x60 mm

Thickness: 40 mm

H depth: 110 mm

DOH: 27.5

1525—BL starts cutting.

1551—BL scratches at cavity entrance and owlet comes up. BL brings the owlet down.

**Owlet Band #1783-64344** (on L leg)

58.9 g

P#5: 48 mm (24 in shaft)

P#6: 47 mm (22 in shaft)

Rect: 18 mm (10 in shaft)

Notes: L wing bled with genetics and smear. Small hematoma. Short wings but fledging coloration.

1618—Owlet back in.

1619—BL back down. We leave.

# CN10—2013

## 30 May 2013

2415-2435: BDG and BL tap cavity trees and listen for nesting activity in the vicinity of the CN10\_2012 nest. Nothing found.

## 7 June 2013

2024—SY and LL arrive in CN10 to search for CN10\_2013 nest and lure net for CN10\_2013 M. We spread out in the drainage to tap and listen with SY in the lower (more western) part of the CN10 drainage and LL ~150m up drainage from the parking spot.

Weather: 12C, clear, calm

2108—LL hears M LCs from ~30m down drainage (W) and immediately pursues M.

2109—LL pursues M, who is still down drainage and starts giving TECs as LL passes tree CN10\_1177. M then gives TCs from N side of drainage, LL pursues.

2112—M goes silent, LL sees FLOW fly over drainage from N to S side, follows path of flight until standing in drainage directly next to tree CN10\_1177. SY joins and we listen for further vocalizations.

2121—**LL taps on CN10\_1177, FLOW pops up into entrance of N-facing cavity ~28ft up the tree. CN10\_1177 is the CN10\_2013 nest tree! Cavity tree is a potr snag in the drainage bottom ~120m up from parking spot. F only came to entrance once we tapped, though we had been standing near CN\_1177 for ~10min.**

2125—After taking notes and observing the FLOW, we leave to set up lure net on the NE slope of drainage.

2147—Start playback at lure net in CN10, ~100m WNW of the nest location.

Vegetation: Low slope on N side of the creek. Site is open yound pipo.

Weather: 9C, clear, wind <5mph

X: 478859

Y: 4330130

+/-3m

2153—M approaches the net from the SE giving TECs (direction of the CN10 nest).

2158—We can hear the presumed CN7 M distantly down drainage giving TCs at same time as CN10.

2203—**We hear wingflaps at the net. We approach: 2 FLOW captured in the net. Both are unbanded and neither has a brood patch.** TCs and TECs have stopped so one is presumed to be the territorial male.

**New** **Band # 1783-64376**

91.0 g LWC: 132 mm

- 34.5 g LLP(5): 95 mm

55.5 g LLP(6): 104 mm

Rect: 50 mm

We blacklight: Left Wing: P1-5 Medium, P6-9 Low, P10 None. Right Wing: Same

Bleed right wing.

We suspect that this is the territory holder based on mass and temperament.

**New** **Band # 1783-64375**

76.5 g LWC: 125 mm

- 18.0 g LLP(5): 96 mm

58.5 g LLP(6): 102 mm

Rect: 61 mm

We blacklight: P1-5 Very Low, P6-910 None. Right Wing: Same

Bleed left wing. Moderate hematoma

It is possible that this M hit the net at the same time as the presumed territory holder – traveling together? We hear a few quiet TCs ~35m WNW of net while we have these two birds in hand.

2236—**We release #64375** – strong flight SW

2247—We hear presumed CN7 TCs to the SW.

2248—**Release #64376** – strong flight SW.

2253—**We return to net – there is an unbanded FLOW in the 3rd shelf, S side.** Presumed CN10 M flies to the tree next to us and gives TECs while we are extracting this bird from the net. CN7 can also be heard down drainage at the same time. No brood patch so FLOW is presumed to be a M. CN10 continues to give TECs around net while we process this bird.

**New** **Band # 1783-64374 (on R leg)**

87.0 g LWC: 130 mm

- 34.5 g LLP(5): 95 mm

52.5 g LLP(6): 106 mm

Rect: 52 mm

We blacklight: Right Wing: P1-5 Low, P6-10 Almost none. Left Wing: Same

Bleed left wing. ***Note – we later discovered that we misplaced the blood sample so we will have to bleed again!***

2302—CN10 TECs stop – while we still have #64374 in hand. We check net - **#64376 is in the top shelf, N side.** We extract.

2307—**We release #64376** – ***this capture further bolsters our thinking that this M is the CN10 territory holder****.*

2310—TECs start again at the net.

2314—**We hear wingflaps at the net—we capture unbanded FLOW is found in the 3rd shelf on the S side.** There are still TCs to the SW (presumed CN7).

**New** **Band # 1783-64373 (on L leg)**

92.5 g LWC: 132 mm

- 35.0 g LLP(5): 97 mm

57.5 g LLP(6): 106 mm

Rect: 53 mm

We blacklight: Left Wing: P1-5 Low , P6-10 None. Right Wing: Same

Bleed left wing.

2316—TECs to the SW ~35m from net.

2329—SY watches as the presumed CN10 M flies over the net while giving TECs. AS the light passes the net we notice another FLOW in the net. This is an unbanded M in the 3rd shelf on the N side.

2330—**Release #64374.**

2332—We remove the unbanded M from the net. An unID FLOW flies over us and the net while we are extracting.

**New** **Band # 1783-64372 (on R leg).**

73.0 g LWC: 133 mm

- 18.0 g LLP(5): 97 mm

55.0 g LLP(6): 108 mm

Rect: 56 mm

We blacklight: Left Wing: P1-5 Low, P6-10 None. Right Wing: Same

Bleed left wing.

2346—**We capture and immediately release #64376**.

2350—**We capture #64376 in first shelf, S side.**

2354—**Release #64373.**

2355—**Release #64376**

2356—Stop playback at lure net.

2401—TCs to the SW (presumed CN10).

2405—**Release #64372** – strong flight SW. ***We break down the net and leave having made 8 captures of 5 total Ms (all unbanded)!***

## 11 June 2013

2030—LL and SY arrive at the CN10 nest to attempt to capture the F and M.

Weather: 15C, clear, wind 5-10mph

2032—F rises to cavity entrance as the net is being raised. We lower net and wait.

2039—F goes back down.

2044—Net in capture position, F rises briefly to entrance, but goes right back down. RESQ starts chattering from the tree – **it appears that the nest tree is shared with a squirrel nest ~7 feet below the FLOW cavity!**

2045—F rises to entrance.

2050—M enters the site from the NW giving TECs. F responds with FSCs.

2055—F flushes and is captured, she is **previously unbanded.**

**New Band #1783-64370** (on L leg)

**We peep: 2 eggs in center of cavity.**

2100—We release the F.

2102—We hear FSCs to the SW, M and F both give LCs.

2105—M gives TCs and TEC in nest site.

2107—M TCs from further down drainage (~30m).

2117—F has not returned to cavity since her release, so we back off to ~20m SE of nest. M TCs from down drainage.

2136—M TCs briefly from ~10m up drainage.

2140—M TCs again briefly from ~10m up drainage.

2142—Faint M TCs from very far down drainage (150+m).

2145—M comes in to nest for a PD, SY attempts to capture and M manages to escape past the left side of the net. F flushes almost immediately after M escapes, presumably having seen the net when she came up after the M’s attempted PD. We leave, heading back down drainage to the CN10 parking spot.

2154—We are ~10m up drainage from the CN10 parking spot when we hear two Ms give TCs and TECs, one from ~100m up drainage (presumably CN10\_2013 M) and one from ~100m down drainage (presumably CN7\_2013 M).

2158—As we are leaving CN10, LL and SY hear an encounter between 2 Ms just downstream from the CN10 parking spot. We presume that we are hearing CN7 and CN10. CN7 appears to have a higher pitched voice. The 2 Ms are within 10m of each other giving TCs and TECs.

2200—We mark songpost CN7\_1 (see data sheet) ~10m S of road, and ~50m W of the parking area for CN10.

2208—We mark songpost CN10\_1 (See data sheet), M is giving TCs and TECs, CN7 is calling farther to the W at this point.

2210—We mark general area songpost CN10\_2 (see data sheet). From this point the CN10 M moves up drainage in the direction of the nest. CN7 simultaneously moves W along the ridge with a small stringer of live trees just S of the road.

2217—LL is standing on side of road ~50m NW of CN10 parking spot and hears CN7 TC from ~100m NW of road.

2223—We leave and continue down the road towards CN9.

## 19 June 2013

~2425—BL and LL enter CN10 nest area with intention of capturing CN10\_M on a PD at the cavity entrance. No sign or sound of either M or F as we get into capture position.

2432—LL is in capture position at nest.

0105—After hearing and seeing nothing the entire time we have been in the nest area, **we peep the cavity and discover that it is completely empty. The CN10\_2013 nest has been predated!** We leave.

~2220—AW, RC, and CK begin setting up lure net 120m NNE on ridgeline extending NE from CN8\_2013 nest site. Net placed on upper slope, opening SE.

2230—Playback begin.

Vegetation: Net adjacent to dense stand of small dbh pipos. Surrounding area comprised of med-mature pipo/psme.

Weather: Clear sky, but hazy with smoke from fire to N. Steady wind swaying trees, 18C.

X: 478229

Y: 4330782

+/- 3m

2240—M heard giving brief TCs 60m S of net, downslope.

2304—AW and RC leave to listen in CN7.

2305—AW and RC hear CN7 M and CN8 M having territorial encounter 50m SE of net in drainage bottom.

Gen. area:

X: 478297

Y: 4330688

+/- 6 m

CN7 M moves E and goes silent. CN8 M moves across drainage to S, then briefly down drainage before moving SE up slope. RC pursues CN8 M.

2312—RC flags CN8\_1 in live psme, mid-slope S of drainage bottom and N of rd. M gives TCs here, then flies NE up slope and across road.

2317—RC flags CN8\_2 in live pipo. CN8 M is giving TCs, and CN7 M can be heard giving TCs ~75m to E. RC notices band on R leg of CN8 M before he continues to move SE up slope on Great Horned R.

2322—RC flags CN8\_3 in live psme on N slope of Great Horned R. CN8 M has crossed rd to S and continues to give TCs and occasional TECs. CN7 M cannot be heard at this point.

*Note: the next 5 songposts (CN8\_4-8) were obtained in the same general area on the N facing slope or Great Horned Ridge likely in a 50 m radius).*

2323—AW flags CN8\_4 in a live psme on low N facing slope of Great Horned R. M gave TC/TEC for ~4 min until 2326.

2326—RC flags CN8\_5 in live psme. AW hears CN7 M calling to E. CN8 M continues to move S and E.

2327—AW flags CN8\_6 in live psme. CN8 M gave TC/TEC for ~1-2 minutes while CN7 M was heard simultaneously giving TCs approximately 50 m to N-NE.

2331—RC flags CN8\_7 in full pipo snag. CN8 M stops flying SE at this point and turns back to the NW, still giving mostly TCs with occasional TECs.

2335—AW flags CN8\_8 in a live psme. CN8 M gives hoarse TCs for ~1-2 minutes before going silent.

2345—After giving a few hoots, AW and RC hear CN7 M ~100m up road to E, giving TCs from drainage bottom on N side of rd. AW and RC pursue into drainage bottom.

2353—RC hangs CN7\_1 in live psme, ~50 m W (down drainage) from where CN7 M was initially heard at 2345. AW hears another M (presumably CN10) giving lower-pitch TCs across rd to SE and pursues.

2359—RC hears CN7 M giving TCs across rd to S as well, and pursues in direction that AW is following lower pitch bird. RC stays on low slope of S side of rd while AW pursues on upper-mid slope. AW hears 2 territorial M FLOWs (most likely CN7 and CN10) singing S of road on the low slope.

2404-2414—AW spotlights CN7 M giving TC/TEC/HECs ~40’ up in a live pipo (songpost CN7\_2). M continues to call (mostly TCs) until 2414. During this time period, a second territorial M approaches CN7\_2 from the E. 2nd territorial M (presumably CN10) gives ~1 minutes of very fast HECs from a low perch to the E (this bird was never seen). While spotlighting the CN7 M (who has now gone quiet), AW observes a 3rd silent bird fly into a tree adjacent to CN7\_2 pipo and perch ~15-20’ up. This 3rd bird flew in from the W-NW. Immediately after CN10 territorial M stops vocalizng, the 3rd silent bird disappears to the NE. *Later this night it was learned that CN10\_2013 nest has failed. We assume the 2nd territorial M to be the CN10 M and the 3rd silent bird to be either 1) the CN10 F or 2) a CN10 floater/apprentice. It is more likely, however, that the 3rd bird was a floater since no F vocalizations were given from the 3rd bird and SY & LL had previously captured a few potential floaters at a lure net in CN10 earlier this summer.*

2410—RC heads SE up slope to assist.

2415—CK stops lure net playback and breaks down net to go pick the crew up from CN7.

2419—RC hangs CN7\_3 in live psme. CN7 left territorial encounter on mid-upper slope and flew E to here, giving TCs/TECs.

2423—AW hangs CN7\_4 in a live psme just S of the road and NE-E of CN7\_2 (where the 3 birds were observed/heard earlier). CN7 M gives ~4 minutes of TCs from this perch.

2424—RC hangs CN7\_5 in live pipo after CN7 M flies W from CN7\_4 slightly N down slope toward rd. AW and RC are joined by SY and BDG as CN7 M then flies N across rd.

2431—BDG hangs songpost CN7\_6 in a mature lightning struck pipo on the low slope of the N side of the CN7 drainage. CN7 gave TCs and possibly TECs for several minutes from high in the pipo.

2442—SY marks songpost CN7\_7. M is giving TCs in live pipo on northern CN7 ridge.

2450—SY, AW, BDG, and RC end songposting.

# CN10—2014

## 30 May 2014

2050—LL and MP arrive in CN10 with intention of lure netting for the 2014 CN10\_M and other surrounding FLOWs.

2110—PB started. Net is located on the NE side of the drainage upslope and ~100m SE of the CN10 parking spot.

Vegetation: High burn severity with medium to mature pipo/psme and a couple small burnt psme

Weather: Mostly cloudy, calm, 12C

X: 478871

Y: 4330136

+/- 4m

2114—M gives TCs in the net area, coming in from the S.

2115—M goes silent.

2117—MP checks the net and finds the M captured. **The M was captured in the 4th shelf from the W side of the net. The M is previously banded and is one of the CN10\_2013 floaters captured by SY and LL on 6/7/13. *Note (8/1/14): Later capture of this M confirms his identity as the CN10\_2014 territorial M. This suggests another progression of a floater becoming a territory holder in an adjacent territory.***

**Band # 1783-64373** (on L leg)

87.5 g LWC: 132 mm

- 35.0 g LLP(5): 101 mm

52.5 g LLP(6): 111 mm

Rect: 57 mm

**Blacklight data**: (we did not have blacklight for the original capture, so the following data was taken after the recapture of this M at 2252)

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 1 | 1.5 |
| P5 | 1 | 1.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1.5 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

Note: LL bled M on L wing. Bleed resulted in a large hematoma.

2152—We release M, he was strong flight to the N.

~2153—BL joins LL and MP at net and then goes to tap and listen in the drainage bottom.

2158—M gives TCs from E, entering the net area.

2200—M goes silent.

2206—MP checks net and **finds M in the 4th shelf of the net from the W side. This is the same M, 1783-64373 captured again. Now we have a blacklight and obtain data (included above in primary capture notes).**

2207—M gives TCs to the S ~100m while M 1783-64373 is in hand.

2211—We release the M, he has a strong flight to the S.

2213—We hear a M give TCs from ~30m W of the net, moving into the net area.

2216—M goes silent.

2220—M gives TCs in net vicinity from the S.

2224—M goes silent.

2226—LL checks the net and **there is a FLOW in the 4th shelf from the E side. It is an unbanded M.**

**Band # 1783-64521** (on L leg)

88.0 g LWC: 126 mm

- 35.5 g LLP(5): 92 mm

52.5 g LLP(6): 105 mm

Rect: 56 mm

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 0.5 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1.5 | 1.5 |
| P4 | 2 | 1.5 |
| P5 | 2.5 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 2 | 2.5 |
| P9 | 2 | 2.5 |
| P10 | 2 | 2.5 |

Note: M is bled on the L wing; a large hematoma develops.

2231—M gives TCs from the W in the net vicinity while 1783-64521 is still in hand.

2236—M goes silent.

2252—**FLOW is captured in the net. It is the same M, 1783-64373 back for the third time** **tonight.** As we did not have a blacklight with us earlier, we now take blacklight and wear data on 1783-64373.

2348—We release M 1783-64521, he has a strong flight to the E.

2354—We release M 1783-64373, who has a slightly weaker/more wobbly flight to the NE.

PB is stopped and we pack up.

2355—M gives TCs ~40m NE of the net.

2356—We are done for the night and leave.

## 5 June 2014

2040-2105: MP, LL, and BL arrive at the CN10 parking area as thunderstorms and hail set in, so we wait it out in the vehicle.

2115—We spread out to listen for nesting vocalizations in the CN10 drainage, from the parking area to the W to the CN10\_2013 nest to the E. LL is closest to the parking spot ~30m up-drainage (S), MP is ~50m further up-drainage from LL and BL is ~50m up-drainage from MP.

Weather: Overcast, breezy on ridgetops, lightning on all horizons, ~ 13 C.

2131—LL hears M TCs from ~30m up-drainage of her position, so M is ~60m S of parking spot.

2144—LL hears M LCs briefly from~40m up-drainage of her position and moves upstream to investigate.

2152—MP heads down to join LL at her position ~70m up-drainage of the parking spot.

2155—MP turns on his light to survey the area and **finds a silent FLOW perched in a 32cm DBH pipo right above our heads. MP flags this tree.** This is CN10\_1, though the FLOW never vocalized.

*Note: based on our later observations, this FLOW is most likely the CN10\_2014 F.*

X: 478772

Y: 4330109

+/- not recorded

2157—FLOW flushes to the SE, MP stays near perch tree, while LL moves up-drainage to listen and tap surrounding cavity trees.

2208—MP spots silent FLOW near cavity tree CN10\_1022 in same area as FLOW was spotted earlier.

2210—MP sees another silent FLOW (suspected M) arrive in the area, landing in the same tree as the 1st FLOW (suspected F) but not making any contact. M soon leaves. BL makes his way down-drainage to MP’s position.

2214—M gives HECs near BL as he approaches suspected F, who is perched near MP’s position. M perches < 0.5 m from F.

2215-2225—F makes a series of small flights (5-10 m) in proximity of cavity tree. M has flown in at least three times with two unsuccessful copulation attempts—M attempts to mount the F, but she is unreceptive, moving slightly away. M & F exchanged a chitter call.

2231—LL peeps CN10\_1022 while BL and MP keep their eyes on the F. **Peeping reveals 2 eggs in the center of the cavity that appear to be touching. CN10\_1022 is the CN10\_2014 nest!** Nest tree is a potr snag with DBH of 19-20 cm. Cavity is flicker excavation with partial bear tear ~5m high facing SW. The tree is 10m out of the bottom of the drainage on the S-facing side and about 70m up-drainage from road, and ~30m down-drainage from where the creek turns.

***Note: Since F is off cavity giving short flights and not incubating the present 2-egg clutch, we believe she may be still gravid and must have laid the 2nd egg within the last few hours prior to our observation of her. We suspect that the final clutch size will be 3 eggs, with the F initiating incubation of the present 2-egg clutch sometime in hours after we ended our observations.***

2233—Reciprocating LC calls heard.

2234—**One M approaches F but is chased of by a 2nd M (the probable resident M) that then attempts to copulate (unsuccessfully) with F.**

*Note: We believe the M that was chased off is likely a non-resident M (possibly attempting extra-pair copulation with F?).* ***Territorial M is banded****.*

2243—The territorial M is giving LCs S of the nest tree when we see a silent FLOW fly quickly through the nest area from the SE disappearing to the NW. **We believe this is the nonresident M.**

~2245—We leave and go to CN7/CN8.

## 13 June 2014

2041—AW, ER, and MP arrive at the CN10\_2014 nest attempting to capture F on flush. MP has net in capture position. F remains down throughout his approach.

Weather: calm, clear, 20C

2048—**F flushes and is captured. She is unbanded**. She is successfully extracted from net and is handed to MP. While AW is getting a band ready, **F escapes from MP and is accidently released.**

2051—**We peep and find 3 eggs, centered, and touching.**

2133—AW, MP, and ER set up lure net ~30m north of the CN7/CN8 drainage bottom , in the vicinity of the majority of CN7 potr cavity trees, with the purpose of luring for CN7 and CN8 Ms. Playback begins.

Vegetation: Young, medium Pipos. Open.

Weather: Calm, clear, 13C

X: 478537

Y: 4330597

+/-7m

2135—We hear supposed CN7 M giving TCs within 10m of the net, bouncing between surrounding pipos.

2138—With the CN7 M still giving TCs near the net, we hear a second bird coming up drainage from the W in CN8 territory. This second bird, CN8 M, has a lower pitched call that helps distinguish it from the CN7 M.

2142—CN8 M approaches the net from the W, but remains in drainage while the CN7 M continues to give TCs from E of net.

2144-2148—Both CN7 M and CN8 M continue to bounce around net site with CN7 M staying generally E of net on S-facing slope and CN8 M staying in drainage.

2148—CN8 M goes silent while CN7 M still responds from up drainage of net.

2155—CN7 M goes silent. AW decides to move the playback from small pipo to ground in between two nets to force birds to take a different flight path around net site. There is no bird in the net at this point.

2158-2159—CN7 M returns from E giving TCs within 30m of the net, then moves closer to net over the next two minutes.

2200—AW and ER decide to meander around drainage to listen and tap cavity trees.

2201—On the way downslope to drainage, AW and ER check net to find a **banded male in the 4th shelf on the W side**! *This male was previously banded as the CN8\_2014 M on 30 May 2014, but because he appeared to stay E (up drainage of net) this time, we think he may be the CN7\_2014 M instead. On 30 May 2014, we also had 2 birds responding to our playback (located just W of CN8\_2014 nest) and both birds were acting territorial on the E side of the net. This bird was “more” territorial in that he spent more time responding to the playback, leading us to believe he was the CN8 territory holder. Tonight’s capture of him further up drainage in CN7 changes his identity to the CN7\_2014 M. We now believe the bird with a deeper pitched call is CN8.* While processing this bird, we can hear a territorial bird calling near the net, but not in the immediate vicinity of the net. Presumably, this bird is CN10 because he does not appear to have a deeper pitched call like CN8. We do not take blood or blacklight due to processing earlier this year.

**Band # 1783-64456 (on L leg)**

73.5 g LWC: 130 mm

- 19.5 g LLP(5): 95 mm

54.0 g LLP(6): 104 mm

Rect: 55 mm

Note: CN7 M shed a few feathers while in hand.

2221—AW releases CN7 M who has a strong, ascending flight to the NW.

2225—Now AW and ER try to go to the drainage to tap and listen.

2229—While walking down to drainage, AW and ER notice a second **banded male in the 3rd shelf** on the western side! While we extract this second bird from the net, we can hear two territorial males calling from the E (most likely CN10) and SW (most likely CN7), leading us to believe the banding male in the net came in silently. **He was previously captured in CN10 by SY and LL on the night they captured 5 unbanded Ms. At this point, he was identified as a CN10 Floater. Our capture of him silently tonight confirms his identity as a CN10/7 Floater.**

**Band # 1783-64374 (on R leg)**

85.0 g LWC: 129 mm

- 29.0g LLP(5): 97 mm

56.0 g LLP(6): 108 mm

Rect: 55 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 1.5 |
| P2 | 2 | 1.5 |
| P3 | 2 | 1 |
| P4 | 1.5 | 1 |
| P5 | 2.5 | 2.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 3 | 3 |
| P5 | 1.5 | 1 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2242—While processing silent male, we hear a male giving TCs 5m S of the net from drainage, and AW hears a couple TCs up slope of our net.

2300—MP releases the silent male who has a short ascending flight to the W.

2305—Playback stopped. We take down net.

2320—AW ventures to CN9 to tap and listen near past nest trees while MP and ER hang in the CN7 drainage to tap cavity trees and spotmap. CN7 M gives TCs just down drainage to the W. MP walks up drainage to find past nest tree and ER walks down drainage to listen and tap.

2329—ER has CN7 M respond to hoots in drainage in live pipo and records songpost CN7\_1.

2340—CN7 M gives four more TCs from same pipo that was already songposted.

2400—MP and ER meet AW on road, and we leave.

## 19 June 2014

2040—MC and AW arrive at CN10\_2014 with intent to capture the F and get the capture net up.

2050—M calls of Roost to E.

2056—M LCs ~20m down drainage.

2057—FSCs from inside the cavity.

2058—F comes up to the cavity.

2059—**F flushes into the net. She was previously unbanded.**

**Band # 1783-64517 (on R leg)**

2101—We release the F without taking any data or bleeding her and peep, **peep reveals 3 eggs.** We leave for CN8.

## 24 June 2014

2127—MC and AW arrive at CN10\_2014 with intent to capture the CN10 M.

2129—F vocalizes from vicinity of cavity, she is likely on. The vocalization sounds like a very excited six note LC.

2131—We move to put up the capture pole and spot a FLOW perched on a low branch. We back out.

2144—Net up.

2156—M gave a single HEC off cavity and the F flushed. We back out to go grab a mist net and let the F back on.

2227—We get the mist net up in front of the cavity.

2233—F gives the same vocalizations as before.

2239—We hear wing flaps at the net, upon check the net is empty.

2241—LCs heard from vicinity of cavity.

2245—We hear a bird hit the net again but again it is empty.

2250—We hear wing flaps again and **find the CN10\_2014 F in the net, who was previously banded with Band # 1783-64517.**

We confirm her band number and then release her. *She was in the third shelf coming back into the cavity. The first set of wing flaps was presumably the male. The second set of wing flaps was likely the f leaving either due to the M wing flaps or to get prey as the m was not coming in and then we caught her on her way back on.*

2300—We get the net down and leave for CN9.

## 30 June 2014

2141—RC, MC, and ER arrive at CN10\_2014 nest site to erect mist net in an effort to capture M. F down on arrival.

2145—We begin erecting mist net.

2200—As net is going up to 5 poles, F comes up and immediately flushes. We break down net and leave.

## 1 July 2014

~2200—MP and JV arrive at the CN10­\_2014 nest to attempt capture of CN10\_2014 M.

2218—Mist net is set up at CN10\_2014 nest on four poles.

2219—Bird comes into nest site and perches on tree just S of nest tree ~18 ft up. This is presumably to M. JV and MP turn off headlamps and cannot see anything because there is no moon. Another bird comes out of the nest cavity (presumably the F) and meets the M on the adjacent tree. Sounds are heard as if a PD may have occurred. **We then hear wing flaps in the net and the F is still on the perch and gives a few TCs or LCs. We find a FLOW captured in the net—the owl was previously banded, and had Band # 1783-64373; this was a CN10\_2013 Floater that was captured (along with several other FLOW!) in a lure net run by SY and LL on 6/7/2013 and then re-captured as the CN10 territorial male on 5/30/14.**

**Band # 1783-64373 (on L leg)**

74.5 g LWC: 130 mm

- 21.0 g LLP(5): 93 mm

53.5 g LLP(6): 101 mm

Rect: 53 mm

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1.5 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2 | 2 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

No blacklight data

2221—F goes back on cavity.

2239—M is released with a strong flight to the W. We depart for CN8.

~0105—We return to the CN10 nest from CN8 to get a peep on the nest. **The nestlings were clumped very close together on top of each other so it was unclear if there were 2 or 3 nestlings. They had natal plumage although the eldest had just a touch of grey coming in. They were slightly active and upright although they were leaning on each other heavily. SY places the eldest at ~6 days.** We leave for the night.

## 10 July 2014

2234—AW and RD arrive in CN10\_2014 nest intending to capture the F for processing and blood. AW begins to approach nest w/ capture pole.

2239—AW has capture net at cavity height. M is in nest vicinity giving LCs.

2241—M and F are in the nest vicinity vocalizing together.

2245—AW makes a capture attempt and the suspected F bounces out of the side of the net.

2258—AW collapses the capture pole, with the M and F reluctant to approach cavity w/ her there (most likely due to low height of nest cavity). RD and AW begin to set up a mist net in front of nest tree instead.

2312—AW and RD have mist net up.

2313—We hear wingflaps and check net, but see nothing. AW re-adjusts net to make top shelf more taunt.

2325—**AW goes to check the net and there is a bird in the third shelf. The bird ends up being the CN10\_2014 F.** We take mass, measurements, and obtain blood for genetics and a parasite smear. RD performs bleed on L wing.

**Band # 1783-64517 (on x leg)**

83.0 g LWC: 127 mm

- 22.5 g LLP(5): 99 mm

60.5 g LLP(6): 107 mm

Rect: 60 mm

2342—AW releases F, strong ascending flight.

2345—**We peep and find only 2 nestlings. The eldest is in full black juvenile plumage with barring on back/wings as well as on head. The younger nestling has black juvenile plumage on back and wings, but still has downy plumage on its head. I do not get a good look at their faces, so I cannot tell if the nestlings have facial disks or not. The eldest nestling looks about 4 days older than the younger one. We had record of the nest containing 3 eggs, but when SY peeped on 7/1, we cannot tell if there are 2 o 3 nestlings. This may reflect evidence of brood reduction. We previously estimated the onset of incubation as 6/6, but based on observation of nestling age, I think this may be a little late. Incubation may have started a few days prior to this and should be advanced to reflect this observation. Our new prediction of incubation date is 6/3, which would put hatching at 6/25, and on 7/10, the eldest nestling would be 15 days old. I think this is a more accurate reflection of nestling age at this date.**

2412—AW and RD start PB on high slope of W facing ridge about 100m E of CN10 nest tree,

across drainage, intending to lure for floaters.

Vegetation: Young to adult Pipo, well spaced, high burn area.

Weather: Overcast, Calm, 21C

X:478902

Y:4330208

+/-3m

~2435—PB stopped, no activity noted, AW and RD leave.

## 17 July 2014

1400—MP, MC, SY and JS arrive at CN10\_2014 nest to process nestlings. We peep: 2 nestlings accounted for in cavity.

Weather: mostly clear, no wind, 15C

Cavity Entrance: Hor. 64mm x Vert. 83mm

Thickness: 16mm

DOH: 19.5

Depth: Hor. 103mm x Vert. 130mm

Height: 16’ 5’’

1404—SY begins cutting.

1407—1st nestling out, followed by others.

**Owlet #1**

56.7 g

P#5: 54 mm (25 in shaft)

P#6: 53 mm (24 in shaft)

Rect: 25 mm (15 in shaft)

**Band#: 1783-64483 (R leg)**

Notes: Bled on R wing. G+P

**Owlet #2**

59.5 g

P#5: 68 mm (20 in shaft)

P#6: 67 mm (21 in shaft)

Rect: 33 mm (12 in shaft)

**Band#: 1783-64591 (L leg)**

Notes: Bled on R wing. G+P

1425—Nestlings back in cavity. We leave.

# CN10—2015

## 1 June 2015

2033—MC and ER arrive in CN10 with the intent to listen for possible presence of a FLOW and nesting vocalizations. We tap the CN10\_2014 nest tree and find nothing. ER listens in the drainage by the CN10\_2014 nest and MC listens about 100m SE up drainage CN10\_2013 nest.

2042—M calls off roost ~15m down drainage from the CN10\_2013 nest tree on the E side of the drainage. He gives a couple hoots before flying to the W side of the drainage.

2053—ER joins MC about 70 NW of the CN10\_2013 nest where M has moved into a live psme giving TCs for about two minutes. **ER hangs songpost CN10\_1**. M goes silent.

X: 478841

Y: 4330035

+/- 8m

~2115—MC and ER hike up the E ridge of CN10 with the intent to set up a lure net on the upper slope. Our lure net bag has no mist nets, so MC leaves to get BL’s extra net and ER resumes listening for vocalizations.

2129—From position 150m NE of the CN10\_2013 nest, ER picks up M giving TCs from across the drainage, but even with the CN10\_2013 nest. ER pursues.

2139—On SW lower slope of CN10, ER picks up M giving TCs and TECs in side drainage about 100m NW of the CN10\_2013 nest near the confluence with the main CN10 drainage. M moves toward the confluence calling for three minutes.

2145—M gives a single TC about 60m W up the western ridge of CN10. MC returns with net, so ER returns to NE ridge to help set up.

2200—MC and ER set up a lure net about 150m NE of the CN10\_2013 nest and 300m SW of the road with the intent to target the probable CN10\_M. PB begins.

Vegetation: Young to medium pipo and psme

Weather: Windy, mostly cloudy, 13C

X: 478940

Y: 4330061

+/- 7m

2201—Presumed CN10\_M begins giving TCs and TECs at the net site just a few meters to the N.

2202—M goes silent.

2203—**We check net and have an unbanded M in the N side of the 4th shelf! This is the presumed CN10\_M.**

**Band # 1833-03203 (on L leg)**

75.5 g LWC: 127 mm

- 22.0 g LLP(5): 95 mm

53.5 g LLP(6): 104 mm

Rect: 62 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 0.5 | 0.5 |
| P6 | 0.5 | 0.5 |
| P7 | 0.5 | 0.5 |
| P8 | 0 | 0 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | 0 | 0 |
| P3 | 0 | 0 |
| P4 | 0 | 0 |
| P5 | 0.5 | 0.5 |
| P6 | 0.5 | 0.5 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Note: We bled the L wing.**

2223—Presumed CN10\_M is released with a strong horizontal flight W.

2228—MC remains at the net while ER listens in the drainage. ER hears and see nothing. CN10\_M is TCing at the net.

2237—CN10\_M returns to the net and gives a couple TCs.

2240—M TCs ~15m NE of net.

2245—We re-capture the CN10\_M, **Band #1833-03203 3rd Shelf, W side.** He is immediately released with a strong, ascending flight W.

2305—**We re-capture #3203, 3rd shelf E side.**

2308—M is released, strong ascending flight W.

2328—ER returns to net site and helps to break down net. Playback stopped. MC and ER to listen. ER in S drainage and MC listens around the CN10\_2014 nest. We hear and see nothing.

2421—We leave CN10 to listen in CN7.

## 12 June 2015

2030—BL, MC, and DL arrive in the CN10 territory to tap cavities and listen for nesting activity. We spread out, with MC lowest in the drainage, DL in the mid-portion of the drainage, and BL in the upper portion.

2047—**BL taps on the CN10\_2013 nest tree (CN10\_1177, tag # 1177), and F FLOW rises to the entrance—this is the CN10\_2015 nest tree! F is perched in the same cavity as was used in 2013, which is a NNW-facing NOFL-excavated cavity, approximately 31 ft high.** **Cavity tree is a full POTR snag, approximately 20 m S of the drainage bottom, in the area where the creek starts to bend noticeably to the SE and which borders high burn, and is ~150 m up drainage from the CN10 parking spot**. F goes down after 30 sec.

2050—M calls off his roost approximately 50 m to the S (upslope), and F gives FSC in response from the cavity.

2051—F flushes to the N, where BL hears M and F vocalizing on the other side of the creek.

2057—**DL and MC join BL, and we peep the cavity—3 eggs in the center of the cavity.**

2102—We leave, with F still off cavity.

## 15 June 2015

2049—SY and LP arrive at the CN10\_2015 nest to attempt to capture the F.

2053—WE hear TCs down drainage to the W, ~50m away.

2054—Net in capture position – no response from F.

2110—M still calling down dr. – no activity observed at the tree. **We peep: top NOFL cavity is full of sticks, the lower NOFL cavity (~31 ft.) has 3 untended eggs. All are in a line, not well centered. 2 look possibly damaged.** We bring peeper down and back off to observe.

2132—Still no activity observed at the nest. We leave.

*Note:* ***This nest appears to have been abandoned****. No activity was observed the entire time we were in the site (43 minutes) from either the M or F. Eggs did not look to be in an appropriate incubation position. Fresh squirrel activity at the base of the tree (cone bracks) possibly indicating an interaction with RESQ?*

# CN10—2016

## 2 June 2016

2035—DL and BL arrive at the CN10 parking area to begin listening for nesting/courtship behavior. DL listens/taps trees in the lower portion of the drainage above the parking area, and BL travels to the upper portion containing the CN10\_2015 nest tree (Tag #1177).

Weather: Mostly clear, light breeze, ~19 C (1st dry, summer-like day of season).

2125—While preparing to cross the creek in the area where the dr. bends to the SE, BL hears a M start to give TCs above BL’s head, in close proximity to several POTR cavity trees. M flies N and goes silent after ~ 1 min.

2135—M starts giving LC from a small ridge top immediately N of the creek, and 20 m N of his previous position. BL pursues, and then hears a F also giving LC from this area. BL arrives in this area just as both birds go quiet. BL then observes one FLOW flush from this location to the vicinity of the cavity trees, where BL had first heard the M, and where DL is now positioned. M proceeds to give LC and TC from this area until 2145.

2205—F starts giving LC, with some sporadic FSC, from the vicinity of the small ridge top again (BL suspected she never moved from this area). BL gets eyes on her ~ 8 m high on a live PSME twig. At this same time, M is giving LCs near DL’s position in a PSME by the clump of POTR cavity trees – specifically next to an un-enumerated tree ~1m NE of tree #1175 with some good-looking flicker holes. M goes quiet after 3-4 min.

2225—F still quietly perched in PSME. DL joins BL.

2226—F flushes ~15 m to the S, back toward the creek/cavity trees, after the M starts giving LC in this area. Apparent PD by the M.

2228—M flies off.

2229—M returns, giving LC, and DL observes copulation attempt.

2230—BL leaves area to set up lure net, while DL stays to track F.

2245—F flushes to the S from perch where copulation occurred. She flies out of sight, but DL hears both the M and F giving location calls near the clump of POTRs on the south side of the creek. A few minutes later, M flies up a side drainage to the NE out of sight (>50m). DL stays in the area to listen and taps cavity trees on the N and S side of the creek but hears and sees nothing.

2300—BL starts playback at this time. Lure net is located on lower S-facing slope of ridge, just N of creek, and ~ 50 m NE of truck parking area.

Vegetation: Net adjacent to patch of subdom POTR; slope mostly consists of mature PIPO/PSME

Weather: Mostly clear, light breeze (breezier on ridge tops), 18 C

X: 478802

Y: 4330206

+/- 5 m

2315—M approaches net from the S, giving TC (presumably B10 M).

2330—M goes quiet in net area. DL arrives to monitor net while BL leaves for CN7 territory.

2335—M returns to the net site giving TCs and TECs for about 2 minutes before going silent.

2340—DL moves the playback toward the area where the FLOWs were spotted earlier and the M immediately returns to the nest site giving TCs and TECs. He follows DL back to the net making a few short flights overhead before going silent. DL walks the playback to the S once more and upon return finds a bird in the net. This M came into the net silent. Presumably this is the CN10\_2016 M as we did not hear any other Ms in the net site while he was being processed.

2350—**Capture un-banded M**. 3rd shelf from the N.

**Band # 1833-03378 (on L leg)**

85.0 g LWC: 139 mm

- 28.5 g LLP(5): 106 mm

56.5 g LLP(6): 115 mm

Rect: 61 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 2.5 | 2 |
| P4 | 1 | 1 |
| P5 | 2 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1 |
| P9 | 1.5 | 1 |
| P10 | 1.5 | .5 |

Under white light on back of wing, P4 looked relatively light on the main portion of the vane in comparison to 3 and 5. 1 and 2 also looked light. This was true on both wings. (1, 2, and 4 look visually lighter than all the rest)

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | .5 |
| P4 | .5 | 1 |
| P5 | 1 | .5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2.5 | 1.5 |

2430—Release. M makes a short flight to a nearby low branch where he sits for ~2 minutes before making a strong flight to the S. Playback is also turned off at this time and BL begins to break down the net.

2440—We leave to go meet the rest of flam crew and debrief.

## 7 June 2016

Afternoon—Flam Crew arrives in Hayman to selectively peep past nest trees and particularly nice-looking cavities in CN5, CN10, CN11, and CN14. **We found the CN5\_2016, CN14\_2016, and CN8\_2016 nests.**

1520—DL and BL arrive in CN10 territory to cherry peep cavity trees. We travel to the clump of POTR cavity trees in the bottom of the CN10 drainage where we had the courtship vocalizations last week.

1528—**We tap on the cavity tree in the center of this clump (which contained what we thought was the best NOFL cavity in the territory), and a F FLOW rises to the entrance—this is the CN10\_2016 nest tree! POTR nest tree is live, 25 cm dbh, and cavity faces W (down drainage), and is ~11 m high. Nest cavity is one of 4 total cavities in the tree, is the 3rd cavity from the top—the nest cavity also has the largest NOFL entrance of any of the tree’s cavities. The unenumerated nest tree is located ~120 m up-drainage (E) of the parking area, and is 3 m S of the creek in the area where the creek bed starts bending strongly to the SE (just W of an area of high burn). The nest tree is ~ 50 NW of the CN10\_2015 nest tree.** F descends after 1-2 min; she rises again when BL flags the tree, but then quickly descends again.

Nest coordinates:

X: 478842

Y: 4330057

+/- 4 m

1540—We leave for CN8 territory.

2030—DL arrives at the CN10\_2016 nest site to watch the F flush and to peep.

2037—M gives LCs from across the drainage. F responds and M flies into nest site giving LCs. He perches on the adjacent PSME that he was calling on last time we were in the drainage.

2040—F gives a few more LCs with no response from the M.

2042—**F flushes. I peep. There are NO eggs in the cavity. NOTE (BL): This apparently reflects the fact the F has not commenced egg-laying yet, despite the passage of 5 days since we observed courtship behavior and a rather sedentary F, and was just roosting in what will be the nest.**

2047—I walk down the road to meet BL at CN8.

## 17 June 2016

2031—DL arrives in the CN10\_2016 nest site to watch the F flush and peep.

2052—M begins giving LCs and comes into the nest site. F begins giving FSCs.

2054—F flushes before the M makes a PD. **I peep. There are two eggs centered and barely touching.**

2057—I leave to meet MC at CN8.

## 1 July 2016

2025—MC and DL arrive at CN10\_2016, DL pproaches the nest and gets the net up to height.

2035—DL places net over the cavity, F comes up.

2036—F flushes into bag. **She is unbanded.**

**Band # 1833-03400 (on R leg)**

2040—F is released with A SAF N. **A peep reveals 2 eggs with a prominent pip mark in one of the eggs.** We leave.

## 14 July 2016

2053—KM and BL arrive at the CN10\_2016 nest to attempt capture of M and F and assess status of nestlings. F is not in the cavity entrance, and all is quiet in the nest site.

2057—BL raises the capture net over the cavity entrance. No response.

2111—Still quiet in the nest site, so **KM peeps the nest cavity—all we see is one unhatched egg, with no egg fragments from a 2nd egg, and no evidence of an owlet.** **NOTE: Evidence suggests partial predation, but this is an unusual occurrence, and it is uncertain whether this may have occurred before or after hatching of the 1st egg.**

2125—After writing notes and listening for several minutes in the nest site, we leave. Nothing seen or heard.

# CN10—2017

## 1 June 2017

2041—ES and BL arrive in the CN10 territory to listen for courtship activity and nest search. We spread out to listen along the Little Turkey Cr drainage bottom, with ES listening ~ 100 m up-drainage (SSE) from the CN10 parking area, and BL farther up-drainage. Weather: mostly clear, calm, ~ 15C.

2045—**ES taps on the CN10\_2014 nest tree (tag # 1022), and a F FLOW rises to the entrance—this is the CN10\_2017 nest tree! Nest tree is a POTR full snag, approximately 20-22 cm dbh, and nest cavity is the same cavity as was used in 2014—approximately 4 m high, facing upslope (WSW), and was originally a NOFL cavity (before being enlarged). Nest tree is approximately 100 m up-drainage (SSE) of the CN10 parking area, and ~15 m upslope (WSW) of the creek bottom, with lots of fallen timber in the general area.** ES backs away to observe the nest from a distance, while BL leaves his position up-drainage to retrieve peeper from vehicle.

2048—ES hears 4-note LCs from up drainage, ~50m ENE of nest tree. F flushes from nest toward LCs.

2054—BL arrives with peeper and ES peeps cavity—**we observe 2 eggs in the center of the cavity, touching, indicating that the F is currently incubating (NOTE: this is the only nest we have found so far this week with any eggs and where incubation has been initiated).** We back off to a position where we can silhouette the nest cavity against the sky.

2112—We back farther away from the nest to allow the F to easily return to the cavity, and then BL leaves to travel farther up-drainage again to listen for any other possible FLOW in the upper drainage.

2135—ES gets closer to nest tree, at a distance where it is possible to observe silhouettes near nest tree.

2136—ES hears one TEC from within 5m of nest tree, closely followed by another TEC from ~30m up drainage E of the nest tree. The two M FLOWs repeat TECs back and forth 2-3 times before one FLOW leaves the nest cavity. It is likely that this was the territorial M, but ES did not see the M arrive at the nest cavity so it is also possible that the F flushed again. No more calls or silhouettes after this.

2155—After hearing nothing, BL leaves the upper drainage to scout out an area for lure netting.

2158—ES hears one TC up drainage, ESE of nest tree.

2207—ES hears 3 more TCs up drainage, ESE of nest tree ~75 away.

2215—ES leaves vicinity of nest tree to assist BL setting up lure net.

2220—BL starts setting up lure net on the WSW facing midslope across the creek from the CN10\_2017 nest, approximately 50 m up-drainage from the CN10 parking area in a small drainage dominated by young POTR. ES joins to assist BL shortly thereafter.

2240—We start playback.

Vegetation: Mature Pipo-Psme, with net adjacent to young (5-10 cm dbh) POTR.

Weather: Mostly clear, light breeze of 5 mph with occasional but consistent gusts to 10 mph (enough to fill out the net).

X: 478803

Y: 4330213

+/- 3 m

2241—M responds with TC approximately 30 m from net along the midslope, S of the net (probably CN10 M). He approaches to within ~10 m of the net, giving TC and TEC.

2248—M goes quiet, but net is empty.

2301—M responds again with TC in approximately the same location as the first response.

2307—3 more TC responses come from similar location.

2315—GHOW calls from within 200 m of lure net, shortly followed by FLOW TC. There were no more FLOW calls after this.

2330—We start to break down net, with two GHOW still calling ~ 200 m away.

2340—We leave area for CN8 territory.

## 16 June 2017

2044—KM, BL, and JE arrive at the CN10\_2017 nest tree in order to attempt a M capture and deploy a pinpoint. We get a spot on the cavity and wait for the F to flush to we can peep the cavity.

2053—M gives LC from about 20m NW of the cavity.

2056—F gives an FSC from the cavity.

2058—M gives LCs from a potr snag about 10m directly W of the nest tree.

2101—M gives a PD, but he does not make a full entrance.

2106—JE and KM hear a potential courtship call from the cavity.

2110—M lands in a potr snag just west of the cavity tree.

2117—BL has quietly raised the capture net and set it on a very low branch on a conifer snag next to the nest tree. KM approaches the net to switch control over the capture pole. F comes up in the cavity, seemingly unprovoked.

2118—F flushes. BL and JE leave the nest site to set up a lure net. KM stays at the capture pole, but backs out to allow F to return to cavity.

2125—M flies into area and sits in the conifer just N of the nest tree. The F makes soft, cooing courtship calls.

2130—M makes a quick PD and does not fully enter the cavity. KM does not swing.

2202—BL and JE leave to set up a lure net and begin playback of T42. The net is set up on the S-facing midslope of Little Turkey Cr, approximately 50 m NE of the CN10 parking spot.

Vegetation: mature pipo/psme burnt by Hayman Fire, with young potr in the drainage bottom.

Weather: Clear, calm, 17C

X: 478804

Y: 43330217

+/- 3m

2207—BL and JE hear TCs and TECs ~40m W. This only lasts for a couple minutes.

2212—The presumed CN10\_M returns to lure net site, once again singing for a couple minutes.

2218—The M is heard singing from much further, ~100m away. He does not return near the lure net site, but is heard somewhat consistently through the night. The CN10\_M seems to respond to the playback from KM’s listening perspective. He responds to the playback for the majority of the night.

~2230—M flies back into the nest area, taking a break from responding to the playback. He uses the same approach conifer just N of the nest tree. He makes a quick PD, KM attempts to capture, but he flies away quickly.

2223—BL changes the PB to megascops. The M can still be heard, but is still not in close proximity to the net site.

2252—The M has not come in close to the net so BL changes the PB once again to another megascops and after a few minutes tries walking around with the PB to lure in the bird.

2303—PB is stopped and net is broken down. No bird was captured.

2312—BL, KM, and JE leave CN10 for the night.

## 22 June 2017

2034—LD and BL arrive at the CN10\_2017 nest to attempt capture of F, or M if F is not captured. F is not in cavity entrance when we arrive, and LD prepares to get in capture position with the brown pole. Weather: Skies with ~50% cloud cover, calm, ~16 C.

2047—LD in capture position.

2048—While LD makes minor adjustments to net position, F rises to cavity entrance and flushes into the top of the net, but extricates herself just as net is lowered and BL reaches for her. We back off from nest.

2052—M arrives in nest area, giving LC, then leaves in the direction the F flushed.

2054—F returns to nest cavity.

2058—We hear M giving TC approximately 50 m to the NE, across Little Turkey Cr.

2118—LD leaves to locate suitable site for lure net, down-drainage near the CN10 parking area and the Cedar Mtn Rd crossing.

2130—BL prepares to get in capture position at the nest to attempt capture of M. M makes an apparent PD at the cavity at this time.

2145—M arrives in nest area, briefly flies to the cavity entrance where he gives 2-3 LC (F responds with 2-3 FSC), and flies off—BL was uncertain whether PD was successful.

2210—LD begins PB ~30m down drainage of CN10 parking spot to the NE. Target trees are multiple young potrs and a broken top pipo snag. Net opens NE/SW.

Vegetation: Young potrs, mixed and snag pipos

Weather: Clear, calm, 14C, turned to breezy later in the night

X: 478763

Y: 4330230

+/- 3m

2215—M is seen flying around nest area, but is quiet and does not approach nest tree.

2225—LD hears M responding to PB from the SW of net ~20m away, giving TECs and HECs, presumed to be the CN10\_2017 M FLOW.

2232—LD hears second M FLOW responding simultaneously to PB ~60m W of lure net, presumed to be the CN8\_2017 M FLOW.

2234—LD approaches PB to switch from Track 42 to MEGA as CN8\_2017 approaches within 30m of net.

2238—Third M FLOW begins calling simultaneously to the N of the lure net’s position. This M FLOW does not have a presumed identity, however it is possible for him to be the CN7\_2017 M or a new territory.

2250—LD changes PB back to Track 42 from MEGA as presumed CN8\_2017 M FLOW and the unknown territorial M FLOW stop vocalizing.

2305—CN10 M goes quiet.

2308—CN10 M returns giving TECs/HECs.

2321—LD temporarily turns of PB per BL request.

2330—F flushes nest cavity, apparently of her own volition. BL backs away from capture position.

2334—F returns to nest cavity.

2337—LD no longer hears CN10 M FLOW vocalizations.

2353—BL: M returns to nest area and gives 1-2 LC as he lands in the cavity entrance. M does not go into the cavity, however, and he flushes as the net is raised.

LD: Restarts PB.

2405—LD hears M FLOW vocalizing NW of cavity 100m+ away, presumably CN8\_2017 M FLOW, Second M FLOW begins vocalizing at roughly the same time to the SW also at 100m+ away, presumed to be CN10\_2017 M FLOW.

2412—BL leaves the nest area.

2425—LD stops PB and breaks down net.

## 29 June 2017

2033—MC, LD, and JE get to the CN10\_2017 nest to attempt a F capture.

2036—LD approaches and gets the net up. Immediately, the F rises and flushes into the net. **This is the CN10\_2016 F!**

**Band # 1833-03400 (on x leg)**

89.0 g

- 29.5 g

59.5 g

2037—A peep shows **2 hatchlings and 1 egg. Both of the hatchlings are in natal down with eyes closed. One of them was holding its head up and moved it a bit.**

2041—F is released with strong, parabolic ascending flight. We leave.

2358—We return to CN10, set up a lure net, and start PB of T42. The net is set up ~45m SE of the parking spot, in between a stand of young aspen.

Vegetation: young potr, pipo/psme snags in high burn area

Weather: calm, 30% cloudy, 14C

X: 478755

Y: 4330251

+/- 3m

2440—We stop PB and break down the net. No responses were heard.

## 7 July 2017

2035—KM, ZM, and ER, arrive at the CN10\_2017 nest to attempt to capture the M at the nest with a mist net. The F is down in the cavity upon our arrival.

2043—M gives TC ~50m NE across the drainage, likely calling off roost.

2045—M LC within 20m of the nest tree.

2054—The F pops up in the cavity and flushes to the M. We go into the nest site and begin setting up a collapsed mist net in front of the cavity. **Peep reveals at least two N both standing up in the cavity, chipping. They both have lots of juvenile plumage coming on the back, head, and wings. The younger of the two has a bit more natal down still attached to the juvenile plumage (~11-12 days old). According to a previous peep, it is possible that this was originally a clutch of three. I only see two definitive N. It is possible that there is a third underneath the two elder siblings, the previous peep revealed two N and an egg fragment rather than a full third egg, or the runt was booted.** While we finish mist net set up, we hear the M giving LC and the F giving FSC and occasional SC around the nest site.

2103—We finish mist net set up.

2105—We see M join F on perch in psme within 10m of the nest tree. The M hands off a prey item to the F.

2106-2126—We witness 9 PD from unknown adults to the N. During this time, we hear the beginnings of raspy begging from the cavity. (See PD sheet for details.) We allow for nine PD, just in case there is a third N in the cavity. Then we move in to raise the mist net.

2130—The mist net is erect.

2135—**An unknown FLOW makes a PD to the cavity and gets caught in the mist net. This is the CN10\_2017 F who had been previously captured. She is caught in the top shelf**. ZM extracts.

**Band # 1833-03400 (on R leg)**

xx.x g LWC: XXX mm

- xx.x g LLP(5): XX mm

xx.x g LLP(6): XXX mm

Rect: XX mm

2140—Release the CN10\_2017 F SAF.

2144—**Silent FLOW is caught in the top shelf of the mist net on the way into the cavity to make a PD (he drops a prey item when he hits the net). He is previously banded as the CN10\_2016 and, now, 2017 M.**

**Band # 1833-03378 (on L leg)**

69.5 g LWC: 139 mm

- 15.0 g LLP(5): 107 mm

54.5 g LLP(6): 116 mm

Rect: 62 mm

**Notes: Bled in 2016.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 0.5 | 0.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1.0 | 1.0 |
| P6 | 1.0 | 1.0 |
| P7 | 1.0 | 1.0 |
| P8 | 0.5 | 0.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1.5 (Notch) | 1.5 |
| P4 | 1 | 1 |
| P5 | 2 | 2 |
| P6 | 1.5 | 1,5 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2213—Release the CN10\_M. Dipping flight then strongly ascends NW.

## 13 July 2017

1335—Flam crew arrives at the CN10\_2017 nest to attempt a F capture and band/bleed nestlings. The F flushes on our approach.

1346—ER pulls two owlets and one dud egg out of the nest, putting them in a capture bag. Both owlets look to be around 20 days.

**Owlet**

60.8 g

P#5: 57 mm (23 in shaft)

P#6: 57 mm (24 in shaft)

Rect: 24 mm (12 in shaft)

Band#: 1833-03577 (R leg)

Notes: Bled LW but couldn’t get enough blood, so bled RW.

**Owlet**

59.6 g

P#5: 48 mm (23 in shaft)

P#6: 49 mm (22 in shaft)

Rect: 21 mm (9 in shaft)

Band#: 1833-03576 (R leg)

Notes: Bled R wing.

**Cavity Dimensions**

Horizontal entrance: 70mm

Vertical entrance: 50mm

Horizontal depth: 110mm

Vertical depth: 135mm

Entrance thickness: 15mm

DOH: 20.0 cm

Height: 13’10”

1420—ER returns the owlets to the nest but does not return the dud egg.

# CN10—2018

## 14 June 2018

2040—AM, ES, and JE arrive at CN10 territory to listen for vocalizations, tap cavity trees, and lure net. ES begins by the vehicles, AM begins at the CN10\_2017 nest, and JE begins farther up drainage near the CN10\_2016 nest.

2100—AM hears M TCs 100m SE of the CN10 parking spot, 20m S of the main drainage. We presume the vocalizations to be the M calling off the roost. No other vocalizations are heard.

2103—JE also hears this M calling off roost, but from her position on the W side of the creek near the CN10\_2016 nest, she thinks the M is ~80m NE.

2110—ES has a difficult time finding the past nest and other known cavities near the parking spot because of the thick and relatively tall (a few feet overhead) young vegetation. I slowly make my way up towards AM and JE.

2122—While flagging an un-enumerated cavity tree ~5m SE of the CN10\_2017 nest tree, ES hears FSCs. I pause to listen—there they are again! It’s impossible to tell where they came from, and they’re very quiet, so I assume they are coming from inside a cavity. I tap the CN10\_2017 nest tree again and the tree I’ve just flagged. Nothing.

2123-2200—ES, JE, and AM tap and listen like fiends in a 50 m radius of where ES heard FSCs, which is within 70 m of where JE thought the earlier TCs (presumably off roost). We don’t hear any other vocalizations.

2223—We start playback, T42 50m SE of CN10 parking spot on a mid, SW facing slope position. Net is open E-W.

Vegetation: Open stand of sticks and mature pipo/psme with young potrs flanking net.

Weather: clear sky, no wind, 21.0 C

X: 478804

Y: 4330217

+/- 3

2227—M comes in almost immediately from the S. We hear M HECs 5m E of net.

2229—We hear M TECs 20m NW of net.

2232—We change track to Megascops and hear M TECs 10m W of net.

2238—ES walks speaker towards FLOW, and he continues calling despite two very loud cars playing music slowly passing through. After a few minutes, PB is returned to original spot behind net.

2243—We hear M TECs 5m S of net.

2248—We hear M TCs and occasional TECs 30m W of net. M retreats towards the main drainage.

2255—ES walks back up to where she heard FSCs earlier, tapping (for the 6th time) the three known cavity trees that are still standing in the area. I listen for 30 minutes but don’t hear any nesting vocalizations. I walk up drainage to try to track down the two past nest trees we still haven’t located, but without any luck. Several potr and conifer trees have fallen, and I can’t find the past nest trees based on GPS coordinates, so I assume they’ve fallen.

2257—JE and AM hear M TCs 70m W of the lure net near the main drainage.

2303—JE hears something that sounded like it may have been wing flaps at the net, but net is empty.

2305-2338—JE continuously hoots at M FLOW and keeps him interested the rest of the night. M makes TCs, TECs, and the occasional HECs while switching between tall conifer perches around the site. M never perches any lower than ~30ft from the ground.

2339—We stop playback. M is still hooting at JE 5m E of the net site as we break down. She looks for a band on him but doesn’t see anything shining back around his leg, however this also could have been blocked as the M was pretty high in the tree. We pack up and leave.

## 21 June 2018

1430-1700—Flam crew peeps out most of CN10 to look for the 2018 nest tree. ES spends some quality time near the location where she thought she heard FSCs. We do not find anything.

## 09 July 2018

2200—ON, AM, and ES arrive at the CN10/CN7 territory boundary to set up a lure net to attempt to capture birds from a possible CN10 or CN7 nest.

2220—We set up the lure net in the drainage bottom ~30m N of CN10 parking spot and start PB T42. The net is open N/S. M immediately starts giving TCs from NW ~75m but quickly goes quiet.

Vegetation: young potr, burned conifer snags

Weather: clear, calm, 18C

X: 478747

Y: 4330242

+/- 3m

2235—M comes in from SW ~30m giving HECs but quickly goes quiet.

2239—Change PB to HECs.

2241—ON spots a silent FLOW perched just adjacent to the net. We shine a light and see it flush in the direction of the net.

2243—**After hearing wing flaps, we check the net to find the unbanded bird captured in the bottom shelf on the S side of the net**. There are no signs of pinfeathers or a brood patch so based on earlier vocalizations we think he might be the CN7 M.

2246—AM extracts the bird.

**Band # 1833-32555 (on L leg)**

69.0 g LWC: 129 mm

- 16.0 g LLP(5): in shaft (both wings)

53.0 g LLP(6): 106 mm

Rect: 58 mm

**Notes:** Skin peeling on belly and both wings. P2, P3, and P4 in molt. Significant notching on secondaries on both sides. No sign of parasites. Bled both wings, moderate hematoma on L wing, no hematoma on R wing.

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | In molt | In molt |
| P3 | In molt with notch | In molt |
| P4 | In molt | In molt |
| P5 | In shaft | In shaft |
| P6 | 1 | 1 |
| P7 | 1 | 2 |
| P8 | 2.5 | 2 |
| P9 | 2 | 2.5 |
| P10 | 2.5 | 2.5 |

2327—Horizontal then ascending flight N.

2329—Cut PB.

2335—We break down the net and head out for the night. No other FLOWs are seen nor heard.

# CN10—2019

## 6 June 2019

2048—BL and SL arrive in CN10 territory to listen for nesting activity, tap historic nest trees and tap other surrounding cavity trees with the intent of locating the potential CN10\_2019 nest. SL starts tapping and listening ~ 75 m SW of CN10 parking spot at the CN10\_2017 historic nest site and works ~ 50m N/S of that point. BL starts listening and tapping ~ 100m up-drainage from the CN10\_2017 nest site and works ~ 50m N/S from that point.

2059—SL is ~ 25 up-drainage from the CN10 parking spot by the creek and hears M FLOW LCs ~ 25m SE.

2100—LCs seem to be getting more distant, moving up-drainage.

2109—BL moves down drainage from his original position, and then hears M FLOW LCs and FSCs by POTR cavity tree #1386 in the creek bottom.

2111—SL follows the M FLOW vocalizations up-drainage and meets BL by tree #1386. LCs are continuous for ~ 15 min.

2126—LCs stop. BL moves down drainage to listen by historic nest CN10\_2019 and SL stays by tree #1386.

2130—SL hears TECs from ~ 25m N followed by wing-flaps from ~ 15m N moving over tree #1386 to the S.

2138—M FLOW vocalizations stop.

2145—BL gives hoots by historic nest tree CN10\_2017. There is no response.

2210—BL leaves historic nest tree CN10\_2017 to set up a lure net ~ 50 m NE of the CN10 parking spot with the intent of luring in the previously vocalizing, potential CN10\_2019 M. SL stays by cavity tree #1386 and nearby cavity trees to watch and listen for potential nesting or territorial activity.

2230—SL taps surrounding cavity trees, including tree #1386, to look for the presence of a nesting F FLOW. No activity is observed.

2231—BL starts playback (Megascops TEC).

Vegetation: Net flanked by young stand of Potr to E, and surrounded by mature Pipo/Psme on upper mid-slope

Weather: Calm, 25% cloud cover, 17 C

X: 478802

Y: 4330197

+/- 3

2234—M responds with TC ~ 30 m SW of net, and quickly moves to the immediate net area.

2243—M goes quiet.

2245—M resumes giving TC ~20 m SW of net.

2253—M goes quiet.

2308—Stop playback and take down lure net.

2315—BL and SL return to tree #1386 after taking down the lure net to tap the surrounding cavity trees to check for the presence of a nesting F FLOW for a final time before leaving the area.

2325—SL and BL leave CN10 territory. No nests were found. (**note: Although no nests were found, we observed that the majority of M and F FLOW vocalizations originated from within ~30m of tree #1358. Due to the high concentration of TCs and FSCs within this area, we believe that a FLOW nest is in this area and future listening, tapping and peeping is necessary).**

## 7 June 2019

1600—AM, JE, BL, and MC arrive in CN10 to cherry peep along the drainage bottom in past nest cavities still standing and other good-looking cavities. We start around the CN10\_2017 nest and move SE up-drainage, but we find no evidence of FLOW nests.

1730—We leave.

## 1 July 2019

2350—JE, ON and KC stop at the CN10 territory to listen and give hoots for a few minutes on our way out of Hayman. We park at the CN10 parking spot and head NE up the drainage.

2351—JE gives some hoots. M responds with TCs ~100 m S. JE continues to hoot and M continues to respond with TCs, moving to be SE ~50 m. We never get eyes on him.

# CN10—2020

## 20 July 2020

2122—KC starts PB in the northern end of CN10 to lure for a territorial M on which to deploy a migration PinPoint/Geolocator unit. Lure net is ~50 m E of the CN10 parking spot. Net is open E/W. Start with T42

Vegetation: Young potr, Mature pipo

Weather: Clear, Calm, 19C

X: 478807

Y: 4330210

+/- 3

2146—KC walks PB S and then W across the road.

2203—Switch track to Psiloscops AZ

2228—Switch track to T42

2230—M TCs ~100 m S

2238—Switch to track Psilscops AZ

2239—M TCs ~75 m S

2249—M gives TCs ~25 m S

2250—Switch tracks to Megascops

2252—**Snag an unbanded M (#1833-32637) in the 3rd shelf. He flew into the net from the W.**

**Band # 1833-32637 (on L leg)**

61.5 g LWC: 133 mm

- 6.5 g LLP(5): XX mm

55.0 g LLP(6): XXX mm

Rect: XX mm

**Notes: We attach a geolocator device to M. Geo #BU563**

2346—We release M. Strong ascending flight S

# CN11—2010

## 11 June 2010

2108—JSG, JG, and BG arrive at CN11 and attempt to spot map M. On 5 June 2010, SY, BG, and JG followed this M into the area S of the CN5 parking spot.

Weather: 15C, foggy with sporadic light rain.

2138—JG gives TCs and CN11 responds. JG flags a general-area songpost.

2149—Together we flag 3 general area songposts on the M.

2201—M continues singing and we flag 5 songposts. He calls sporadically until 2221.

\*Note: The three General-area songposts we flagged lead us to the area where we flagged the 5 songposts. The M did not move very far between the five trees from which he sang. Nearby to these trees is a small patch of fairly-large size Potrs, both snags and live trees. We searched these trees for cavities and found a couple, but could not locate the nest.

2251—We leave the area and it is now raining moderately with lightning and thunder.

## 18 June 2010

2021—JG, JSG, and BG park at CN5 parking spot. BG enters CN11 to attempt to locate nest or at least potential nest areas, beginning with location of songpost #2 from 6-11-10.

X: 0481520, Y: 4333158

JG and JSG go to CN5 nest.

2101—BG hears TC further down drainage from location by big round rock. BG pursues.

X: 0481222, Y: 4332997

2110—Hear more TCs even further down drainage, then TCs jump all around drainage before

BG can reach bird for a songpost. Bird sings from W, then S, then E, but never as far

north as BG.

2121—TCs stop.

2143—Hear TCs to SE, also hear another bird further toward CN5 – territorial encounter!

2145—Hear F begging in drainage further S, continue towards vocalizations.

2151—F begs again, still S, BG pursues. M giving TCs from same direction.

2156—F begs again very close.

~2200—BG sees unknown person, leaves immediately and returns to vehicle.

## 29 June 2010

1449—Flam Crew begins peeping in CN11 where a female was heard begging on 6/18/10 and a male was songposted on 6/11/10.

1651—**On our way out of Pirate Creek the CN11 nest was found upon tapping the cavity tree CN11\_1163 #1163.** The female comes up for less than one minute. The tree is a full snag potr with 25.0 cm dbh. The cavity is the lower of two cavities on the NE side of the tree facing up drainage. The cavity is approx. 5 m from the ground with an entrance diameter of 5.5-6 cm. The tree is surrounded by mixed age Pipo/Psme/Potr on the left fork at the head of the drainage where Flam Crew has had all previous experiences.

X: 481590

Y:4333280

+/- 4m

1655—We leave with the female back down in cavity.

2030—JSG and JG arrive at CN11 nest to attempt capture of one of the adults. F is down.

Weather: calm, clear, 21C

2031—JG puts net over cavity entrance and female pops up in cavity.

2032—F flushes into net and as the net is being brought down F gets out and flies away.

2034—**We peep cavity and see 3 nestlings which are white and are moving around with eyes completely open. The oldest has some darker plumage on the back and head.**

2035—We back off the nest to allow F to come back on.

2051—JG gets net ready to capture M.

2054—Silent bird lands in Pipo 15 m from nest tree and sits not moving for about 10 min.

2102—M gives LCs and flies around giving LCs occasionally. We back off from nest.

2111—F comes back on.

2114—JG gets back in position to attempt to capture M.

2119—M sits in Pipo to S of nest tree and gives HECs continually until JG takes down net 3 min later.

2131—We leave the area because we do not want to disturb birds any longer.

2325—JG and JSG arrive back at CN11 nest to attempt to capture M.

2327—JG gets in position with net standing in a stand of young aspen to avoid being seen by M.

2329—M gives TECs at us.

2331—JG brings down net and we back off from nest.

2335—JG puts up net again.

2338—JG takes down net and we leave.

## 6 July 2010

2046—BL and BG arrive at the CN11\_2010 nest to attempt capture of either F or M. BG raises the capture net over the cavity. We tap, but no response. Weather: overcast and threatening, breezy.

2048—F gives FSC from off cavity, approximately 15 m to the W. We lower net and Peep: 2 nestlings in mostly juvenile (grey) plumage, very active with heads oriented upwards; appear to be approximately 13-14 days old.

2052—Light to moderate rain starts to fall, and it becomes very busy. We retreat and take shelter.

2104—Precipitation has mostly stopped.

2105—We hear M LCs from *pipo* ~5m from nest tree.

2106—M gives LCs from farther away, as well as a couple of scolding calls.

2107—Lots of M LCs (3 note) as M circles nest moving from tree to tree.

2109—Possible PD from M, he does not fully enter cavity.

2110—Scolds from M.

2112—M comes to cavity for another possible PD. Seems the cavity may be shallow enough that

he can perch and lean in to deliver prey without going fully inside cavity.

2114—PD by M, again from a perched position at the entrance of the cavity (this is true for all subsequent M PDs).

2115—Begins to rain again, F calls off cavity from S.

2117—F begs/scolds again. M makes another PD. Still raining.

2121—PD by M, rain has mostly stopped, but it is still too breezy to set up the mist net in front of the cavity.

2122—F scold.

2125—PD by M.

2127—PD by M.

2129—PD by M.

2133—PD by M.

2137—PD by M.

2141—PD by M.

2144—PD by M.

2145—PD by M.

2149—PD by M.

2204—PD from M after LCs (bordering on TCs). M then continues to give TC/TECs.

2205—We begin to set up mist net in front of nest tree to attempt to capture M (breeze still present, but mostly light).

2222—M gives more TECs.

2236—M flies from small potr above net to make PD. We decide to try raising net by hand.

2252—**We catch M in the top shelf of the mist net as he attempts PD.**

**Bird is unbanded, we band with # 1593-64737 (on R leg)**

84.0 g LWC: 126 mm

- 30.0 g LLP(5): 91 mm

54.0 g LLP(6): 100 mm

Rect: 61 mm

**Notes**: **BL attaches geolocator**. We do not take blood due to time. P2, P3, and P4 are

being replaced on both sides.

2323—We release M, relatively strong flight to the W as he flies under the crown of an adjacent tree, and appears to ascend before we lose him.

2331—We have net broken down. We wait to see if we can observe more M flight with newly

attached geolocator.

2341—Owlets begging with hissing call. No sign of M. BL walks around in direction M flew to

see if he can spot him.

2348—BL and BG leave nest area without having seen any sign of M. We go to join DW and

JSG at lure net in possible CN12 territory as they have just caught bird.

## 12 July 2010

1529—We arrive at CN11 to capture F and measure, band, and bleed nestlings.

1531—BG puts up capture pole.

1536—DW peeps cavity with net still in place—F is not there. We see 2 nestlings. Nestlings are beginning to develop facial discs and have lost most natal down.

1539—Start excavating cavity.

Entrance dimensions 45 x 45 mm

Thickness 35 mm

Hor. Depth 120 mm

~1545—Pull out 2 nestlings. We band both nestlings and take genetic blood and smears for

both.

**Band # 1539-64775 (on L leg)**

51.8 g

P#5: 54 mm (26 in shaft)

P#6: 55 mm (19 in shaft)

Rect: 21 mm (11 in shaft)

**Band # 1539-64776 (on L leg)**

51.8 g

P#5: 50 mm (23 in shaft)

P#6: 51 mm (23 in shaft)

Rect: 21 mm (12 in shaft)

1618—Put nestlings back into cavity and we leave.

2028—JSG, DW, and BL arrive at the CN11\_2010 nest to attempt capture of F. JSG raises the capture pole at this time, and BL taps tree—no response, suggesting F may not be in the cavity (she was not in the cavity when we processed owlets this afternoon). Weather: mostly clear, calm, 25 C.

2035—We proceed to set up a mist net in front of the cavity entrance.

2046—Mist net set-up is complete.

2049—Owlets start giving sporadic begging calls from the cavity that are audible from our position 10-12 m away.

2053—M arrives in the nest area giving LC. He perches on a lower limb of a large *Pipo* 5m SW of the nest tree for several minutes—we try to observe the geolocator on his back with our binocs, but the lighting is too weak.

2056—We observe one of the owlets begging from the cavity entrance—it may have been here already for 1-2 minutes. F arrives in the nest area around this time, attempting to deliver prey that the M handed off to her.

2059—F temporarily is captured in the mist net as she attempts to fly to the cavity, but she escapes before we can get to the net. Thereafter she became very tentative about approaching the cavity, frequently diverting her flight over the net in an apparent attempt to find unobstructed access to the cavity.

2216—**F is captured in the mist net (top shelf) as she attempts to deliver prey. F is unbanded, and we band her with band #1593—64764.**

**Band # 1593-64764 (on r leg)**

80.0 g LWC: 132 mm

- 29.5 g LLP(5): 100 mm

50.5 g LLP(6): 107 mm

Rect: 63 mm

Primaries 2 and 3 were molting on both wings (approximately 25-33 mm length), but not P1.

F yields blood for genetics and parasite smear.

2042—We release F, and she shows strong flight away from us.

2051—We leave the area for CN5 nest. Note: The CN11\_2010 M showed no ill effects of carrying the geolocator during our presence, as he flew with ease and regularly (if not frequently) came into the nest area with prey, usually attempting to hand off prey to the F.

# CN11—2011

## 3 June 2011

~1650—Crew enters CN11 territory to peep/tap cavity trees and hopefully locate CN11 nest.

1714—JG peeps CN11\_1162 #1162 and sees FLOW in the S-facing cavity. **This is the CN11\_2011 nest.** The F did not come up to the tap and remained inside the cavity following the peep. The nest tree is about 40 m SW of the CN11\_2010 nest tree and is in the drainage bottom. The nest tree is a full snag Potr directly next to a live Psme. The cavity is approximately 17 feet high and is NOFL-sized. In order to capture, lean the capture pole in from the W side of the tree to avoid the Psme.

~1730—Crew leaves CN11 territory.

2040—JG and BG arrive in CN11 nest area to capture M and hopefully recover geolocator.

2048—JG has net up and in position for capture.

2049—M gives LCs ~10 m off cavity, then gives TECs, circling nest.

2054—M gives quiet LCs, F flushes.

2055—Both birds giving LCs/TCs off cavity (mostly M). We watch to see when F returns to cavity.

2102—We move back out of nest area because M is continuing to give TCs/TECs. M stops calling as soon as we exit nest area. Unfortunately we can no longer see cavity and have no way of knowing when F returns.

2113—We leave CN11 to return equipment to vehicle before returning to lure net in CN11.

2155—JG, BG, JV, and BL begin playback in CN11 S of the nest tree on the mid-slope of Geolocator Ridge.

Vegetation: mature pipo, moderate burn

Weather: clear, no wind, 11 C

X: 481392

Y: 4333137

+/- 3m

2156—We hear response TCs in the immediate vicinity of the lure net.

2159—After passing over the net a few times, the M responding to the playback is caught in the top shelf. He approached from the W. **This is the CN11\_2010 M and he has returned with a Geolocator! HOLY COW!! FIRST RECOVERED GEOLOCATOR!!**

**Band # 1593-64737 (on right leg)**

91.0 g LWC: 130 mm

- 33.5 g LLP(5): 30 mm (broken)

57.5 g (w/ geo.) LLP(6): 102 mm

Rect: 56 mm

89.5 g

- 33.5 g

56.0 g (w/out geo)

We remove the geolocator, observe normal wear, have a photo-shoot, and release him. 2220—He flies away with strong flight.

\*Note – back at the office, we weighed the geolocator on the electronic scale – it was 1.4 g

2222—We hear TCs at the net again, probably the same M.

2223—We discontinue the playback, break down the net, and head to CN5 to set up a lure net with our remaining time. Refer to CN5—2011 for 3 June 2011 for further notes.

## 10 June 2011

2106—BL, IJ, and JR arrive to attempt to capture M at CN\_2011 nest.

Calm and clear night. 12C.

2109—F flush, BL had net up; IJ peeps: 3 eggs center touching

2117—M delivers prey to F off cavity.

2128—F back to nest.

2137—BL has net up.

2152—BL takes net down. We leave.

## 17 June 2011

2048—IJ, JR, BL arrive at CN11\_2011 nest to attempt capture of F or M. JR begins positioning capture net; M heard vocalizing from roost to the W.

2053—JR places capture net over nets cavity; M TCs heard in the nest area.

2054—BL taps on cavity tree and female flushes into net at **2055**; M still heard making TCs.

2056—**F out of net, already banded CN11\_2010 female, with band # 64764.**

**Band # 1593-64764 (on left leg)**

98.5 g

- 22.0 g

76.5 g

2058—**IJ peeps cavity; 1 egg in nest surrounded by debris of unknown nature.**

2100—F released with strong flight W; IJ, JR, BL leave area and head to CN12 to set up lure net.

2138—IJ, JR, BL begin playback in CN12 territory

Weather: calm, mostly clear, 14C

Vegetation: 50m E of high burn area in area of low burn intensity; SE facing upper slope (3) with

mixed mature/young pipo/psme

X: 481110

Y: 4333281

+/- 3m

2150—BL leaves to listen for nesting activity in Potr bottom to S.

2200—BL hears M singing in drainage south of lure net, and pursues.

2201—BL marks one songpost on M before he quiets (see Songpost Data for details), about 50 m N of the Potr bottom. A couple of minutes later, BL hears M give a few TCs approximately 60 m to the N before quieting—BL alerts IJ and JR that M may be heading N towards lure net.

2203—M TCs/TECs very close to net.

2211—M continues to make consistent TC/TECs from pipos N and S of net.

2221—M stops calling and is silent for first time.

2223—IJ discovers M in the lure net; M in 3rd shelf of lure net, flew in from S. M is the already

banded **CN11\_2011 territorial male (Band # 64737)**, previously caught in 2011 season with geo-locator.

**Band # 1593-64737 (on right leg)**

**84.0 g**

**- 22.0 g**

**62.0 g**

2246—M released with strong flight to the E.

2247—Stop playback and begin breakdown.

## 24 June 2011

2151—JG and JR arrive at the CN11\_2011 nest to attempt to capture the male. When we arrive, the F flushes, so we back off, set our gear down, and head toward the NE to listen in the vicinity of other CN11 cavity trees for possible other nest.

2212—While in the vicinity of the clump of enumerated cavity trees to the NE extent of CN11, we hear a M giving TCs.

2230—As the M at 2212 is still giving TCs, we decide to follow and attempt to songpost him. We follow him back to the immediate vicinity of the CN11\_2011 nest tree, not marking any songposts, but determining that his territory extends at least as far NE as the extent of the CN11 cavity trees to the NE.

## 14 July 2011

2020—SY, JV, and PS arrive at the CN11\_2011 nest to capture the M and F.

Weather: 17C, cloudy, light rain, calm.

2026—JV gets the net up over the nest cavity and to our surprise a NOFL flushes out of the cavity and into the net and escapes.

2030—**We peep the cavity and it is empty. There are a few feathers and some egg shells in the cavity (unclear if these are NOFL or OTFL. Note: Flam nest has apparently failed or fledged – unclear which.** We spread out to listen for a possible fledge group.

2037—PS hears a single M LC far away to east of nest.

2101—SY hears a F scold in the distance – direction was unclear though was likely to the E. PS and JV join him in the area where the scold was heard and make occasional fledgling begging calls. We get no responses from the F and hear no begs from the fledgling.

2117—SY gives a couple hoots and a M responds far to the south in the main CN11 drainage. This might be CN12.

2137—JV hears TCs in the main drainage again and we follow.

2140—M is silent.

2156—SY, JV, and PS follow CN11 M across the main drainage. He is hopping around from perch to perch giving TCs. At one point he was heard responding to the CN12 M.

Weather: raining, calm, 18 C

2220—We leave, not having located the possible CN11 Fl group.

# CN11—2012

## 30 May 2012

2015— SY and NS set out walking north from road in CN11.

2021 – **SY locates CN11\_2012 nest at site of 2011 nest, tag #1162. Female is up as we approach. Nest faces north (away from road) approx. 25 ft. high in potr snag in drainage bottom. Potr is adjacent to and touching nearby psme – difficult capture site. Nest tree is approximately 300 m S of the 90-degree bend in 9-J road (just W of the CN5 territory), in the bottom of a Potr-dominated swale.**

2025 (approx.) – SY leaves for vehicle to get nets, NS remains to observe.

2044 – Female alternates between up and down in the nest several times.

2045 – Female moves back down in the nest.

2056 – Net in capture position.

2100 (approx.) – SY leaves site to assist CN5 lure net capture. NS remains to observe.

2102 – Occasional TCs heard from NW.

2110 – TECs heard again from NW, closer.

2111 – Female flushes nest.

2125 – Female returns to nest.

2135 – Male lands in psme ~1m SE of nest, giving TCs.

2140 – Male makes three rapid prey deliveries over the course of ~6-7 min.

2150 – SY returns, net back in capture position.

2158 – Male makes fourth PD. SY attempts capture, male is caught momentarily in net before escaping (possible hole in net?) Male flies away to the NW.

2240 – Male returns giving TCs and TECs. Female is begging quietly. Male is hesitant and continuing TECs in response to our presence, but makes a fifth PD. SY attempts second capture. Male crawls sideways out of net and lands in nearby tree, continuing TECs.

2243 – Male flies to the SE, continuing occasional TCs.

2245 – Net taken down.

2250 – SY and NS leave site.

## 08 June 2012

2022—JV begins raising capture pole to cover the presumed nest cavity (faced SW).

2023—F flushes from an E-facing cavity ~16.5 ft high.

2026—**JV peeps nest; there is 1 egg off to the side in the cavity**. We back off.

Vegetation: mostly young potr and medium aged pipo. Some psme

Weather: clear, calm, 23C

2059—M begins giving TCs SSE of the nest.

Weather: few clouds, little wind, 20C

2111—M is silent for the first time. NS and MD move in to get eyes on the cavity.

2120—M successfully gives a PD. He flew down into the cavity and remained for a couple seconds before leaving.

2128—JV has the net in place.

2131—M flies to cavity tree and then to nearby psme and gives TCs/TECs briefly before going silent.

2225—No action until we take down capture net and leave to go to CN10, M gives a few TCs as we walked away.

## 12 June 2012

2034—JR has net covering nest cavity, the net got snagged twice, but the F never flushed.

Weather: cloudy, calm, 16C

2055—M giving TCs S of nest tree. MD hears a few soft TECs from same location.

2058—M goes silent.

2059—M gives a single TC S of nest.

2102—M giving TCs further S.

2108—M goes silent.

2110—M is again giving TCs S of the nest. JR calls MD over to tap the tree. There is no response to the tap.

2115—MD peeps the cavity and discovers signs of predation (egg fragments). JR and MD leave to assist SY and AP in CN5.

## 19 June 2012

2130—AW, JR, and NS arrive in CN11 to lure net.

2142—Playback started.

Weather: Calm, clear, 15C.

Vegetation: young potr and medium pipo.

X: 481567

Y: 4333335

+/-3

2148—NS hears M giving TCs to the S, approaches net.

2150—JR hears M giving TCs to the W, flies E towards net.

2204—**Unbanded M caught.** Giving TC/TECs up until he hit the net as NS was checking net.

Assumed CN11\_2012 M. 3rd shelf from the E.

**Band# 1593-64878** (on R leg)

80.0 g LWC: 127 mm

- 29.0 g LLP(5): 98 mm

51.0 g LLP(6): 104 mm

Rect: 55 mm

2235—M released, strong flight to the S.

2039—M heard giving TCs to S.

2258—CN11 M caught again, 4th shelf from the W.

2300—Stop playback. JR goes to radio track CN13 M with SY.

2310—AW arrives at lure net. Playback resumed with FSCs.

2318—M gives TCs from 200 m S-SW of lure net for approximately 1 minute.

2323—M approaches net giving TCs from S-SW. M then bounches E of net and continues to give TCs.

2325—M gives about 2-3 minutes of occasional HECs mixed in with TCs. Possible 2nd silent bird in area?

2328—M goes silent.

2345—Playback stopped, we leave area.

# CN11—2013

## 30 May 2013

1130—LL, CK, and SY arrive in CN11 territory to tap cavity trees and listen for nesting vocalizations. We spread out along the main drainage and side drainage to the S.

Weather: 5C, clear, wind 5-10, gusts higher.

2432—Nothing heard - we depart. (Listening conditions were not ideal).

## 7 June 2013

Afternoon—Flam Crew peeps in CN11

1602—BDG and SY approach cavity tree #1289. F is in entrance as we arrive. Cavity is 25 feet up on the NW side. Tree is a live potr in the drainage bottom, approximately 150m downstream of the past CN11 nest trees. **This is the CN11—2013 nest!**

2023—CK, RC and AW arrive at CN11\_2013 (#1289) nest site to capture F FLOW. Upon

arriving F is up in the cavity.

2024—F returns down in the cavity.

2039—F rises to cavity entrance and is immediately captured. **F is unbanded**.

**Band # 1593-64890 (on R leg)**

No measurements taken.

2042—We peep the cavity and **find 2 eggs center touching**.

2047—F is released and fell to the ground. F immediately got up and flew to the SW. During release, F grabbed wing with left foot. This likely caused her to hit the ground. We decide to wait around the nest for the F to return.

2120—AW sees F return to the nest cavity. Crew then leaves to set up a lure net in CN5/CN13.

## 11 June 2013

2028—CK, AW and BDG arrive at CN5/CN13 to listen for FLOW vocalizations along the main drainage in an attempt to locate FLOW nest.

2055—We depart CN5/CN13 to go to CN11 and attempt nest capture of the CN11\_2013 M (#1289).

2112—We arrive at the CN11\_2013 nest and decide to wait for ~10 minutes, ensuring F is back in cavity, before attempting M capture. *Note: There are numerous young potr (4-6 cm dbh) surrounding the nest tree, which makes capture difficult. Also, the nest tree is a large live potr ~10m high making it difficult to silhouette M and F nest entries/departures. It would be useful to approach nest tree from ridgeline on the W in future attempts. A cavity silhouette might be better from this position.*

2125—2207—AW begins moving into position to capture M at the nest cavity. CK and BDG light up cavity to watch for F flush upon approach. As AW moves close to the tree, F FLOW rises to cavity entrance. AW approaches the nest tree carefully during the time the F is up in the cavity. After F drops down into the cavity at 2207, AW proceeds to set up the capture net and bring it to the cavity entrance.

2231—We see the M FLOW fly to the nest cavity and make a PD. AW places capture net over cavity. M perches on cavity entrance for ~15 seconds while delivering PD, but never fully enters cavity. As M backs out of the cavity he escapes out of the right side of the capture net to the W.

2235—M perches on snag branch to W of nest cavity. AW thinks M makes a PD, but apparently he flies to the SE, around the back of the tree. AW places capture net over cavity. M begins to give TECs from SE of nest tree. AW removes capture net, and F FLOW flushes from the cavity. We decide to depart after the F flushed and had already been up in the cavity ~30 minutes prior to flushing.

## 19 June 2013

2030—BL and LL arrive in CN11\_2013 nest area with intention of capturing CN11\_M on a PD at the cavity entrance.

2032—BL goes to scope out cavity from base of tree and discovers the F is up as soon as the cavity comes into view.

~2034—We leave the capture pole and peeper close to the tree and position ourselves to observe the cavity on the hillside ~20m SE of the nest. F is still in the entrance as we walk and settle in on the hillside.

Weather: Very hazy/smoky due to the smoke from the Lime Gulch Fire, breezy (swaying tops of trees), 21 C

2047—F finally goes down into the cavity. BL decides to go back up to the base of the tree to attempt to capture M if he makes a PD before F flushes.

2049—F pops back up into the entrance of the cavity as BL is making his way to the nest tree.

2050—F goes back down.

2058—F comes back up again as BL is getting in capture position at base of tree, BL stops. She remains in the entrance until she flushes.

2105—F flushes. **We peep the cavity and see two eggs, one with a suspicious dark spot on one end.** The M never came into the nest site and we never heard him vocalize prior to the F flushing.

2112—BL gets net in capture position.

2118—F reenters cavity.

2124—M LCs from ~10m E of the nest.

2125—M makes a PD, we do not attempt capture at this point.

2126—M gives HECs ~10m NE of nest, then flies further away and HECs from ~20m N of nest.

2130—M goes silent.

2131—M HECs from ~50m N of nest for ~1min.

2141—M HECs from ~10m SE of nest.

2147—M gives a few TCs from ~40m SE of nest.

2150—M gives a few TCs from same area ~40m SE of nest.

2153—M flies to cavity and lands, but quickly flushes. This is probably an aborted PD attempt.

2154—M hovers near cavity, but does not land and quickly flies away.

2156—M flies to cavity and lands again, but quickly flushes, probably aborting another PD attempt.

2157—M hovers near cavity but quickly flies away again.

2208—M gives a couple of LCs SE of the nest. Flies to nest and makes a successful PD, but smoke particulate gets caught in BL’s contact lens, so he is unable to make capture attempt.

2210—M TCs from ~50m N of nest for ~1min.

2215—M gives a couple more TCs from same area ~50m N of nest.

2250—M comes back into the nest area, giving LCs from ~10m NE and then from directly adjacent to the nest.

2253—**M makes a PD going all the way into the cavity, BL covers the entrance with the capture net and snags the M as he flushes after the PD. The F flushes right after the M is snagged.** **The M is previously banded and was the 2012 CN11\_M**.

**Band # 1593-64878** (on R leg)

77.0 g LWC: 129 mm

- 22.5 g LLP(5): 95 mm

54.5 g LLP(6): 105 mm

Rect: 61 mm

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2 |
| P2 | 2.5 | 2 |
| P3 | 2.5 | 2 |
| P4 | 2.5 | 2.5 |
| P5 | 2.5 | 2.5 |
| P6 | 2 | 2.5 |
| P7 | 2 | 2 |
| P8 | 1 | 2 |
| P9 | 1 | 2 |
| P10 | 0 | 0.5 |

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 0.5 |
| P2 | 1 | 0.5 |
| P3 | 1 | 0.5 |
| P4 | 1 | 0.5 |
| P5 | 1 | 0.5 |
| P6 | 1.5 | 2 |
| P7 | 1.5 | 2 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2328—We release M, strong flight to the W.

2333—We leave CN11 and head to CN10.

## 16 July 2013

2110—BL arrives in the CN11\_2013 nest area to attempt capture of F (blood needed) and assess status of fledging. At this time I see an adult FLOW fly across the nest area from W to E.

2111—Silent PD at cavity entrance, where there is one owlet begging audibly. I move to the nest tree where I prepare to peep the cavity and determine if both owlets are present. While looking down and positioning the peeper pole, I hear a “splash” in the leaf foliage of young Potr surrounding the nest tree, suggesting a possible fledging event, but I’m uncertain which direction it came from. I scan the Potr foliage in all directions for movement, and see a few leaves still moving approximately 10 m N of the nest tree (weather was calm, with not even a light breeze in the drainage bottom). I look back at the cavity entrance and see an owlet still in the cavity entrance—did fledging occur?? Owlet in entrance appears poised to fledge, but he peers down at me and stays in place for the next couple of minutes, so I move slowly away to investigate the leaf splash.

2214—**I find a fledgling hanging upside down by one foot near the top of one of the young Potr, ~10 m N of the nest tree, and ~ 8 ft above ground**. I gently shake the fledgling out of the tree, recover it from the ground, and move back to the nest tree.

2215—**I peep the cavity, as no owlet is in the cavity entrance—the cavity is empty!** Apparently the 2nd owlet fledged, silently, while I recovered fledgling #1. I presume fledgling #2 has not landed in the Potr surrounding the nest tree (young, 8-10 ft tall Potr surround the nest tree out to ~ 5-10 m radius), otherwise I would have hoped to have heard another splash.

2216—I move ~ 20 m S of the nest tree to the lower mid-slope to process **#1 fledgling**.

**Band # 1783-64461** (on l leg)

93.5 g LWC: 89 mm

- 35.0 g LLP(5): 70 mm

58.5 g LLP(6): 70 mm

Rect: 37 mm

I bleed owlet on L wing (genetic and PS).

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 (95%) | Same (on down) |
| P2 | 3 (90%) |  |
| P3 | 3 (80%) |  |
| P4 | 3 (75%) |  |
| P5 | 3 (65%) |  |
| P6 | 3 (50%) |  |
| P7 | 2 (30%) |  |
| P8 | 2 (25%) |  |
| P9 | 2 (25%) |  |
| P10 | 2 (20%) |  |

**Note: Secondaries were all 3s, and were nearly 100% pink**

2120—I hear a couple of begs from #2 fledgling, which seem to come ~ 10 m E of the nest, so I bag fledgling #1, and pursue.

2152—I finally find #2 fledgling approximately 30 m E of the nest tree (he was a runner—I heard some noise in the ground cover from time to time), clinging to the limb-less trunk of a live 25 cm Psme. I pluck him off the trunk, and return to the area of #1 fledgling.

2155—Fledgling #2:

**Band # 1783-64462** (on r leg)

75.0 g LWC: 92 mm

- 23.0 g LLP(5): 72 mm

52.0 g LLP(6): 72 mm

Rect: 37 mm

I bleed owlet on L wing (genetic and PS).

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | Same as fledgling #1 | Same (on down) |
| P2 | (same on down) |  |
| P3 |  |  |
| P4 |  |  |
| P5 |  |  |
| P6 |  |  |
| P7 |  |  |
| P8 |  |  |
| P9 |  |  |
| P10 |  |  |

**Note: Secondaries were all 3s, and were nearly 100% pink**

2245—I release both fledglings near the tree where #2 fledgling was recovered (placed them in tree, ~1.5 m above ground). M had been giving LC periodically in this area over the past half hour, presumably attempting to locate the fledglings.

2255—I leave. Fledglings starting to beg at this time. NOTE: Female was not heard or seen all evening. She presumably has left tending of both fledglings to the M.

# CN11—2014

## 30 May 2014

Afternoon—Flam crew peeps the upper and lower drainage of CN11 terriory; we do not find any nests.

~1720—BL hears suspicious TC/TECs while peeping in CN11 drainage bottom. He spots M roosting under a cluster of foliage on a primary branch of a live, full pipo (dbh = 64.5). We hang with white flagging and label **CN11 Roost Tree**:

X: 481115

Y: 4332819

+/- 7m

2030—SY, RC, RD and JS arrive in vicinity of the presumed CN11 M found roosting earlier that day. We spread out up and down drainage of that location.

2041—SY observed the M flush due west just as he approaches the roost.

2043—M returns to middle of drainage followed by AMROs.

2047—SY, RC, RD and JS surround M location awaiting action.

2054—AMROs calls and flapping are heard.

2102—RC and JS hear TCs SE down drainage – possibly a 2nd M?

2102—JS sees FLOW flush to the N from tall potr in middle of drainage.

2109—JS hears M TECs in middle of drainage.

~2115—With the drainage quiet, we break off from listening to set up a lure net.

2136—Lure net set up on low E-facing slope 75m NNW of roost tree and PB started.

**GPS estimated from CN11 roost tree:**

X: 480955

Y: 4332900

+/- 4m

**Vegetation**: adolescent pipos and dead snags all along slope, relatively open area.

**Weather**: cloudy, foggy, no wind, 10C.

2140—GHOW calls heard west of lure net

2142—TCs and TECs heard from direction of initial roost site.

2144-2151—M in vicinity of lure net making TECs and HECs

2152—**Banded M in net, 3d shelf E side**. Approached from N. **This is a floater from CN5\_2012 and the presumed CN11\_2014 M.**

**Band # 1593-64861** (on R leg)

66.0 g LWC: 128 mm

- 16.5 g LLP(5): 95 mm

49.5 g LLP(6): 102 mm

Rect: 50 m

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1.5 |
| P3 | 2.5 | 2.5 |
| P4 | 2.5 | 2.5 |
| P5 | 2 | 2.5 |
| P6 | 2 | 2 |
| P7 | 1 | 2 |
| P8 | 1 | 2 |
| P9 | 1 | 1 |
| P10 | 0 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 2 | 1.5 |
| P5 | 2 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2 |
| P8 | 3 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

2214—M released due W.

2215—RC, JS and SY head into drainage to listen for CN11 M. RD stays at lure net.

2216—RC and JS hear M TCs 40m S of net in drainage.

2226—RC heads down drainage to listen for more action and gets to hard northward turn in drainage, but hears nothing. JS and SY stay in net vicinity. No additional calling heard outside the immediate vicinity of the net.

2239—PB off. We break down net.

2250—We depart CN11 area heading downstream to set up second lure net for potential southern M that we heard earlier.

2255—We move net down drainage to target potential M downstream of CN11. Net is flat, opening N/S on upper W-facing slope just above had northward turn in drainage.

X: 480966

Y: 4332826

+/- 4m

**Vegetation:** Very open site edge of high burn near sm. Psme snags.

**Weather:** 10C, calm, foggy/overcast.

2258—PB begin.

2315—JS heads to S CN11 where last peeped earlier in the day and RD and SY head up drainage to listen and peep. RC stays at lure net.

2321—JS hears TCs in drainage and pursues.

2321—M moves up-drainage and is quiet.

2323-2326—M gives TCs in response to SY TCs, all in drainage.

2333—SY has eyes on M and F of CN11.

2335-2410—JS, RD and SY follow the F as she gradually works up drainage. F appears to be gravid, making very short flights and often remaining relatively sedentary (at one point she is perched for >20 minutes in a tree <1m from cavity tree #1236. M is observed making several bark-gleaning forages in vicinity of the F and makes several PDs to the F. F gives relatively constant, quite FSCs. M sporadically gives TCs and TEC from in the drainage (usually within 50m of the F) and give LCs as he approaches the F for PDs. M was observed to be banded on the R leg and is presumed to be the territorial M we captured at the first lure net earlier in the evening. F is unbanded. **F appears to be gravid and not yet incubating (based on time out of cavity)** **– we would expect the CN11 nest be located in close vicinity to where this was observed.**

2401—PB off. Never a sound at the net.

2410—Net broken down, we leave.

## 5 June 2014

1546—RC and RD arrive at cavity tree #1236 where F received several PDs from M on 5/30/14 (observed by SY and RD) and proceed to tap and peep down drainage to the roost tree noted on 5/30/14 and beyond, with the intent of finding the CN11 nest tree.

1658—While RC and RD are peeping CN11 drainage ~40m down drainage from CN11\_2014 roost tree and 50m up drainage from side drainage to S, **F FLOW comes up to a tap in cavity tree CN11\_1538. This is the CN11\_2014 nest tree.**

X: 481105

Y: 4332782

+/- 5m

**Tree was newly enumerated this year and is a 24.0cm dbh full potr snag on the S side of the drainage bottom in a stand of 3-4 similar potrs. Nest is in NOFL cavity facing N ~25ft up. Cavity is 1ft above bottom cavity of 3 in tree, all on N side. F is up in cavity entrance until we leave at 1703.**

2050—RC and RD arrive at CN11\_2014 nest tree with intent to peep cavity. No sign of F on arrival nor on tap. **Peep reveals 1 egg, off center in cavity.**

2053—We leave to listen in upper CN11 as it begins to rain.

2108—Hail. We huddle under tree for safety. FLOW activity likely stifled.

~2135—Rain lets up. We spread out in main upper CN11 drainage. Rain is intermittent and we hear nothing.

2221—We erect lure net in bottom of upper CN11 drainage near first stand of young potr moving S from rd. **with goal of determining whether there may or may not exist a second territory in the CN11 drainage N of CN11\_2014 nest**. PB begin.

Vegetation: young potr stand with some young-mature pipo/psme nearby. Net is set up adjacent to 5m psme snag.

Weather: Slight breeze, partly to mostly cloudy with passing storm cells, 10C.

X: 481483

Y: 4333143

+/- 3m

2233—**Unbanded bird in net at first check, 2nd shelf from N.** No vocalizations were heard before capture nor while the bird was in hand, he is identified as a CN11 floater.

**Band # 1783-64531 (on R leg)**

69.5 g LWC: 133 mm

- 16.0 g LLP(5): 98 mm

53.5 g LLP(6): 108 mm

Rect: 62 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 1.5 | 1.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | .5 |
| P9 | .5 | .5 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1.5 w/ notches | 1 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

Notes: We did not get a blood sample from this bird. L wing was pricked 3 times without drawing blood. R wing bled first time, but did not produce enough blood to fill even tip of cap tube. We err on the side of caution and forego the blood sample. **Bird is presumed to be M and seems to be of breeding mass, but did not vocalize. This bird could be a CN11 floater or a territory holder that did not vocalize given the recent hail and possible focus on foraging efforts.**

2323—M released with strong ascending flight W 10m to pipo perch 5m off ground. M makes another short flight W to second pipo before flying away.

2328—PB off. We break down and leave CN11 to meet SY and JS to lure net in CN13.

## 13 June 2014

2053—LL and RD arrive in the CN11\_2014 nest area with intention of capturing the CN11\_F at the nest. RD approaches the base of the tree, but the F pops up.

2055—The M gives LCs in the nest site and the F flushes. **We peep. There are 3 eggs touching in the center of the cavity**. We leave to join SY and company to lure net in CN5.

## 19 June 2014

2140—BL arrives at the CN11\_2014 nest to attempt capture of M. I get into capture position.

Weather: Mostly clear, calm, ~14C.

2145—M flies into nest area, silently perches in a Potr 5 m from the nest, then flies past the nest tree and exits the area.

2215—F reenters the nest cavity (Note: I was not aware that she had left the nest, but at this time I hear the M giving TC from the adjacent drainage bottom, so I knew it was not him).

2220—Without any vocalization, the M flies to the cavity and makes an apparent PD by leaning in the cavity entrance (her never fully entered).

2315—F flushes from the nest (no impetus from me).

2320—F reenters cavity.

2420—M arrives in the nest area, and after giving a few quiet LC flies toward the cavity entrance—however, the F flushes at this time, and I hear a prey transfer up-drainage from the nest.

2425—F reenters cavity.

2440—I leave.

## 24 June 2014

2023—MP, ER, and BL arrive in the CN11\_2013 nest area to attempt capture of F. F not in cavity entrance (note that the nest cavity is the 2nd lowest cavity on the NW side—up-drainage—in a former limb node; 30 cm below this is a HOWR nest cavity).

Weather: Clearing (late PM thunder-showers), calm, 14 C.

2040—ER in capture position. F still down.

2054—M gives one SC from the riparian stand of Pipu/Potr 15 m to the W.

2059—M enters the nest area giving LC. F flushes shortly thereafter, but she escapes the net as a large plate of bark falls off, shifting the position of the net. **We peep cavity—nest contains the 3eggs, with no obvious sign of cracks in shells (to indicate initiation of hatching).** We back away from nest area.

2109—F reenters nest.

2111—Apparent PD by M in cavity.

2130—BL approaches nest tree and gets in position to attempt capture of M.

~2135—M lands in cavity entrance where he appears to lean inside (PD?) before flushing.

2152—F flushes from cavity (apparently on her own volition).

2153—F reenters cavity.

2217—With the M absent from the nest site, BL gives a few hoots and the M responds about 30m N of the CN11\_2014 nest and subsequently flies W over the nest site.

2236—M lands in cavity entrance—BL attempts capture, but he escapes and F flushes.

2240—We leave area for CN13\_2014 nest tree.

## 30 June 2014

2030—MP and BL arrive in the CN11\_2014 nest area to attempt capture of F. F not in cavity entrance.

Weather: (Hot/dry afternoon) Mostly cloudy, breezy, 22 C.

2040—MP raises net into capture position.

2059—M approaches nest area giving TCs.

2108—M attempts to make PD—he approaches the cavity before veering off, and makes several additional short flights tangential to the cavity tree.

2109—**MP captures F as she flushes cavity. F is not previously banded, and we band her with Band # 1783-64509**. **We peep cavity and observe 1 owlet and 2 unhatched eggs—the owlet was lying down but was quite active, and while it appeared grey-colored under limited lighting, it was probably still in all white natal plumage (maybe dirty). Based on size alone, BL estimated the age at ~ 3 days.**

**Band # 1783-64509 (on x leg)**

83.0 g

- 7.5 g

75.5 g

2116—We release F—she makes a 10 m horizontal flight to the N.

2124—We leave for CN13\_2014 nest.

## 8 July 2014

2228—AW, RC, and MP arrive at the CN11\_2014 nest intending to capture M at nest (to confirm his identity) and to check on status of nest to see if nestlings are old enough for a F capture and bled.   
Weather: calm, clear, 18C

2230—F is up as RC approaches nest with capture pole. RC pauses approach.

2231—F flushes.

~2235—M PD.

2239—**We peep and find 3 nestlings. The eldest 2 nestlings have some dark juvenile plumage coming in under their white natal down. Emerging juvenile plumage is concentrated on scapulars with a little on head. The runt is still largely in natal down and uniform in color. There is a little bit of darker juvenile plumage just beginning to come in on the head. We suspect the runt is approximately 7-8 days while the eldest are 10-12 days. BL and MP peeped on 6/30 and observed 1 nestling and 2 unhatched eggs and BL estimated age as ~3 days for the nestling. Our observation tonight is consistent with a hatch date of 6/27±1. This would put the onset of incubation at 6/5 (which is the day we found the nest and observed a single egg). It is possible that we are 1-2 days early in our estimate of age.** We decide the nestlings are not old enough for us to capture and bleed the F. We back off to allow F a few minutes to come back on in case our approach is what caused her to flush.

~2255—We re-enter nest vicinity. RC begins approach to nest with capture pole.

2258—F is up in entrance giving FSCs.

2304—M PD.

2308—RC has net in capture position.

2311—M PD to F up in cavity entrance.

2312—M PD to F up in cavity entrance.

2313—F flushes.

2315—M PD to nestlings.

~2317—F comes back on.

2319—M PD.

2330—F flushes.

2334—F PD to nestlings.

2335—F leaves cavity.

2340—**M makes a PD and is captured. He is previously banded and was originally captured as a floater in CN5 in 2012. Earlier this year, he was captured in a lure net in CN11 and presumed territory holder. This capture confirms his identity as the CN11\_2014 M. This is another documentation of a M transitioning from floater to territory holder in an adjacent territory.**

**Band # 1593-64861 (on R leg)**

65.5 g LWC: 130 mm

- 16.0 g LLP(5): 96 mm

49.5 g LLP(6): 105 mm

Rect: 59 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1.5 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

2403—M is released with strong, ascending flight and we leave.

## 10 July 2014

2037—AW and RD arrive at CN11\_2014. RD raises capture net at CN11\_2014 intending to capture F on flush for blood samples. There are two cavities on the nest tree and we are unsure which one is the nest cavity. We guess that it is the lower cavity, but when RD puts net against tree, the F pops her head out of the upper cavity.

2039—F comes up to upper cavity entrance. RD stealthily raises net and places it over F in upper cavity, who is still up in the entrance and does not seem to mind the net over her head.

2044—F goes down.

Weather: calm, clear, 18C

2047—M calls off roost to the SE.

2057—F flushes and is not captured. Apparently net was not completely touching tree and she flushes around it. RD lowers net to re-adjust rim for a better fit to the tree.

2100—RD raises capture net.

2101—PD.

2108—M PD. **RD goes for capture unsure that this is the M, and he is captured. We extract him and AW holds on to him while RB raises net. Band # 1593-64861.**

2112—**F is captured on a PD. She is the CN11\_2014 F.** We obtain mass, measurements, and blood for genetics/parasite smear. Blood is drawn from the L wing.

**Band # 1783-64509 (on L leg)**

80.0 g LWC: 122 mm

- 22.5 g LLP(5): 98 mm

57.5 g LLP(6): 108 mm

Rect: 58 mm

2115—M released with strong, ascending flight.

2131—F released with strong, ascending flight.

2132—**We peep. Image is bad and it is very difficult to make out detail.** Nestlings look covered in downy plumage. AW was at this nest on 8 July 2014, so refer to that date for a more detailed description of nestling age/characteristics.

## 16 July 2014

2045—BL and Steve Getty arrive in the CN11\_2014 nest area to assess status of fledging.

Weather: Heavy PM thunderstorms (which dropped ~3+ cm at lodge), and short but intense t-storm as we approached the CN11 parking area. Light rain continued intermittently all evening. ~ 14 C.

2050—As BL approaches nest tree, he thinks he hears fledgling begging to S of cavity tree, but difficult to hear as “second rain” is dripping off trees/vegetation and there is light breeze. (Note: This is later found to be erroneous when we finally get a clean peep before we leave, and find all nestlings accounted for.) No nestlings in cavity entrance. **We peep cavity—camera instantly fogs up and we cannot clearly see contents.**

2230—**We peep cavity during a brief respite from rainshowers and see all 3 nestlings present, and with a well-defined facial disk appearing on at least one of them.** We leave. **Note**: BL spent all of the time since 2050 listening for possible fledglings to the E and S of the nest tree. SG reported that the M made sporadic PDs in the cavity, during periods of light rain, and that no nestlings came up to the cavity entrance.

## 21 July 2014

1530—SY, LL, JS, RD and Carina, Kaeli, Cat and Brenda arrive at the CN11\_2014 nest to band and bleed nestlings. As we approach, F swoops low to the S out of sight. **We peep: 3 nestlings present! Two have complete developed facial disks while the other is obviously younger and smaller.**

1536—SY begins ascent to cavity entrance.

Cavity entrance: Hor. 65mm x Vert. 61mm

Thickness: 20mm

DOH: 22.5 cm

Depth: Hor. 60mm

Height: 19’ 7’’

1539—SY begins cutting (pit stains acquired).

1548—1st nestling out of the cavity, followed by 2 others.

**Nestling #1**

52.5 g

P#5: 63 mm (19 in shaft)

P#6: 62 mm (18 in shaft)

Rect: 29 mm (8 in shaft)

Band#: 1783-64592 (L leg)

Notes: Bled on R wing. No P.

**Nestling #2**

55.6 g

P#5: 59 mm (19 in shaft)

P#6: 58 mm (19 in shaft)

Rect: 28 mm (10 in shaft)

Band#: 1783-64593 (L leg)

Notes: Bled on L wing. No P.

**Nestling #3**

45.2 g

P#5: 51 mm (18 in shaft)

P#6: 51 mm (20 in shaft)

Rect: 24 mm (10 in shaft)

Band#: 1783-64594 (L leg)

Notes: Bled on L wing. No P.

1613—Nestlings back in cavity. We leave.

## 23 July 2014

1519—MC, AW, MP and JS arrive at CN11\_2014 nest to do vegetative work. No bird is seen in the entrance, **we peep: 2 nestlings, all juvenile plumage with large and developed facial disks. ~21-22 days old. The first must have fledged 7/21 or 7/22.**

# CN11—2015

## 1 June 2015

1530-1700: Flam Crew peeps cavity trees in the lower portion of the main drainage of the CN11 territory. Nothing found.

2020—RC, LL, and LP arrive in CN11 to nest search, lure net, and spot map. We erect lure net ~100m down drainage from the CN11\_2013 nest tree on low E-facing slope of R NW of main CN11 drainage (just down drainage from large rock outcrop). Net is 40m NW of drainage bottom and opens NW/SE.

Vegetation: net flanked by mostly young potr/pipo with young-mature pipo/potr/psme in net area, open.

Weather: Mostly clear, calm, 13.5C.

X: 481320

Y: 4333058

+/- 9m

2032—We spread out along length of CN11 drainage to listen for nesting vocalizations before starting PB—RC near 2012 nest, LP near 2013 nest, and LL near 2014 nest. Nothing seen or heard.

2102—PB begin.

2122—RC and LL leave net to tap and listen. RC moves up dr again and LL moves back down dr.

2130—From area of CN11\_2012 nest tree, RC hears TCs 200+m ENE and pursues, but M quickly retreats to E and goes silent. This is the same M that SY will song post later in the night as CN14 M. From lure net area, LL hears another M TC/TECing 100m down dr from PB.

2133—M quickly moves up drainage toward PB and gives TC/TECs for ~1min in 70.0 cm dbh live pipo on two-track NW of drainage bottom before going silent. **LL hangs general area song post CN11\_1**.

X: 481299

Y: 4333018

+/- 9m

2135—M in net area, initially heard just W of net toward shallow side dr NW of main dr. M is giving TC/TECs.

2141—RC arrives back at net.

2142—M in net area silent, backs away to W.

2149—M back in site, HECing and bouncing around net, sticking mostly to large pipos N of net.

2155—**2 Ms**. Upper M is still in net site giving HECs, while lower M is giving TC/TECs from ~100m down drainage near where first vocalizations were heard from net at 2130. Second M moves up to same pipo where LL hung CN11\_1. *Note:* *We now suspect that this is the first bird that we heard instead of the M now HECing in the net site*. Upper M in net site seems to be sticking to NW side of net, rarely crossing toward dr bottom.

2158—M in dr bottom silent.

2205—M in net site silent.

2209—Upper M back in net site, HECing.

2211—**Upper M in net**, 3rd shelf from SE. **M is previously banded on 6/5/14 by RC and RD as CN11\_2014 floater in upper portion of main CN11 dr**. On this occasion, no vocalizations were heard, but capture was made just after hail storm, which may have reduced vocalization frequency due to foraging efforts. Possible upper CN11 nest was suspected, but never found in 2014.

**Band # 1783-64531 (on R leg)**

67.0 g LWC: 136 mm

- 15.0 g LLP(5): 99 mm

52.0 g LLP(6): 110 mm

Rect: 61.0 mm

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | 0 | 0 |
| P3 | 0 | .5 |
| P4 | 0 | 0 |
| P5 | 0 | 0 |
| P6 | .5 | .5 |
| P7 | .5 | 1 |
| P8 | 1.5 | 1.5 |
| P9 | 1.5 | 1.5 |
| P10 | 2 | 2 |

**Note: Bled R wing after failed attempt at L wing. Small hematoma on both sides. Pressure applied for 4 min. Covert and contour samples taken. Strong ascending flight towards NE.**

2303—PB off. Net site has been quiet since capture at 2211, except for distant TCs heard to ENE (SY’s CN14 M). We break down net.

2315—We spread out to listen/spot map. LP and LL move down dr from net area to try and pick up the two birds heard in that area earlier, while RC moves up dr to tap and listen in upper CN11 cavity trees. LP taps and listens in area ~100m down drainage from net, where M was initially heard earlier, while LL moves back to the vicinity of the CN11\_2014 nest.

2337—LL hears M give TCs 200+m down drainage/SE of CN11\_2014 nest for <1min. LL attempts to pursue, but M moves off more distantly up the ridge to the E, lots of deadfall and brevity of vocalization makes locating M difficult.

2344—From CN11\_2014 nest site, LL hears M give TCs 300+m SE for 2min, further E and up the ridge from where M was heard at 2337.

2357—Nothing seen or heard in upper CN11. RC moves back to net area. LL works her way up drainage after hearing nothing more in CN11\_2014 nest area.

2401—RC spots silent FLOW in patch of small potr/pipo 40m NE of net site. Bird is banded on R leg and so may be same individual captured earlier, but does not vocalize and quickly flies off and is lost.

2425—From point where 2-track crosses creek, RC hears loud 3-note M vocalization (likely LC, considering no other Ms have been heard in area recently) from 80m SE toward R top SE of dr. This is the R that the 2-track runs on top of that borders high burn. RC pursues, but M goes silent and never vocalizes again.

0108—We leave.

## 12 June 2015

~2032—RC and LP arrive in CN11 to nest search and lure for CN11 M. LP and RC split up between the CN11\_2013 and CN11\_2014 nest areas.

2054—RC hears LCs in 2014 nest area from ~40m NE and pursues.

2055—On approach, RC hears FSCs in CN11\_2014 nest area as well.

2057—RC spots both M and F perched in small potr in 2014 nest site, 10-15m NW of nest tree. M flies up dr, followed by F (both vocalizing.)

~2100—LP joins RC and both chase pair up dr ENE toward low NW-facing slope.

2106—Brief FSCs ~80m NE of 2014 nest tree near dr bottom.

2108—LCs near R top 150m ENE of nest tree. RC pursues, but M quickly goes silent.

2115—LP hears faint FSC from direction of 2014 nest tree ~60m NE up dr (near CN11\_2014 M daytime roost tree). We head back toward 2014 nest tree.

2125—RC taps 2014 nest tree, but no sign of F, and M silent since 2108. We spread out in the drainage NE of this area to tap cavity trees and listen.

2151—Having heard nothing, we are collecting dropped netting gear when LP hears LCs in 2014 nest site, moving NE up dr. LP pursues M while RC spots 2014 nest tree.

2201—LCs in nest site to NE followed by FSCs (from inside a cavity). M makes a PD to 2014 keyhole. **This is the CN11\_2015 nest tree!** **Nest tree (#1238) is a 24.0cm dbh full potr snag on the SE side of the drainage bottom in a stand of 3-4 similar potrs. Nest is in 2014 NOFL cavity keyhole facing N ~25ft up. Cavity is 1ft above bottom cavity of 3 in tree, all on N side.** We back out of site and set up lure net.

2222—Net is set up on R top SE of CN11 dr, ~150m ENE of nest tree and ~30m up R from where 2 track rd crests out on R. Net opens SE/NW running alongside stand of small pipo/psme.

Vegetation: young pipo/psme in site with young-mature pipo/psme in surrounding area, very open.

Weather: clear, calm, 8C.

X: 481235

Y: 4332872

+/- 16m

2225—M in net site giving HECs in large pipo NE of net. M bounces around above net.

2229—M backs off to dr bottom NW and moves SW down dr toward nest site, still giving TC/TECs. This is apparently the CN11 M. 2nd M begins calling near net on SE side of R and a bit down dr. This M calls in the site briefly then backs off distantly down dr. The identity of this M is unclear (possibly M previously heard far down CN11 dr or another bird inhabiting dr SE of CN11 dr).

2234—PB changed to ‘P.flammeolus.’

2237—CN11 M back in net site, giving very low TCs followed shortly by TEC/HECs. M flies over net a couple of times before we hear wingflaps.

2246—**Banded M in net!** 4th shelf from SE. **This is the CN11\_2014 M, returned for another year!** Ecto-parasite found on individual and collected. He has sharpened his talons since the last time he was captured.

**Band # 1593-64861 (on R leg)**

80.0 g LWC: 125 mm

- 29.0 g LLP(5): 95 mm

51.0 g LLP(6): 103 mm

Rect: 60 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 1 | 1 |
| P4 | 2 | 2 |
| P5 | 2 | 2 |
| P6 | 1 | 1.5 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 | 0 |
| P2 | 0 | 0 |
| P3 | 0 | 0.5 |
| P4 | 0 | 0 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1 |
| P8 | 1.5 | 1 |
| P9 | 2 | 1.5 |
| P10 | 2.5 | 2 |

2254—PB turned off in hopes of calming M in hand. It sort of works…

2325—M released with strong flight SE.

2326—TC/TECs nearby to SE, then ~150m S in dr bottom. Unclear if this is the CN11 M or the 2nd M we heard earlier.

2328—Net broken down. We leave.

## 19 June 2015

2202—MC and BH arrive at CN11\_2015 nest tree with intent of capturing CN11\_M at the nest. As we approach the tree, we hear M giving consistent TCs distantly to the W. MC begins raising pole.

2203— M approaches nest tree from W and perches ~5m E of the nest tree.

2206—M flutters at cavity and makes a prey handoff to F, whose FSCs grow louder from cavity. M flies S out of nest area. F flushes cavity immediately after him.

2207—We leave nest area and retreat ~40m SW to wait for F to return to nest.

2207-2212—LCs heard sporadically from nest area, while far away M continues to give consistent TCs ~100m W of us (persistent vocals lead us to believe he is a bachelor M).

2219—LCs resume nearby nest site in N side drainage.

2220—LCs at nest tree.

2229—BH reenters nest site and sees FLOW silhouette flush cavity, believes it to be CN11\_F initially. Kills light.

2231—MC comes in, taps tree and F comes up to cavity entrance, so it must have been the M that BH saw flush cavity after a PD. We kill lights and she goes down immediately.

2238—MC positions capture net at cavity.

2239—M makes a PD to cavity, evades net by flying N out of cavity instead of W into the net.

2303—**M makes a PD to cavity, and is caught in net! This is the CN11\_2014 M and was caught earlier in the year by RC and LP in a lure net ~120m ENE of the nest tree.**

**Band # 1593-64861 (on R leg)**

74.0 g LWC: 128 mm

- 19.5 g LLP(5): 94 mm

54.5 g LLP(6): 102 mm

Rect: 57 mm

Weather: Calm, clear, 12C

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1 | 1.5 |
| P7 | 1.5 | 2 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

*Note: M was bled previously this season*.

2321—M released, SAF E. Let it be noted this bird was an uncooperative SOB that we did not enjoy spending time with.

2323—We leave CN11.

## 26 June 2015

2035—MC and DL arrive at CN11\_2015 to capture the F on flush.

2042—DL approaches the nest and gets the net up.

2048—M calls ~15m NW of the nest.

2050—M comes in to site giving LCs.

2055—M flies S and gives TCs ~25m from nest. *Note: This is the same area where the M was heard giving TCs the night that MC and BH came in to capture the M.*

2058—M is back in the site.

2117—F flushes in to the back of the bag. **She is unbanded.** We do not take specs as to not have F in hand for an extended period of time.

**Band # 1833-03263 (on X leg)**

2122—F is released and we leave. As we are leaving the CN11 area we hear a M giving TCs from the area where the 2-track crosses the creek.

## 8 July 2015

2028—RC and BH arrive in the CN11\_2015 nest area to capture F, peep, and bleed F if Ns are old enough. F down on arrival. We observe for a few moments, then BH approaches tree with capture net.

Weather: Overcast, calm, foggy, dripping from evening rain, 10C.

2033—BH arrives at tree.

2035—BH begins raising net.

2037—Net in place over cavity. Cavity height: 19’11”. No response from F. M in site, perched ~2m NW of nest tree.

2042-2044—M swoops across nest site in front of cavity several times in rapid succession. M is giving LCs and we hear a few quiet FSCs that seem to be on cavity. After giving progressively louder and more rapid LCs, M leaves site.

2048—Light rain, lasts for less than ten minutes and is not enough to pull down net.

2100—We tap. F stays down.

2105—**We peep and see F holding tight in cavity bottom with spread wings.** We hear LCs 10m SSW. RC backs off to observe, and BH replaces net over cavity.

2107—More LCs 10m E of nest, then M flies in to site.

2111—BH allows M to make a PD. F stays down. M perches briefly in entrance then flies out of site.

2115—M back in site giving LCs.

2116—FSCs. M flying around site like this is the last PD he will ever make. Multiple aborts, flutters in a circle around cavity.

2118—F comes up in entrance and remains there for ~15 seconds before flushing into the back of the net. **F is captured! This is the CN11\_2015 F.**

**Band # 1833-03263 (on L leg)**

73.0 g

- 15.5 g

57.5 g

Note: F has pin feathers coming out of shaft on abdomen, as well a small patch which appears pinkish and somewhat irritated, presumably a result of incubation.

2122—**Peep reveals some egg shell fragments and likely 2 Ns in all white natal down. We only ever see one head, but there seems to be at least one more recently hatched owlet face down and unmoving (must be <2 days). The owlet that we do confirm is active with head up and eyes open, but is snow white and still has an obvious egg tooth (~4 days). This N is standing, but seems a bit wobbly.** We do not bleed F due to age of owlets.

2127—F released with strong ascending flight WSW. We leave nest area.

2142—RC and BH spread out in mid-upper CN11 drainage to tap/listen/nest search, based on previous observations and capture of territorial M near 2013 nest area (RC/LL/LP 6/1/15). BH starts near net site where this M was captured ~100m down dr from CN11\_2013 nest area and RC moves up to the CN11\_2013 area. We both move up dr as we tap.

2145—DL and SY spread out in the CN13/CN14 area (S and W of the CN5 parking spot and in the upper part of the CN12 drainage.

Weather: 11C, cloudy/foggy, calm.

2207—Fog rolls in extremely thick – visibility down to 5m.

2252—RC arrives in clump of cavity trees near CN11\_2012, taps tree #1161. **FLOW flushes from tree and, after a fluttery flight, perches nearby to the NW. F FLOW makes short flight to another perch and then flies out of sight. This is the CN14?\_2015 nest tree!**

2253—RC positions himself under nest tree and hears raspy N begs.

2258—**F flutters at nest tree then enters a NOFL-sized cavity facing SW down dr. Cavity height=16’3” (from subsequent peep). Nest tree is a full snag potr with dbh = 20-25cm. Cavity is in a patch of remaining bark on tree and looks like the most obvious choice for a flam nest.** RC backs out to meet BH, who arrives shortly with capture net and peeper.

2316—RC and BH arrive back in nest site. BH spots while RC approaches tree to attempt M capture. F comes up on approach. We kill lights, drop gear, and sit.

2320—F flushes after several minutes in the dark with no movement. **We peep and see 3 Ns, all active with eyes open and heads up. 2 Ns have significant gray coming in on scaps (~11-12 days) and 1 with seemingly some (but just the beginnings of) gray on head. N possibly has some gray on scaps as well (~7-9 days), but N falls flat on his back while craning at peeper and we lose sight of his scaps while he is helplessly waving his little legs in the air.** We pull peeper and back out to allow F back on.

2350—We arrive back in nest site for a final attempt at M capture. BH remains outside site while RC approaches. F down on arrival.

2355—RC at tree. F down.

2358—F flushes as net is being raised. We back out and head up dr to assist SY/DL with listening effort.

2400-2430—RC moves due N from CN14?\_2015 nest tree and BH moves NE in dr bottom. We both tap and listen until RC pops out just W of CN11 parking spot and BH pops out at CN5 parking spot. Nothing seen or heard. We leave.

2430—DL and SY depart – nothing heard from the CN13/CN14 area.

## 10 July 2015

2219— DL arrives at CN11\_2015 nest. F is down when I arrive and I observe for ~10 minutes.

2230—I tap, F does not come up in cavity. **I peep to find F in cavity filling entire cavity bottom, obscuring Ns.**

2233—I leave and join RC in CN14.

## 17 July 2015

2252—RC arrives in CN11\_2015 nest area to peep and determine status of nest. F is off on arrival. **Peep reveals 3 Ns with dark juvenile plumage on scaps and coming in on body (~13 days, but I do not get a good look at their faces). Youngest N is much smaller, in nearly all white natal down with the beginnings of gray coming in on scaps. Eyes open, possible egg tooth.**

2256—F scolds from ~10m SW of nest tree. I leave.

## 20 July 2015

1546—BL, RC, ER, LP, and friends arrive in CN11\_2015 to band/bleed Ns and bleed F. RC approaches with capture net.

1556—Net in place over cavity. F stays down. HOWR flushes into side of net form lower cavity. Tap, F stays down. Peep reveals F is on cavity. We set up ladder.

1600—BL up. Begin enlarging cavity. Measurements listed taken pre-enlargement. Cavity also previously enlarged in 2014. BL only takes a corner. HOWR released.

Cavity Dimensions:

Cavity Height: 19’8”

Entrance (triangle base x height): 75mm x 75mm

Entrance Thickness: 30mm

Depth H: 140mm

Depth V: 160mm

DOH: 22.5cm

1603—Enlarging complete. F out.

1604—Ns out. *Only 2 Ns remain. Based on appearance and primary measurements, it is highly unlikely that the runt remains in the cavity. This clutch has been reduced from 3 to 2 between 7/17/15 and today. We search for booted N around base of tree, but find nothing.* BL down.

CN11\_2015 F (new in 2015):

**Band # 1833-03263 (on L leg)**

64.1 g LWC: 129 mm

- 7.4 g LLP(5): 99 mm

56.7 g LLP(6): 108 mm

Rect: 61 mm

Note: F was bled on L wing for genetics. Very small hematoma.

**Bubbly Owlet**

54.1 g

P#5: 43 mm

P#6: 42 mm

Rect: 17 mm

Band#: **1833-03178 (on L leg)**

Notes: Bled L wing (gen.) Moderate hematoma.

**Stubbly Owlet**

59.0 g

P#5: 36 mm

P#6: 35 mm

Rect: 11 mm

Band#: **1833-03179 (on L leg)**

Notes: Bled L wing (gen.) Small hematoma.

1624—BL back up.

1627—Ns back in.

1635—F released with strong flight SW. We leave.

# CN11—2016

## 2 June 2016

1520-1610— Flam crew arrives at CN14/CN11 to cheery pick and peep. We tap and peep all past nest trees and any nice-looking cavity trees from ~15m up drainage from the CN14\_2015 nest tree down to ~30m down drainage from the CN11\_2015 nest tree. We do not find anything.

~1530—RC locates a FLOW roosting in live pipo about 30m SE upslope of the CN11\_2013 nest tree after peeping the CN11\_2013 nest tree. FLOW gives a high-pitched three note call. Later observations suggest this is the F. Pipo has a dbh of 37.5 cm.

X: 481432

Y: 4333013

+/- 20m

2025—RC and BH arrive in CN14/CN11 area to return to afternoon roost tree, listen for nesting vocalizations and find all nests! We spot FLOW on roost in same location as the afternoon and observe.

2035—1m further from trunk on same branch as perched FLOW, a second FLOW shifts in the foliage, then flies SW toward dr bottom. RC pursues while BH watches perched FLOW. Moving bird circles back to W and then to N and begins giving LCs. This is the M, and afternoon perched FLOW was apparently the F. As M gets close, F begins giving LCs as well, including a quiet, high-pitched 3-note call similar to the one RC heard during afternoon. *We suspect that M was roosting on same branch as F, but was missed earlier in the day. This observation comes within a couple of days of SY’s observation of two closely perched FLOWs in Hot Creek.*

2037—F makes a short flight W to psme. M joins. **Copulation attempt!** M flies N.

2039—F gives FSCs in place.

2041—M returns from a **second copulation attempt**. This makes a fair bit of noise, and M is promptly mobbed by AMROs. F stays put. AMROs also swoop RC and BH in their fury.

2043—AMROs calm down. M gives brief 3-note call 20m NE of perched F. F makes a strong flight to join M.

2046—M perches high up in CN11\_2013 nest tree, then makes a few short flights with the F on his tail. M returns to 2013 nest tree once. F never perches here.

2048—M and F perch 10m up a psme 10m S of 2013 nest tree and **allopreen** for ~1min.

2050—Both birds make long-strong flights to the center of the dr bottom to the NW, then quickly move up to R top NW of dr. We pursue, and are able to keep up with pair for ~25 mins.

2056—PD ~120m NNW of roost tree.

X: 481422

Y: 4333212

2057—Second PD in this vicinity.

2101-2108—We intermittently catch up to and lose pair.

2108-2112—We hear brief, faint FSCs to SW from R top, then lose the pair. **Based on this pair’s behavior and location (marked PD location ~700m up dr from CN11\_2015 nest), we deem them CN14 in courthship** and then move down to CN11 proper to listen for nesting vocalizations from a southern pair.

2122—BH and RC split up in the CN11 drainage to listen for FLOW nesting vocalizations. BH starts at N end of CN11 cavity tree clump and works SW; RC begins ~200m up dr of CN11\_2015 nest tree and works SW as well.

2140—RC taps CN11\_2015. Nada.

2144—BH hears M give faint LC on E slope of CN11 drainage, 100m up dr of CN11\_2015 nest tree.

2151—BH hears M give TCs on lower E slope of drainage, finds him calling in clump of large pipos nearby cavity tree Tag #1238.

2153—BH spots M make short flight midway across drainage to another pipo, where he continues to call.

X: 481129

Y: 4332838

+/- 6.6 m

2157—M goes silent. RC leaves to retrieve net gear while BH remains in this area.

2211—M gives 1 LC ~30m W of BH, who remains in the stand of pipos where the male was first heard.

2215—BH moves N up drainage to listen and tap cavity trees while RC begins setting up a lure net on R top to SE of dr, 10m S of where logger rd reaches R top after crossing cr. Net is set up adjacent to a small stand of psme/pipo ~150m ENE of CN11\_2015 nest tree, in the same location used by RC in 2015 to capture CN11 M early season.

2225—PB started.

Vegetation: Young-mature pipo/psme, very open.

Weather: Clear, mostly calm, 11.5C.

X: 481219

Y: 4332873

+/- 8m

2239—CN11 M rapidly approaches net site from dr bottom to SW. M jumps across net and calls for ~3min, giving TC/TECs including 2- and 4-note calls.

2242—CN11 M suddenly leaves net site, flying 80m up dr and continuing to call. M potentially has an encounter, but we can confirm no second M. M then flies quickly down dr to vicinity of CN11\_2015 nest and continues to call.

2250—CN11 M silent/out of range. M loses interest in PB for remainder of time in CN11. RC walks SW with PB briefly from 2306-2318 and picks up M calling in 2015 nest vicinity, but M never approaches net again.

2322—After silence in the drainage bottom, BH meets up with RC at the lure net.

2328—PB off. We break down and move back up dr to lure for CN14 M.

2350—We set up lure net in small potr stand near large rock outcrop ~80m down drainage from CN11\_2013 nest tree. RC has set up in this stand in the past and had success at drawing in both CN11 and CN14 birds.

2400—PB started.

Vegetation: Young to mature pipo/potr, fairly open

Weather: Clear, calm, 9.5C.

X: 481353

Y: 4333057

+/- 8m

2407—CN14 M gives brief TCs 80m N up dr then goes silent, never approaching net.

2416—CN11 M gives ~4 distant TCs from S down drainage, never approaches.

2432—PB off. We break down nets and leave CN11.

## 7 June 2016

Afternoon—Flam Crew arrives in Hayman to selectively peep past nest trees and particularly nice-looking cavities in CN5, CN10, CN11, and CN14. **We found the CN5\_2016, CN14\_2016, and CN8\_2016 nests.**

~2044—BH leaves CN14 to go listen for nesting behavior around the CN11\_2015 nest tree.

2105—Soon after arriving at CN11\_2015, BH hears M give a few 3-note LCs ~20m down dr. from CN11\_2015 tree, localized where the SE side dr. meets the main CN11 dr.

2106—M gives 4 LCs from a clump of mature psme then goes silent.

2125—RC arrives in CN14 and begins heading down dr to meet BH, who is tracking CN11 pair near confluence w/ E side dr just below CN11\_2015 nest.

2127—RC hears CN14 M in 2016 nest site as he passes on his way down dr. BH hears M giving 3 note LCs on E side of dr, flies W and goes silent. Half a minute later, BH hears a solitary LC on E side of dr, which leads her to believe that a F FLOW is also in the vicinity.

~2130—RC joins BH in confluence area to track CN11 pair. Silent on arrival.

~2140—BH and RC chase M as he bounces around giving LCs in the same centralized area ~30m SSW of CN11\_2015 nest tree. No F vocalizations during this time.

2146—RC hangs a live psme for reference at SW end of confluence below CN11\_2015 nest. M gave LC/TCs in this tree for 1-2 minutes before flying NE.

2148—RC hangs 2nd live psme 10m NE of first psme. M gave TC/TECs here for 1-2 mins in the vicinity of two marked cavity trees before flying up the E side dr ~50m (at 2150), continuing to TC. RC pursues, but M quickly goes silent. BH remains in confluence area.

2156—BH picks up M giving LCs in confluence area once again. RC joins. FSCs follow shortly in close proximity to M. W spot F, then M, both making short flights around cavity trees #1264 and #1265.

2159, 2201, 2204, 2207—PDs in rapid succession within 5m of these two cavity trees. F vocalizing consistently. F and M perch multiple times on potr snag leaning against cavity tree #1265. F flies twice during this period to a small cavity entrance ~10m up SE side of #1265, leans in a little bit but struggles to fit—fully extending her wings, backing out, and flying to nearby psme.

2208—**F successfully enters cavity in #1265 and stays down! This is the CN11\_2016 nest tree!** Cavity is a very small WISA excavation 10m up, facing SE just under a bend in the tree (no bark around cavity). Nest tree is one of the last enumerated cavity trees in the CN11 dr, located ~10m SE of cr at the SW end of the confluence with the eastern side dr below the CN11\_2016 nest area.

2210—We confirm tag, label tree, and back out of nest site. F stays on during this time.

2230—RC and BH arrive in vicinity of CN11/14 interface to lure for both territorial Ms.

2241—PB begin. Net is set up 40m NW of logger rd/cr crossing, on low SE-facing slope.

Vegetation: Mixed pipo/psme, open (net flanks a couple of medium psme snags)

Weather: mostly clear, calm, 8C.

X: 481202

Y: 4333032

+/- 8m

2254—M begins TCing 50m SE of net in dr bottom.

2257—M tosses in some TECs as well, but stays in dr bottom.

2258—M silent. We are unsure if this M is CN11 or CN14 M, but suspect it is the former.

2311—TCs from CN11 M 120m SW of net in dr bottom. M moves up dr toward net site over the next 3 mins, but never leaves dr bottom.

2315-2325—RC walks PB SE toward logger rd/cr crossing to lure in M. M is TCing on SE side of dr, likely on NW-facing slope. M approaches by about 20m during this time, giving TC/TECs, but never leaves dr bottom. T42/Megascops used. PB returned to net site.

2339—PB off. We break down net and move to opposite site of dr to run PB and set up net if M stays interested. M continues to call in dr bottom as we brak down and move to opposite R, then goes silent as we arrive in this area.

2349—PB begin 10m NW of spot where logger rd crests out on R. M silent. RC walks PB toward dr bottom and back but does not pick up M again.

2403—PB off. We hear M TCing in dr bottom again as we leave. We play another brief PB at him, but he retreats down dr and we decide to move up dr to target CN14.

2416—PB begin in upper CN14 while we set up net. Net erected 150-200m NE of CN14\_2016/CN11\_2013 nest.

2428—Net fully up after a few tangle troubles.

Vegetation: young-mature pipo/potr, live and snag, fairly dense.

Weather: mostly clear, calm, 7C.

X: 481489

Y: 4333182

+/- 9m

2453—PB off. We heard a single hoot of indeterminate direction during net up time, distant and never approaching. We break down and leave.

## 17 June 2016

2038—RC arrives in CN11\_2016 nest area to peep and determine nest status, attempting M capture if a full clutch. F down on arrival.

2047—M LCs 50m S.

2053—M LCs 20m S, enters nest site. F gives FSCs in cavity and scratches her way up to the entrance.

2055—F flushes S. **Peep reveals 2 eggs, c&t. Peep height: 26’7.5” from S side capture position.**

2059—I back out and leave to join BH at CN14 for M capture attempt.

2140—That didn’t go well. We’re back! RC and BH begin setting up a lure net to capture CN11\_M on R top NE of CN11 dr, 30m down R from where logger rd crests out after crossing cr.

2150—PB begin. Net erected flat, opening N/S and running between a small potr snag and a young pipo.

Vegetation: young-mature pipo/psme, sm potr snags, very open (larger, more dense trees at boundaries of R top clearing)

Weather: clear, calm, 12.5C

481226

Y: 4332843

2153—M approaches net site from CN11 nest area, giving TC/TECs, but goes silent shortly and backs off to S. After a few minutes, we change call to Megascops and RC walks PB around net site. M rapidly approaches again, giving TEC/HECs and bouncing all around site.

2207—ER meets BH and RC at their net.

2210—M still bouncing around site, but staying pretty high and not hitting net. ER arrives. RC leaves PB by net. M continues calling aggressively at PB for ~5min, then backs off to S.

2225—PB off. No response from M after a single TC in net site as we change PB back to T42 at ~2118. We leave CN11 and head up R to lure for CN14 M.

## 1 July 2016

~2034—RC arrives in CN11\_2016 nest site to capture F and peep to determine nest status. F down on arrival.

2038—Net up and in place over cavity. F stays down.

2050—M LCs just SW of nest site.

2055—M enters nest site prey laden, giving LCs.

2056—M aborts PD twice while net is over cavity.

2058—RC allows M to deliver a PD. FSCs on cavity.

2102—M PD allowed. Possible N begs? Unconfirmed.

2106—M in site, on approach.

2107—**F comes up and flushes into net! F is unbanded.** Net is snagged on nest tree and psme branch near cavity, andF is excessively tangled in capture net. After making a few cuts in the net, I remove and band F.

**Band # 1833-03374 (on R leg)**

2116—F released with low, flappy flight to upside down perch 3m away and 2m up a small potr. F rights herself, and RC backs out of nest site without peeping due to long extraction and release quality.

2118—RC out of site. M LCs in site, and F gives FSCs off cavity.

2138-2148—RC returns to nest site to observe (to confirm F has returned successfully to cavity and briefly monitor PD rate). F is back on when I arrive and activity appears normal. M delivers 3 PDs during this time. F gives FSCs and LCs intermittently on cavity. *PD rate suggests that hatching has occurred, but future peep required to determine N ages. Previous peep was on 6/17/16 (2 eggs).* RC leaves.

## 8 July 2016

2042—BH, KM and Sawyer arrive in the CN11\_2016 nest site to peep nest contents and attempt a M capture. The F comes up upon our arrival then recedes back into the cavity. We get a silhouette and observe nest activity.

2051-2056—M makes 4 PDs via fluttering at the cavity entrance. The majority of his PDs are in this manner (See PD Sheet).

2056—F flushes upon her own volition. We advance to peep the cavity.

2058—The M makes a PD with camera aside cavity. **Our peep reveals 3 Ns all in white natal down. 2 Ns are face down and unmoving, and the eldest has head up with some movement, eyes still slits. I estimate eldest is ~6-7 days old.** As we are about to lower peeper, F flies around nest tree and gives a few FSCs in an adjacent spruce. We retreat out of sight and continue to observe.

2100-2139—We observe 18 PDs (See PD Sheet).

2104—F lands on a potr snag near the nest, and receives a PD from the M off cavity. A few moments later, she returns to nest cavity for the first time since her flush.

2105—M makes a PD, and immediately after, the F follows him out of the nest.

2200—We leave CN11\_2016 to meet DL and ER before heading to CN13 to walk with playbacks and listen for any FLOWs.

**Note:** *Because we observed the F off cavity for approximately 55 minutes, we decided to abandon a M capture attempt. Based on the very young age of Ns, and the lack of vocalizations confirming FLOW sex on each PD, we did not want to risk capturing the F on her return from an extended period off cavity. We speculate that the two different modes of PDs we observed (one bird fluttering at entrance, and the other fully entering the cavity) are indicative of the F also making a few PDs to the nest alongside the M. However, we could not confirm her presence in the site.*

## 19 July 2016

1641—MC, BH, and BL arrive at the CN11\_2016 nest to assess status of nestlings. F not in cavity entrance when we arrive. **We peep—no F present, with 2 owlets in cavity. Eldest owlet had all juvenal plumage with a moderate facial disc developing—probably 18 days old. Runt owlet was mostly grey without facial disc—probably 3-4 days younger.**

1646—We leave.

2035—Steve Getty and BL return to the CN11\_2016 nest to attempt capture of M. No F or nestling in cavity entrance when we arrive, and all is quiet. BL approaches nest tree to get net at cavity height. Weather: Overcast (light PM showers, heavier on MEF), calm, 19 C.

2046—M starts giving occasional SC from ~ 50 m to E.

2059—Presumed M arrives in nest area (no vocalizations given, but SC to E had conspicuously stopped), who then flies to cavity entrance and makes fluttering PD at entrance (no owlet at entrance, but cavity is shallow).

2100-2109: Approximately 6 PDs at cavity entrance (no vocalizations, but presumed to be M).

2110—**Presumed M is captured after PD at cavity entrance. FLOW was previously banded, with Band # 1593-64861—this was the CN11\_2014 and 2015 M, and the CN5\_2012 floater!** M gives frequent SC coming down from the cavity, and when extracting from the net, he frequently lunged to deliver painful bites of any exposed flesh.

**Band # 1593-64861 (on x leg)**

54.5 g LWC: 128 mm

- 7.5 g LLP(5): 96 mm

47.0 g LLP(6): 105 mm

Rect: 56 mm

**Notes: Blood sample was taken in 2015, so no sample taken today.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 2.5 |
| P2 | 2.5 | 2.5 |
| P3 | 2.5 | 2.5 |
| P4 | 1 (much lighter) | 1 (much lighter) |
| P5 | 2.5 | 2.5 |
| P6 | 1 | 1.5 |
| P7 | 1 | 1.5 |
| P8 | 1 | 1.5 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 1.5 | 1.5 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1.5 | 1.5 |
| P9 | 2 | 2 |
| P10 | 2.5 | 2.5 |

2136—M is released; he shows strong, horizontal flight toward the nest area (M continued to be quite feisty all through handling process, biting and clawing quite aggressively). We hear F give a few SC ~30 m to the E shortly before we released the M—the first evidence of her in the area since we arrived.

2140—We leave.

# CN11—2017

## 1 June 2017

Afternoon—A Flam crew contingent cherrypeeps in the CN14/CN11 drainage. The cherrypeep turns into a mostly exhaustive search, no nests are found.

2035—ZM, MC, and JE arrive at the main drainage in the N section of CN14. ZM stays at the N end, in between the CN14\_2015 and CN14\_2016 nest cavities while MC moves to the N end of CN11 (near the junction of the CN11 two-track and the cr.) and JE moves S on the two-track in CN11 east of the CN11\_2015 nest cavity.

Weather:~10% cloud cover, calm, 11C

2049—JE hears faint FSCs to the SE of her location. MC moves slightly S towards her position.

2200—We all stop listening and move towards MCs position at the junction of the CN11 two-track and the cr in order to set up our lure net.

2222—Playback starts with the lure net set up ~60m E of junction of the two-track and cr. The net was on the upper NW-facing slope with the net open to the NW and SE.

Vegetation: Mixed Pipo and Pisme

Weather: Clear, calm, 10C

X: 481280

Y: 4332901

+/- 3m

2250—MC leaves lure net in order to walk around the drainage below the net. He gives a few M TCs and elicits no response.

2330—After no response calls to the playback, MC took playback down into the drainage and to the S. ZM and JE walked up N into the drainage back towards the CN nest cavities in order to tap trees and listen. We gave some M TCs while up at the CN14\_2015 nest cavity and got no response.

2400—After we all returned to the lure net, we stopped the playback after hearing no FLOW calls. We then began our hike out.

2420—We all returned to the car and headed out of the study area.

## 16 June 2017

2039—ES and AW arrive in CN11 territory to listen for vocalizations with intent to find the CN11\_2017 nest site.

2045—LD and ZM begin listening for FLOW vocalizations with intent to find the CN14\_2017 nest site.

2045—ZM and ES hear GHOW calls about 100 m NW of C11/C14 drainage. The calls endure for about 15 minutes.

2112—LD hears a potential TC ~100m SE of CN14\_2016 nest site.

2201—ES and AW begin PB at a lure net 300 m SW and down drainage from the CN11/CN14 parking spot. Lure net is on the E-facing slope of the drainage in between the CN11/CN14 territories. AW goes down drainage to listen in CN11 while ES waits at lure net.

Vegetation: Mixed age pipo/potr

Weather: Clear, gentle breeze, 18C

X: 481282

Y: 4333041

+/- 3m

2232—ZM meets ES at lure net. ES goes down drainage into the northern part of CN11 to listen while ZM waits at lure net.

2235—LD joins AW in CN11 territory to listen for vocalizations with intent to find the CN11\_2017 nest site

2300—ES returns to lure net and helps ZM turn off PB and pack up net.

2310—LD and AW join ES and ZM at lure net after hearing nothing. We return to the vehicles after hearing no FLOW vocalizations tonight

## 22 June 2017

Afternoon—Flam crew does extensive peep of CN11 and CN14, covering most known trees in the territory and enumerating several more. Many trees were fallen, so it is likely that a good number of known cavity trees not peeped had fallen and were unable to be identified.

## 7 July 2017

2300-2325—Bashful (ER), Sneezy (KM), and Dopey (ZM), hike into CN11/CN14 to play playback and hoot. We mainly focus our listening efforts on the W slopes of the territories. We do not hear anything. We hi ho out of there.

# CN11—2018

## 07 June 2018

1520—AM, ES, and KM arrive in CN11 territory to cherry peep past nest cavities and other preferential cavity trees.

1553—ES taps and peeps a cavity tree that is tagged but tape has fallen off. She sees dark eyes and a brown body moving around very close to the peeper camera. Thinking it’s a squirrel, ES tells AM to look at the monitor. At this moment, a facial disc comes into view—it’s a FLOW! **This is the CN11\_2018 nest! Cavity is the lowest of about 6 cavities on a live potr, in a NOFL excavation that is NW and downslope facing. The nest tree is 20m E of the CN11\_2014 nest tree and 30m E of the creek. Tree tag #3052—it doesn’t show up in our data sheet, so someone may have marked it as fallen last summer.** After ES removes the peeper, F comes up to cavity entrance. ES and AM back off to take notes, and the rest of flam crew make their way over to see the nest site.

Vegetation: mixed age stand of psme, potr.

Weather: 90% cloud cover, slight breeze, 25.0 C

X: 481075

Y: 4333755

+/- 3m

1605—F is down. KM quietly approaches to flag the tree.

1606—F is back up.

1609—F is down again. We leave nest site.

2046—AM, SF, ES arrive at CN11\_2018 nest site to peep after F flush. F is down when we arrive.

2051—We hear a vocalization in a tree immediately above us, about 10m to the S of the nest, which we believe to be a F FSC.

2052—AM approaches to peep the nest, and SF has visual of a perched FLOW 10m south of nest from vicinity of the “FSC”. As peeper nears nest cavity height, F flushes out of the cavity to SE. We are surprised that she’s still on the nest, as we were sure we heard an FSC off cavity. Since the peeper is right at the cavity entrance, AM goes ahead and peeps. **Nest contains a clutch of 2 eggs, centered and touching.** We immediately leave following peeping effort.

Note: Based on the high pitch of call, we initially thought it was an FSC indicating the female was already off cavity. However, this vocalization was likely a male scold, directed at us since we were in close proximity to the nest. Further precautions will be needed at this nest site as the male is apparently wary.

2113—We return to nest site to monitor and record PD rates.

2115—Silent PD, M perches on psme 10m SW of nest before delivery. Delivery only takes 3-4 seconds as nest cavity is very shallow. M does not fully enter cavity.

2118—Silent PD. Male perches at the cavity entrance without fully entering.

2140—We leave nest site. All is quiet when we leave.

2211—We start playback, T42. Net is located 20m N of creek and 10m W of “No Motor Vehicles” sign, where the old two-track road crosses the creek. Net is open N-S 200m away from nest on a low, S facing slope position.

Vegetation: young potr/mature pipo, open stand.

Weather: sky clear, slight breeze, 18.5 C

X: 481220

Y: 4332998

+/- 3m

2220—M TCs 50m S of net, coming from the direction of CN11\_2018 nest.

2223—M TECs 20m S of net.

2228—Track is changed to Megascops.

2238-2255—M TCs 40m SW of net. M does not come any closer.

2255—M TCs stop as ES and SF enter drainage to listen and tap around for a potential CN14 nest.

2303-2313—Faint M TCs again 70m SW of net. M has retreated to the area of CN11\_2018 nest again. We presume M FLOW to be CN11\_2018 M.

2313-2356—No more M TCs are heard for the rest of the night.

2401—Playback is stopped. We leave.

## 21 June 2018

2044—ES and AM arrive at the CN11\_2018 nest site to peep the nest and attempt a M capture.

2053—M flies into the site and gives LCs.

2058—F peeks her head out of the cavity and then flushes.

2102—**AM peeps the nest cavity to find that there are still two eggs, centered and touching. One shows possible evidence of pipping.** We back off to observe.

2108—F comes back on.

2114—FSCs from on cavity. M gives LCs followed by a PD. For all of the PDs he delivers tonight, he perches at the entrance to deliver the PD without fully entering the cavity.

2116—M PD.

2117—M PD.

2120—ES begins approach with capture pole.

2125—M gives a PD as ES is raising the net.

2128—Capture pole in position. M goes in for a PD and ES swings, but the M escapes.

2130—**M PD, swing, and capture!** **The F flushes as ES pulls the capture pole away from the tree, but the un-banded M remains in the capture net.** We extract the bird and move ~75 m across the creek to process him.

**Band # 1833-32538 (on L leg)**

68.0 g LWC: 128 mm

- 15.5 g LLP(5): 100 mm

52.5 g LLP(6): 107 mm

Rect: 58 mm

**Notes: Hippoboscidae present. On both wings, P3 was broken off at the tip and P4 and P5 had large notches. Bled both wings, as first prick on L wing didn’t supply enough for sample—moderate hematoma on L wing and small hematoma on R wing.**

2214—AM releases FLOW. Horizontal then ascending flight to the SE. We pack up and leave CN11 territory.

## 28 June 2018

2025—KM and DL get into the CN11\_2018 nest site to attempt a F capture. Upon arrival, we note that the nest tree has experienced some cosmetic work—the limb closest to the creek where the tree splits has broken off about two feet higher than the cavity. F is down upon arrival.

2030—DL starts her approach.

2037—DL has net in position.

2100—F does not come up to a tap.

2103—M flies into the site and makes LCs.

2106—M flies into a potr snag just W of the cavity tree with orthopteran prey in beak.

2108—F flushes into bag! But the sneaky shedevil escapes as DL lowers net. **We peep and see two eggs with no apparent pips. The F appears to be unbanded based on moderately rushed observations.**

2112—We leave to go listen in CN7/CN8.

## 9 July 2018

2038—ES, AM, and ON arrive at the CN11\_2018 nest site to attempt a F capture. The F is down when we arrive. ON moves in with the capture pole and begins raising it.

2043—As ON is swinging the capture net around to cover the cavity entrance, the F pops up and flushes. **She scolds us from a nearby tree as we peep the cavity to find that she is still on 2 eggs, centered and touching. One egg appears to have a brown spot developing. The F has been on 2 eggs for at least 32 days, so we presume that they are duds and that the F is inexperienced.** We back off and observe the nest.

2054—F gives FSCs in the nest site, off cavity. We don’t see a band on her.

2058—F retreats to the NE, where she is out of site. We hear her continue to give FSCs.

2115—Although we are almost positive the eggs are duds, since the F still hasn’t come back on we back out of the site to give her space.

2120—At the two track road, 50 m from the nest, ES gives some TCs. No response. There has been no sign of the M tonight. We leave the territory.

## 20 July 2018

2040—AM and SF arrive at CN11 nest to peep. No one is up at cavity entrance upon arrival. AM approaches with capture net.

2045—Net is at cavity height in position.

2050—**SF peeps nest. 2 rotten eggs, both with brown patches. F must’ve finally gotten the message**. No sign of a FLOW is seen or heard in the nest site. We leave.

# CN11—2019

## 31 May 2019

1545-1730—Flam crew cherry peeps CN11 territory, searching for the CN11\_2019 nest. 2 unenumerated trees are flagged near tree #762.

X: 481563

Y: 4333262

+/- 5m

We peeped our way down the main drainage, following the creek SW past the CN11\_2018 nest. No signs of FLOWs found. Past nest tree #1289 contains one unknown egg in a new cavity. The white egg is slightly oblong, so likely not a FLOW egg, but is worth rechecking to confirm.

## 13 June 2019

1500—Flam Crew arrives in CN11 to cherry peep for a CN11\_2019 nest tree. We peeped our way down the main drainage to the area in the vicinity of the CN11\_2018 nest tree.

1607—ON is the first to arrive in the 2018 nest tree area, and she decides to start with her shot call tree from week one of this year’s field season; she had peeped it on May 31, 2019, but it was empty. As she makes her way toward the tree, she notices a small owl face in the cavity peering at her. **This is the CN11\_2019 nest! Cavity is a SW-facing NOFL excavation ~20 ft from the base of the tree and is directly beneath a Y-shaped snag branch. Tree tag #3047—it doesn’t show up in our data sheet, so someone may have marked it as fallen. The tree is a beautiful live potr ~40 m E of the creek and ~10 m E of the CN11\_2018 nest tree.** \*Note: The CN11\_2019 nest tree is directly SE of a live, mature psme that has branches reaching directly out to the cavity, so we believe there is a higher likelihood of nest predation. We also think there’s a good chance this is the CN11\_2018 F just based on her poor nest site choice and her peculiar behavior last year. Obviously we will never know for certain (because we never caught the CN11\_2018 F), but this is our hunch.

Vegetation: mixed age potr/psme/pipo

X: 481101

Y: 4332746

+/- 3 m

1608—F goes back down in cavity as ON nears the nest tree. The rest of the crew comes down to join, and ON gives the tree another tap just to confirm that there is indeed a FLOW inside the cavity. F pops up for a few seconds before going back down again.

1622—We leave the nest site to go cheery peep in CN5. F stayed down the entire time we observed her after the tap.

## 1 July 2019

2050—ON, KC and JE arrive at CN11\_2019 nest to attempt a F capture and peep the nest. Upon arrival F is down and all is quiet. ON starts her approach to get into capture position.

Weather: 100% cloud cover, slight breeze, 15 C

2052—ON has the capture net at position in front of the cavity.

2057—We hear the M call off roost ~30m E

2058—ON hears F LCs off cavity ~15 m NE of nest tree, so we lower the net and peep.

2059—**We peep the nest cavity to find a RESQ rise up from grass on the bottom of the cavity, peering up at the camera. Predation is noted for the CN11\_2019 nest tree.**

2102—We head out to attempt a M capture at the CN8\_2019 nest.

# CN12—2011

## 10 June 2011

2215—BL, IJ, and JR set up lure net in the CN12 territory, approximately 350 m W of the CN11\_2011 nest tree on the top of a N-S running ridge. While setting up, between wind gusts we intermittently hear a M giving TCs to the W or NW of us, approximately 200 m.

2230—We start playback.

Weather: windy on and off (5-10mph—enough to fill net shelves), mostly clear, 14C.

Vegetation: Mixed age Pipo and Psme.

X:481100 Y: 4333165 +/-3

2300—Stop playback. Nothing heard in the vicinity of the net, and nothing captured.

2310—We leave.

## 17 June 2011

2138—IJ, JR, BL begin playback in CN12 territory

Weather: calm, mostly clear, 14C

Vegetation: 50m E of high burn area in area of low burn intensity; SE facing upper slope (3) with

mixed mature/young pipo/psme

X: 481110

Y: 4333281

+/- 3m

2150—BL leaves to listen for nesting activity in Potr bottom to S.

2200—BL hears M singing in drainage south of lure net, and pursues.

2201—BL marks one songpost on M before he quiets (see Songpost Data for details), about 50 m N of the Potr bottom. A couple of minutes later, BL hears M give a few TCs approximately 60 m to the N before quieting—BL alerts IJ and JR that M may be heading N towards lure net.

2203—M TCs/TECs very close to net.

2211—M continues to make consistent TC/TECs from pipos N and S of net.

2221—M stops calling and is silent for first time.

2223—IJ discovers M in the lure net; M in 3rd shelf of lure net, flew in from S. M is the already

banded **CN11\_2011 territorial male (Band # 64737)**, previously caught in 2011 season with geo-locator.

**Band # 1593-64737 (on right leg)**

**84.0 g**

**- 22.0 g**

**62.0 g**

2246—M released with strong flight to the E.

2247—Stop playback and begin breakdown.

# CN13—2011

## 17 June 2011

2223—Playback started. Net was set up about 75m south of CN5 parking spot.

Vegetation: Mixed young and mature Pipo/Psme

Weather: Calm, clear, 15C

X: 482199

Y: 4333229

+/- 3m

2232—JG, PS, and EE leave to tap and listen in CN13. No cavities found and no birds heard.

2306—Playback stopped. Nothing seen or heard in the vicinity.

2315—We leave.

# CN13—2012

**Note (6/20/2012): Originally (5/30/2012), the CN13\_2012 nest was presumed to be the CN5\_2012 nest. Following observation on ----, we now think that CN5 is located further N (down drainage) and that this nest reflects on a new territory, CN13. This observation is further supported by our radio tracking efforts in the CN13 territory. Therefore, all notes that were originally placed in CN5—2012 have been moved to CN13—2012.**

## 30 May 2012

2025—AW, AP, and MD arrive at ridge near the top of CN5 drainage to set up lure net with the goal of capturing CN5 M. We set up lure net opening to the NW.

Vegetation: Medium psme mixed with potr undergrowth and snags

Weather: Clear and calm, 13C

X: 0482165

Y: 4333402

+/- 9 ft

2051—M gives TCs from NE of lure net for three minutes as we are setting up net then flies overhead and lands on a psme approximately 3 m SW of lure net.

2056—Start playback.

2100—**We check net and find 2 birds. Both flew in from the W and both were in the second shelf from the bottom. Neither bird vocalized prior to capture.** While in net, M gives HECs and F is silent.

2109—**1st owl is in hand (presumed F due to size and lack of vocalizations). She is unbanded.** We take her mass and band her, but we do not take blood or measurements. **Note\* (6/20/2012): Observation during following nights has led us to believe that she is the CN13\_2012 F).**

**Band # 1593-64881** (on R leg)

93.0 g

- 21.0 g

72.00 g

2111—2nd owl is in hand.

2118—F released to the E with mostly horizontal flight to a nearby psme approximately 3 m away.

2119—We begin processing the M. **He is previously banded—he was captured in the lure net (also erected in the S end of CN5 near the 9-J road) on 24 June 2011. Note\* (6/20/2012): Observation in following nights has led us to believe that he is the CN13\_2012 M).**

**Band # 1593-64825** (on L leg) LWC: 125 mm

69.5 g LLP5: 100 mm

- 15.5 g LLP6: 109 mm

54.0 g RET: 63 mm

2130—M is released with strong, ascending flight to the W.

2146—Resume playback.

2149—AW and MD leave net to listen and attempt to find CN13 nest.

2157—**CN13 M (band # 1593-64825) captured again. He flew in from the W and was found in shelf 4.**

2200—Release M with strong ascending flight to the W.

2207—We take down the net and proceed to search for nest. MD heads N down CN5 drainage while AW and AP search SW of net.

2210-2228—AW and AP attempt to follow M while he continuously gives TCs with occasional TECs from SW of lure net. AW and AP hear a hoarse location call given from M.

2229—**AW spots a nearby broken top psme and finds F up in a N facing cavity approximately 4 m from the ground. This is the CN13\_2012 nest tree! Nest tree is not enumerated and is located approximately 100 m NE of parking spot on the Nine J road near the top of the ridge crest. We flag the tree and take GPS coordinates. When the cavity is checked a second time, F is down.**

X: 482114

Y: 4333394

+/- 12 ft

2248—We leave CN13 to listen in CN7.

## 8 June 2012

2018—SY, JR, CC, and AW arrive at the CN13\_2012 nest attempting to capture the M in order to attach a radio transmitter for the purpose of radio telemetry.

2020—We peep and find the F down in the cavity with 1 egg visible.

**\*Note: Not enumerated nest tree is a pipo broken top. Nest cavity is the 2nd to the top facing NE. We find out later that nest has a double entrance with the 2nd cavity entrance being located approximately 7 cm up and to the left of the previously described cavity entrance. 2nd entrance is elongated.**

2038—JR raises net to capture position.

Weather: calm, clear, 18 C

2055—F is up. She flushes.

2057—**We peep the CN13\_2012 nest and find 3 eggs, touching.**

2112—F lands on psme next to nest tree and perches for approximately 3 min before M comes in and gives a single TC. She flies off, so we back off to wait for her to come back on.

2127—We return to the nest and JR raises net back to capture position.

2203—M gives 2 location calls from E of the nest.

2211—JR attempts to capture M on PD. JR has main cavity entrance covered with the capture net. M blasts out of previously unknown double entrance. F is up in main cavity entrance.

2218—JR lowers net because F is still up. At this point, AW and CC leave to set up lure net attempting to capture CN5 M after nest capture was unsuccessful.

2226—F goes back down to cavity bottom.

2228—While trying to plug second entrance, SY flushes F. JR and SY back off and head to lure net site.

2246—AW and CC set up lure net approximately 40 m SE of nest. Playback begins.

Weather: calm, clear, 20 C

Vegetation: mixed psme/potr.

X: 482184

Y: 4333333

+/- 5m

2248—JR and SY return to nest site.

2251—Net in capture position

2306—**Unbanded, silent M captured in lure net. He is a CN5 floater!** M came in silent from the E and was captured in the bottom shelf (1). SY brings net down and heads to lure net site.

**Band # 1593-64861 (on R leg)**

81.0 g LWC: 127 mm

- 26.5 g LLP(5): 96 mm

53.5 g LLP(6): 104 mm

Rect: 56 mm

Blood is taken.

2322—Territorial M (most likely CN13) responds to playback with TC/TECs from W of net and E of nest. M continues to call until playback is turned off and lure net is taken down.

2330—Captured M released with strong ascending flight to S-SE.

## 12 June 2012

2016—SY, AP and Abby Pyle arrive at CN13\_2012 nest site to attempt to capture M with a mistnet in front of the cavity due to the double entrance of the nest.

Vegetation: Large/medium Psme and small Pipo, bushes and fallen trees.

Weather: Cloudy at first, clearing later in night. Calm 19C.

X: 482163

Y: 4333443

+/- 9M

2023—F up when SY approaches nest and clears branches for the mistnet.

2025—SY moves away from nest, F still up.

2051—F lushes on her own.

2052—SY peeps. **There are 3 eggs in the center touching, no cracks are seen.**

2054—F gives FSCs from Psme near nest. M responds from NE with TCs.

2055—Unknown bird goes to cavity. We believed that it was the F going back on.

2057—M gives LCs.

2100—We start to set up the mistnet away from the nest site.

2101—Hear M TCs.

2112—Net is in place in front of nest. We see two birds in a tree across from the cavity opening. They are the M and F, giving LCs and FSCs. We immediately lower the net and move it away from the nest.

2138—JR and MD arrive to assist.

2147—SY, JR, AP and MD move mist net into nest site. As we were setting up the net the M makes a PD and flies over the 5 pole net. TECs were heard as we were leaving the area. SY goes back in to watch the nest site.

2246—JR and MD go down into CN5 drainage to listen. M heard to the N/NW. We follow and JR gets a general area songpost.

X: 482002

Y: 4333718

+/- 4m

2258—A bird is in the net. **He is a banded M, the same caught in the CN5 lure net by AW.** He gives HECs once SY approaches him in the net. We mass him, but do not take measurements again. **When the bird is in the net, we can hear the bird that JR and MD are songposting. We suspect that the M that is in the net is in fact a new territory, and the bird signing is the CN5\_2012 M.**

**Band # 1593-64825 (on R leg)**

79.5 g

- 15.5 g

64.0 g

~2305—**SY places a radiotag on the M. It is on the frequency 164.831**. We mass the bird again after the radiotag is on. **The pack mass is 2.5 g.**

82.0 g

- 15.5 g

66.5 g

2315—M released and glides to ground, SY picks back up and then M lies to burned psme snag about 3m off the ground. His flight is just ok. He is perching ok, has good balance when not trying to pull off the backpack.

2348—SY, JR and Abby Pyle stay to observe M. MD and AP head NW to spot map in CN5 near where JR songposted at 2246.

2404—MD hears a single TC from the N.

2408—AP hears M TCs to the N, across the drainage. I move towards it and end up near the end of the CN5 low ridge.

2415—AP hears wing flapping in nearby brokentop.

2418—AP sees a bird fly W low overhead, and hears soft wing flaps as it takes off. I take a GPS of the location.

X: 482074

Y: 4333679

+/- 3M

2425—MD and AP leave drainage area to meet back up with SY, JR and Abbey Pyle near the site of release to pack up.

2435—We leave the area.

## 19 June 2012

2035—AW, JR, and NS arrive at CN13\_2012 to attempt to capture the F. SY begins radio tracking M.

2038—AW and JR have nets up, covering both entrances.

2048—SY located M roost ~150m N of nest. (CN13\_1)

2055—M begins stretching wings, preening and tugging at radio-tag.

2056—M gives a few TECs then flushes towards the nest.

2056-2320—SY and JR/AW get 10 fixes on the M, mostly forages.

2058—F caught in AWs net, the lower one covering the normal hole. **Previously banded F.**

**Band # 1593-64881** (on R leg)

**Peeped: two nestlings, one egg, both nestlings have eyes completely closed, heads not raised and complete natal down.**

2104—F released, strong flight to the N.

2113—We leave to lure net in CN11.

~2320—While fixing tag at CN13\_6, SY hears M’s radio beep getting fainter, apparently towards the NE. SY follows but quickly loses radio signal entirely (even with gain all the way up)> JR reports no signal from road near parking area. SY continues up ridge to a high point ot the northeast but still is unable to locate M’s signal. JR and SY head to nest site.

2340—SY and JR begin observing at nest site.

2355—JR and SY begin to hear very faint radio signal to the NNW. We pursue. We locate generally on the ridge on the NW side of CN5, within what is considered CN5 proper. M begins zig-zagging back through CN5 to the S. M reaches high burn area between CN5 and CN13 and then moves towards the nest site.

2416—AW and NS arrive at CN13\_2012 nest to observe while SY and JR attempt radio tracking of CN13 M.

2418—M comes in and makes PD. F is up following PD.

~2420—AW hears movement at nest then observes bird flying E away from nest. This was either the F flushing or the M leaving nest following a PD (AW never observed bird going in to nest site).

2430—After locating 2 more additional telemetry fixes in close proximity to nest, we end observation and leave.

## 21 June 2012

1133—SY begins radio tracking CN13 M.

1147—SY located M’s roost in live psme. M is ~30 feet up (near top) of tree on W side, immediately adjacent to the trunk, facing E. Roost is ~70m from the nest site. After flagging and tagging tree, I leave.

## 22 June 2012

~2240—CC and PPS enter CN13\_2012 nest area to record PDs and peep cavity while SY and JV radiotrack.

2045—WE locate M’s roost – same location and perch as 6-21-12

2046—CC goes to grab peeper. F comes up.

2054—M flies into nest area, giving LCs.

2055—F makes FSC. M makes PD.

2055 (almost 2056)—F flushes. Both M and F fly off N.

2057—**CC peeps cavity. Three newly hatched nestlings with white natal down and not raising heads, and lots of eggshell fragments.**

2058—F comes back on.

~2100—CC goes to spotmap in the area.

2101—M makes PD from E.

2104—M makes PD from E, flies S.

2107—F up, maybe in response to PPS turning receiver on.

2109—F goes down.

2117—M makes PD and flies S.

2119—F flushes to N.

2124—PPS heard some noises at nest cavity, but didn’t see any bird fly in or out.

2128—F comes back on.

2132—Calls from the nest and a bird flies S. F flushing again?

2135—Heard a bird land back on the nest and give soft LCs. F coming back on?

2144—Possible M PD. Heard M land on psme to S and then give calls at nest cavity.

~2147—CC returns to nest.

2151—M makes PD from pipo to N of nest after giving soft LCs, and then flies NE.

2203—Recorded weather since we forgot earlier.

Weather: 21C, mostly clear but a little smoky, no wind.

2205—Soft LCs and sounds of movement at nest. Didn’t see any birds flying in or out.

2237—Probable PD. PPS and CC hear movement at nest and FSCs after M enters area.

2252—PPS leaves CC at the nest and goes spotmapping NW towards CN5.

2258—F leaves cavity and perches on psme directly adjacent to cavity tree about 25 ft up. She then makes a forage flight and flies off to the SE.

2305—F returns.

2307—F gives FSC.

2318—CC hears wing flaps near the nest but cannot confirm there was a PD.

2327—Stop radio tracking and leave – we hung 11 fixes on M. At least 2 suspected extra-terr movements. Around 2200 M moved to the N through and past CN5 terr for ~#0 minutes (see CN13\_5). M was again moving very far to the NE when we stopped tracking him (CN13\_11)

## 29 June 2012

2020—JR and SY begin radio-tracking CN13\_2012 M.

2030—CC arrives at CN13\_2012 nest sight.

Weather is cloudy, 10-15 mph winds, 22C and F is down upon arrival.

2036—Locate M’s roost. He is about 2/3 of the way up (~40 feet) a live psme. M is ~6 inches from trunk on S side, facing W. In sight of nest tree. See SY pics. (CN13\_1)

2045—M flushes to the NE.

2045-2345—We radio track M and hang fixes CN13\_2-9 M makes at least 2 apparent extra-territory movements. 1 for ~40 minutes to the N, using a similar route through CN5 as last couple times. Towards the end of the night, M moved a significant distance to the S and was continuing to the south when we stopped tracking. Not clear if the terr is just very large or if this M makes multiple extra-terr movements each night – need more tracking…

2052—PD by M.

2054—F flushes naturally.

2102-2116—5 PDs by M.

2117—F back on.

2122—PD by M.

2128—PD by M.

2132—PD by M.

2227—F flush

2233—PD

2238—F PD

2245—M PD, flew N.

2303—M PD, gives LCs before going into the cavity and stays in cavity for ~30 sec.

2309—M PD

2314—F back on cavity. We leave.

2345—Car picks up SY after tracking M far to the S, we leave.

## 04 July 2012

1515—Flam Crew arrives at CN13 to band and bleed owlets. Cavity is empty on arrival.

1520--

2020—SY, CC, and MD arrive in CN13 to lure net for the CN13 M to remove the radio tag and/or do telemetry work.

2048—M flushes roost to the E.

2052—Playback is started. The net is located ~60m E of the parking spot on the N side of the road. The net opens SE.

Vegetation: primarily mixed age pipo/psme, some medium age potr

Weather: 20C, cloudy, calm

X: 482159

Y: 4333321

+/- 3m

2101—CN13 M begins giving TCs to the N of the net.

2103—CN13 M is giving TC/TECs from a large psme in the lure net site.

2105—CC spots radio tagged CN13\_2012 M in large psme at nest site giving TC’s and TEC’s.

While observing him another bird flies directly overhead from SW, lands on a tree

adjacent (N) to psme and gives a TC and TEC. The bird then flies off to the NE where the

CN13 M subsequently follows him and flies off NE.

2124—M gives TCs from NW.

2127—M is giving TC/TECs from the net site.

2133—M goes silent.

~2215—M begins calling from NW and flies into the net site.

2229—M is silent.

~2400—M is acting very defensive around CN5\_942. He gave TCs and a couple TECs on our approach. This is CN13\_9 telemetry fix.

2400-2435—CN13 M is tracked to be flying up to the ridge top to the NE and then back down to the drainage multiple times. He is defending this area. SY identifies this behavior as possible foraging on the ridge top and PDs in the drainage. The CN13 F makes no vocalizations and is not seen in this area.

## 12 July 2012

2015—SY and MD arrive in CN13 to attempt to capture the CN13 M and remove the radio tag. Begin radio tracking M.

2028—SY locates the CN13 M in his roost approximately 30m up in a live pipo. M is adjacent to trunk on S side, facing E.

2043—M gives TECs from roost.

2045—We head to set up net.

2057—Playback is started. The net is located on the first ridge N of the CN13\_2012 nest ridge and ~40m W of his perch. The net opens to the SW.

Vegetation: moderately open, young to mature psme/pipo

Weather: mostly clear, calm, 15C

X: 482302

Y: 4333518

+/-3m

2058—SY checks the roost; the M is no longer there.

2108—M flies silently into psme W of the net. He leaves silently.

2153—Playback switched to FSCs but they are very quiet.

2212—Playback switched back to M TC/TECs.

2224—SY hears M giving TC/TECs in drainage W of the lure net.

2230—MD hears M giving TC/TECs to the W of the net site.

2233—M gives 1 TC within net site.

2235—M gives TC/TECs ~30m NE of the net.

2243—M goes silent.

2246—M again giving TC/TECs from NE, but he is further away.

2253—M goes silent.

2301—M gives a few TCs from N.

2302—M is silent for the rest of the night.

2433—Playback is stopped and we leave.

## 13 July 2012

2034—JV, MD, and CC find CN13 M roosting in the same roost as 7/12/12. He is about ~35ft up in the crown in a live pipo on the east side of the trunk facing south.

2047—M calls off roost giving TECs east of roost.

2049—Playback is on using F calls. Net opens to the NE on the ridge top. M comes silently into the net site several times but never responds.

Vegetation: mature pipo/psme, young potr

Weather: partly cloudy, calm, 19 C

X: 482342

Y: 4333506 +/- 3m

2118—Switch playback to TC/TECs. M has not been in the net site since 2108.

2137—Catch a silent bird in the 3rd tier coming from the north. The bird is unbanded. JV cannot tell the sex of the bird but it is vocalizing in hand with some scolding calls. CC bands left leg and MD bleeds left wing for both genetics and parasite smear. No hematoma.

**Band # 1783-64351** (on left leg)

92.5 g LWC: 129 mm

- 34.5 g LLP(5): 52 mm

58.0 g LLP(6): 108 mm

Rect: 62 mm

*\*Bird is molting P2-5. P2: 72 mm P3: 73 mm P4: 72 mm*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Blacklight, R wing, 0-3 | Blacklight, R wing, 0-5 | Wear, L wing, 0-3 |
| 1 |  |  | 1 | 2 | 2 |
| 2 |  |  | 3 | 4 | 3 |
| 3 |  |  | 3 | 4 | 3 |
| 4 |  |  | 3 | 4 | 3 |
| 5 |  |  | 1 | 1 | 3 |
| 6 | 0 | 1 | 0 | 0 | 1 |
| 7 |  |  | 0 | 0 | 0 |
| 8 |  |  | 0 | 0 | 0 |
| 9 |  |  | 0 | 0 | 0 |
| 10 |  |  | 0 | 0 | 0 |

~2200—After switching the playback back to F calls CN13 M comes into the net site giving LCs but loses interest quickly and never comes back in.

2223—Release the bird. Strong short flight S landing 12ft up in a live psme. 2nd flight is strong but still short.

2224—Turn off playback and leave. As team walks back to the vehicle the M is way far south. Even south of the road.

## 14 July 2012

1311—JV tracks CN13\_2012 M to his roost. He is on the same tree that he was roosting on 7/12/12 and 7/13/12. He is ~40ft up on the east side of the tree, facing south.

# CN13—2013

## 30 May 2013

1500-1700: Flam Crew taps and peeps cavity trees in the CN5 and CN13 territories—most of CN13 and the E portion of CN5 were completed, but the W portion of CN5 was not peeped.

2055—CK, LL and SY arrive to set up a lure net in the open on the edge of a high burn area adjacent to 9-J on the N side.

Vegetation: lure net adjacent to young Psme and Pipo. Mature Pipo present as well.

Weather: Clear and calm to start at 9C. Wind quickly picked up to 5-10mph sustained, gusting 15+mph.

X: 482094

Y: 4333369

+/- 3m

2056—LL hears faint M TCs from N in the main central drainage ~200m away.

2100—CK and SY leave lure net. CK heads N into the main central drainage and SY heads over ridge to adjacent drainage to the NW to tap trees and listen for calls. LL stays at the lure net.

2131—CK heads NE in the main central drainage and taps tree CN5\_953 while keeping sight of main keyhole cavity facing E. Immediately after 3-4 taps a bird resembling a FLOW flies strongly away to the N.

2138—No positive ID on the bird, but CK waits 10m E of the cavity to see if there is a return

2245—SY hears nothing in adjacent drainage and leaves. Arrives at CN5\_953 with a peeper to check for nests. No presence of nesting sites nor FLOW return. SY and CK then return to lure net.

2302—Playback stops. We take down net and leave to CN11.

## 7 June 2013

2145—AW, CK and RC arrive in CN5 with intent to lure for and CN5/CN13 M. Net opens SSW on low slope of spur R approximately 120 m N of CN13\_2012 nest.

2158—Start playback.

Vegetation: Med-mature pipo/psme, young potr, low burn intensity.

Weather: Clear, light breeze, 6.5C.

X: 482188

Y: 4333486

+/- 3m

2201—M approaches from the N, giving TCs/HECs. Possibly CN13 M?

2207—M moves to the N of the net.

2212—M moves back S of the net.

2217—M backs off.

2226—AW leaves to tap and listen in CN13.

2227—CK leaves to inspect CN5\_2013 (#1185) as possible FLOW nest.

2244—Wing flaps heard 20m N of net. No visual/aural confirmation of FLOW identity. Flaps are intermittent and end shortly.

2250—CK taps and peeps #1185 and sees no noticeable nest.

2256—CK hears M TC SE of #1185.

2316—CK returns to net.

2322—M heard giving TCs 50m NE of net.

2324—RC leaves to tap and listen in CN13.

2330—We stop playback and move to the W side of the drainage.

2354—CK and AW start playback on low slope of W side of main CN5 drainage.

Vegetation: Young pipo/potr, moderate bun intensity.

Weather: Clear and calm, 10C.

X: 482094

Y: 4333608

+/- 3m

2410—RC returns to net, having heard and seen nothing in CN13.

2418—Stop playback.

# CN13—2014

## 5 June 2014

1523—LL taps tree CN13\_799 (the CN13\_2012 nest tree) and starts peeping.

1526—**LL peeps the center of the 3 E-facing cavities and sees F looking right up at the camera**. **CN13\_799 is the CN13\_2014 nest tree!** The cavity is the same cavity as used previously, 2nd cavity down from the split on the tree facing E/NE. The cavity is ~15ft up and is a double entrance. The tree is a broken top lightning struck psme.

*Note: The F never comes up and doesn’t move off of her eggs at all, so we presume she is incubating.*

2405—JS, RC, RD and SY start playback at a lure net positioned ~75m SE of the CN13\_2013 nest.

Vegetation: Small to med. Pipos, fairly open, right next to road on ridgetop.

Weather: 15C, cloudy, wind variable 0 to ~7mph. Recent t-storms with rain and hail.

X: 482157

Y: 4333288

+/-3m

2446—Stop playback and break down – nothing heard.

## 13 June 2014

2043—JG, JS, SY and Brooke arrive at the CN13 nest to attempt to capture the F.

Weather: ~15C, clear, wind <5mph

2045—F is up as we approach the nest.

2052—F down for ~30 seconds, then right back up.

2053—M gives TECS ~25m to the N of the nest.

2054—F flushes to the N before we can get the net in place for capture.

**We peep: 3 eggs - center and touching.**

2101—F returns to the cavity. SY approaches net to attempt M capture.

2102—SY silent at the net ready for capture.

2104—M heard in vicinity giving LCs. No PDs follow.

2117—F flushes on her own. We leave vicinity for CN5.

## 19 June 2014

2035—BL arrives at the CN13\_2014 nest to attempt capture of F. F not in entrance when I arrive.

Weather: Mostly clear, calm, ~ 16 C.

2043—I raise net into capture position.

2102—**Without any vocalization and without first ascending to the cavity entrance, F flushes from the cavity into the net.** **F was not previously banded—I band her with #1783-64398**. F quite vocal during extraction and handling, giving extended chitter calls.

**Band # 1783-64398 (on r leg)**

79.5 g

- 7.0 g

72.5 g

No blood sample or measurements taken.

2107—I release F, who shows strong flight to the S (away from nest tree), **and peep contents of nest—I see 3unhatched eggs, centered and touching.**

2111—I leave area. M never seen or heard.

## 24 June 2014

~2315—MP, ER, and BL arrive in the CN13\_2014 nest area to attempt capture of M. After quietly scouting out suitable locations to set up mist net, we proceed to set up net.

Weather: Mostly clear, calm, ~ 13 C. Ground cover moist from PM thundershowers.

2330—We complete setting up mist net (on E-W axis directly in front of cavity entrance).

~2335-2345: MP, who was positioned most closely to the net, observed that M made ~ 3 PDs to the nest, each time entering and exiting the nest by flying parallel to mist net. BL quietly positions himself beneath Psme to E of nest tree, where M had been perching before approaching the nest, in attempt to alter flight trajectory.

2349—**M is captured after making PD in cavity (top shelf of net, which had 4 poles on W end, 3 poles on E end). M was previously banded—Band # 1783-64523; this was the same M captured by SY and JS et al. in lure net on ridge just W of the main CN5 drainage on 13 June 2014, and at that time was presumed to be CN5 M based on his approach to the net area from the N.**

**Band # 1783-64523 (on R leg)**

64.5 g LWC: 127 mm

- 7.5 g LLP(5): 98 mm

57.0 g LLP(6): 105 mm

Rect: 58 mm

No blood sample or blacklight data taken.

**Note: Both L and R primaries were in molt, with P1-4 in shafts on both wings. Total length of P1 was ~ 35 mm, P2 was ~ 25 mm, and P3-4 were completely in shaft.**

2439—We release M. He has a strong ascending flight to the N.

2447—We break down lure net and leave area.

## 30 June 2014

2146—MP and BL arrive at the CN13\_2014 nest site to observe and peep the CN13 nest to monitor the nestling progression.

2151—Bird goes into nest for a PD (sex unknown).

2152—Another PD in the cavity.

**Note**: Hatchlings are giving FSC we can hear from the ground near the nest. BL says the calls are consistent with nestlings ~1 week old.

2159—PD in the cavity.

2204—PD, then MP and BL go in for the peep. **The F is off cavity; we observe** **3 hatchlings upright and actively moving around, w/ heads up and leaning on each other. Still in white natal plumage, but appearing a bit darker—BL ages them at ~6 days.**

2222—We leave the nest site to go for a geo effort in CNG1.

## 8 July 2014

2123—AW, RC, and MP arrive at CN13\_2014 nest site to capture and bleed F. We hear F scold off cavity. MP approaches nest and raises net.

Weather: Partly cloudy, wind a light breeze but picking up, 14C.

2127—M LCs 30m NNE of nest.

2129—Both M and F enter site silently. One bird (F) makes PD and flies NW.

2130—**Second bird makes a PD and is captured. This is the CN13\_2014 M.** We hold him to encourage F to make PDs. F scolds as M is removed from net.

**Band # 1783-64523 (on R leg)**

2144—**F makes a PD and is captured.**

2145—M released.

**Band # 1783-64398 (on R leg)**

73.5 g LWC: 131 mm

- 16.0 g LLP(5): 94 mm

57.5 g LLP(6): 105 mm

Rect: 60 mm

2200—F released with strong flight upward! **Peep reveals 3 nestlings. Some white remains on their heads—especially the runt—but all 3 have prominent juvenile plumage coming in. Older 2 have very dark wings and scapulars and are starting to develop facial discs (white appearing around eyes, but no disc edges visible yet). We estimate age of older nestlings to be around 15-16 days.** **BL and MP peeped on 6/30 and observed 3 nestlings with an approximate age of 6 days. Based on both these observations, we estimate hatch date as 6/23±1.** We leave.

## 9 July 2014

1513—Flam Crew arrives at CN13\_2014 nest to process nestlings. F is up in the entrance on our approach.

Weather: clear sky, no wind, 19C

1514—Ladder risen and F flushes. AW begins ascent to nest.

Cavity Dimensions

Entrance: Hor. 55 mm x Vert. 75 mm

Thickness: 45 mm

Depth: Hor. 135 mm x Vert. 240 mm

DOH: 29.5

No cuts necessary.

1519—1st nestling removed and placed in bag, 2 others follow.

**Nestling #1**

51.3 g

P#5: 37mm (22 in shaft)

P#6: 36 mm (22 in shaft)

Rect: 13 mm (8 in shaft)

**Band#: 1783-64551 (on L leg)**

Notes: Bled R wing, parasite smear as well. Even gray coming through still present natal down ~ 17 days.

**Nestling #2**

50.2 g

P#5: 37 mm (24 in shaft)

P#6: 36 mm (27 in shaft)

Rect: 11 mm (9 in shaft)

**Band#: 1783-64563 (on R leg)**

Notes: Bled R wing, parasite smear as well. Natal down still present, parts of gray coming through on wings and back ~16 days.

**Nestling #3**

46.5 g

P#5: 29 mm (24 in shaft)

P#6: 30 mm (25 in shaft)

Rect: 7 mm (6 in shaft)

**Band#: 1783-64538 (on R leg)**

Notes: Bled R wing. Runt of the brood, natal down still very present ~14 days.

1553—AW returns nestlings to cavity.

1555—We all leave.

# CN13—2015

## 1 June 2015

2017—BH and SY spread out along the main CN13/CN5 drainage to listen for nesting vocalizations.

Weather: 12C, mostly clear, calm.

2100—Nothing heard, we go to set up a lure net.

2117—We start playback at a nest on the main CN5 ridge, ~35m SW of the faint 2-track. Net not fully up due to faulty poles…

Vegetation: Medium density young to mature pipo/psme on ridge top of low ridge.

Weather: 11C, clear, wind 0-3 mph.

X: 482020

Y: 4333598

+/- 8m

2121—We hear distant TCs (200+m) to the SE.

2125—Poles replaced – net fully open.

2126—We hear TCs right at the net, M still calling to the SE – 2 Ms in the vicinity. The 2nd (closer) M is likely CN5, heard W in drainage. ID of the bird to the SE is unknown.

2130—CN5 M goes quiet – possibly clipped the net.

2132—SE M gives TCs, is moving around net site.

2137—SE M goes quiet.

2140—SE M begins giving TCs again, still distant. Wind has picked up a bit, gusts to 5 mph.

2145—SY leaves net to go listen/tap. I move toward the SE M who is fairly consistently giving TCs

2219—PB track changed to ‘Track 42’

2222—TCs near the vehicle SE of net site (at the standard CN5 parking spot). Very brief, approx. 2-3 calls.

2230-2300—**SY records 4 songposts** in several trees on the S side of the road. The M called more or less constantly in the areas S and SE of the CN5 parking spot. M was still calling when I left.

2245—BH hears approx. 2 TCs ~40m SE, possibly indicating SE M heard consistently earlier.

2317—SY returns to the net and increases PB volume.

2319—We hear TCs distantly to the SE.

2322—CN5 M (presumably) begins giving TECs right at the net. M to the SE is still calling.

2341—Stop playback. The CN5 M made several flights around the net site giving TCs, TECs and, HECs before going quiet. We see M flying around net and landing in PB tree. Ultimately avoids net and vacates area after ~10 minutes. May have bounced out of the net at one point.

2351—BH and SY spread out to listen in the CN5 and CN13 area. SE bird giving intermittent TCs basically the whole time, we ignore him for now.

2455—We leave the CN13 and CN5 area and head up towards the vehicles to go after the SE M (now designated the CN14 M).

0105—From the CN5 parking spot we hear TCs distant to the S. We chase.

0116—We hang a songpost on the M in the same area SY hung songposts earlier in the night. After recording data, we leave.

# CN13—2016

## 2 June 2016

1620-1700—Flam crew arrives at CN5/CN13 to cherry pick and peep. We tap and peep all past nest trees and any nice-looking cavity trees from the road to the lower end of CN5, but do not find anything.

2025—MC, KM, and ER spread out in the CN13 drainage to listen for nesting or territorial vocalizations. MC starts in the confluence of the main CN13 and CN5 drainage and the side drainage W of CN5\_2015, KM listens about halfway down the CN13 drainage, and ER listens in the SE side drainage in CN13. ER, MC, and KM begin listening for calls in the drainage and slowly move W. MC and KM hear an LC and possibly an FSC near the junction of the main drainage and the large side drainage ~100m E of CN5\_2015.

2100—MC circles back towards the CN5\_2015 nest tree and hears a three note LC ~20m E of the past nest.

2141—KM and ER hear M LCs across the drainage from the CN5\_2015 nest tree.

~2200—We leave to set up lure nets.

2215—MC, KM, and ER set up a lure net along 9J Rd about 50m E of the CN13 parking spot on a N/S axis. MC and KM leave to set up a second lure net to the NW. PB begins.

Vegetation: Young pipo, psme. Open.

Weather: Clear, slight breeze

X: 482172

Y: 4333323

+/- 8m

2225—MC and KM set lure net on the ridge just W of CN5\_2015 nest tree and begin playback.

Vegetation: mixed age pipo and psme trees

Weather: clear skies, 15C

X: 481870

Y: 4333762

Note: This GPS coordinate is estimated from cavity trees that were nearby and is not exact.

2238—MC and KM hear TC NW of the net ~50m. The FLOW seems to fly E of net then goes quiet.

2245—M FLOW makes HEC ~20m NE of the net and flies closer. M changes perches near the net site multiple times but does not hit the net.

2251—MC changes the playback to a more aggressive call (4-note TCs).

2252—MC and KM successfully capture the calling bird, he is an unbanded M and came from the S side of the net in the 3rd shelf. This is presumably the CN5\_2016 M! MC and KM process the male.

**Band # 1833-03368 (on L leg)**

73.0 g LWC: 136 mm

- 19.5 g LLP(5): 100 mm

53.5 g LLP(6): 110 mm

Rect: 61 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 2 | 2 |
| P5 | 2 | 2 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | .5 | .5 |
| P2 | .5 | .5 |
| P3 | .5 | .5 |
| P4 | .5 | .5 |
| P5 | .5 | .5 |
| P6 | 1 | 1 |
| P7 | 1 | 1 |
| P8 | 1.5 | 1.5 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

2313—After a completely silent night at ER’s lure net, she sees a Long-eared Owl hit the net apparently trying to eat the PB. It wiggles itself free.

2326— At the net site near CN5\_2015 nest tree, KM releases processed M, who flies NE from the release site. KM and MC return to ER at the initial lure net site.

2332—PB off. ER breaks down net, and rejoins KM and MC to head to CN1 and CN2.

## 5 July 2016

2120—ER and KM leave CN5 to set up a lure net off the road in CN13. On the way to CN13, We spot two eyeballs on the side of the road. As we approach to investigate the identity of this creature, the animal flies off the road into some nearby pipos. Using our deductive reasoning skills, we confirm that this mysterious set of eyes belongs to a bird, possibly a FLOW as the size and shape of the bird resembles those of our familiar feathered friends. We trek around the stand of trees but do not hear any calls nor see the FLOW. We resign our efforts and continue our journey to CN13.

2130—ER and KM set up a lure net off the road in CN13 so that it opens N/S and begin the playback. We hear absolutely nothing for the rest of the evening.

Vegetation: mixed pipo

Weather: spotty drizzles, moderately cloudy, 16C

X: 482130

Y: 4333308

+/- 15

2200-2210—ER and KM take the playback and walk up the road for a bit to see if we can entice the possible FLOW we saw earlier in the evening. This proves ineffective. We return to our lure net and replace the playback in a nearby pipo. Silence perpetuates.

2220—ER and KM hear and see a few surrounding campers. They appear harmless so we continue our lure netting.

2235—ER and KM break down our net and meet RC and BH at the road.

## 8 July 2016

2254—ER, BH, DL, KM, and Sawyer start PB on either side 9J Rd about 150m E of the CN5 parking spot to see if we can pick up a CN13 M. ER and BH listen on the N side of the road, and DL, KM, and Sawyer listen on the S side.

2309—ER and BH hear a M giving TCs about 150m N of the CN13\_2014 nest tree where we have ended our PB session. We suspect this could be the CN5\_M. DL and KM hear nothing. We leave.

# CN13—2017

## 1 June 2017

2035—KM, ER, and LD (a team we might refer to as ELK), begin listening in the CN5/CN13 territory. KM immediately heard a soft FSC on the ridge to the E of the confluence of the two drainages in the E part of the territory. LD listened just SE of KM and ER shot NW to listen on the central ridge and in the CN5\_2016 nest drainage.

2044—ER hears a M giving TC on the eastern R. about 500m N of the parking spot by the power line. ER pursues and picks up the M in a pipo, but he immediately begins moving W, pausing every few seconds to sing and following the power line W. ER follows M until he is stationary giving TCs 150m NW of the CN5\_2016 nest at 2103.

2116—M moves to the E side of the CN5\_2016 drainage where he gives TCs for greater than 30 minutes. ER takes songpost CN5\_1 in a live psme. DBH: 56.5 cm

X: 481974

Y: 4333714

+/-3m

2130—KM hears an FSC to the E of the central drainage in CN5. KM thinks she hears an LC but upon conversation with ER concludes that the noise is most likely echoes of the M TCs to the NW of me.

2146—LD hears FSC vocalization NE of S portion of Eastern most ridge, S of KM location’s location.

2245—Team ELK abandons listening efforts to head back to the vehicle to grab lure netting equipment.

2250—M gives TC about 200m NE of the CN5\_2015 nest tree while we begin setting up the lure net.

2252—We begin playbacks at a net set up about 150m N of the road of the central ridgetop in CN5. We set up the net in order to hopefully target the M ER heard making TCs in the NW drainage. The net is about 50m SE of CN5\_2015

Vegetation: mixed pipo/psme, open

Weather: clear, breezy, 11C

X: 482070

Y: 4333636

+/- 3m

2255—Response from M about 100m NW from the net. He seems to fly closer to the net, following what seems like the live trees in the drainage. His closest approach brings him within 50m from the net. M makes TCs NW of the net and backs off, still responding. He makes a few TCs from the E, staying well over 150m from the playback.

2300—M goes silent for two minutes, but picks back up in the same location at 2302.

2315—LD hears M vocalizations from E ridge, ER and KM do not corroborate

2330—ER and KM walk playback N on the ridgetop in an attempt to draw M closer to the net. We listen to the M make TCs and TECs E of the playback on the ridge, but he does not fly any closer.

2400—We put the playback back near the lure net and wait. The M stays in the conifers almost directly E of CN5\_2015.

2415—We break down the net as the M appears to stay more than 100m from the net. We return to car.

## 16 June 2017

Afternoon—Flam crew does an extensive peep in CN5/CN13 territory. We find several downed cavity trees and peep most known cavity trees. Cavity trees on the ridge just W of the creek were not peeped, along with cavity trees in the farthest NE clump of CN5 and farthest N clump in CN13. We do not find a nest.

# CN13\_2018

## 21 June 2018

2250—ES and AM arrive in the CN5/CN13 territory to set up a lure net briefly.

2257—We start playback, T42. Net is positioned 50m N of 9-J road near boundary between CN5 and CN13 in a low slope position on a NW facing slope about 100m W of parking spot. Net is open E-W.

Vegetation: young potr, mature psme, in side drainage bottom

Weather: clear sky, slight breeze, 15.0 C

X: 481885

Y: 4333434

+/- 3m

2257-2337—No FLOW vocalizations are heard.

2337—Playback is stopped. We leave.

# CN13—2019

## 20 June 2019

1430-1700—Flam crew systematically peeps CN5 and CN13 for a FLOW nest, hitting past nest trees #938, 799, and 1312 as well as most of the marked cavity trees still standing. No evidence of a FLOW nest is found.

1700—Storms roll in so we depart.

# CN14—2015

## 1 June 2015

2017—BH and SY spread out along the main CN13/CN5 drainage to listen for nesting vocalizations.

Weather: 12C, mostly clear, calm.

2100—Nothing heard, we go to set up a lure net.

2117—We start playback at a nest on the main CN5 ridge, ~35m SW of the faint 2-track. Net not fully up due to faulty poles…

Vegetation: Medium density young to mature pipo/psme on ridge top of low ridge.

Weather: 11C, clear, wind 0-3 mph.

X: 482020

Y: 4333598

+/- 8m

2121—We hear distant TCs (200+m), to the SE.

2125—Poles replaced – net fully open.

2126—We hear TCs right at the net, M still calling to the SE – 2 Ms in the vicinity. The 2nd (closer) M is likely CN5, heard W in drainage. ID of the bird to the SE is unknown.

2130—CN5 M goes quiet – possibly clipped the net.

2130—From area of CN11\_2012 nest tree, RC hears TCs 200+m ENE and pursues, but M quickly retreats to E and goes silent. This is the same M that SY will song post later in the night as CN14 M. From CN11 lure net area, LL hears another M TC/TECing 100m down dr from PB.

2132—SE M gives TCs, is moving around net site.

2137—SE M goes quiet.

2140—SE M begins giving TCs again, still distant. Wind has picked up a bit, gusts to 5 mph.

2145—SY leaves net to go listen/tap. I move toward the SE M who is fairly consistently giving TCs

2219—PB track changed to ‘Track 42’

2222—TCs near the vehicle SE of net site (at the standard CN5 parking spot). Very brief, approx. 2-3 calls.

2230-2300—SY records 4 songposts in several trees on the S side of the road. The M called more or less constantly in the areas S and SE of the CN5 parking spot. M was still calling when I left.

2245—BH hears approx. 2 TCs ~40m SE, possibly indicating SE M heard consistently earlier.

2303—CN11 PB off. CN 11 net site has been quiet since capture at 2211, except for distant TCs heard to ENE (SY’s CN14 M). RC, LL, LP break down CN11 net.

2317—SY returns to the net and increases PB volume.

2319—We hear TCs distantly to the SE.

2322—CN5 M (presumably) begins giving TECs right at the net. M to the SE is still calling.

2341—Stop playback. The CN5 M made several flights around the net site giving TCs, TECs and, HECs before going quiet. We see M flying around net and landing in PB tree. Ultimately avoids net and vacates area after ~10 minutes. May have bounced out of the net at one point.

2351—BH and SY spread out to listen in the CN5 and CN13 area. SE bird giving intermittent TCs basically the whole time, we ignore him for now.

2455—We leave the CN13 and CN5 area and head up towards the vehicles to go after the SE M (now designated the CN14 M).

0105—From the CN5 parking spot we hear TCs distant to the S. We chase.

0116—We hang a songpost on the M in the same area SY hung songposts earlier in the night. After recording data, we leave.

## 12 June 2015

Afternoon—Flam crew peeps CN5 and CN13. Fairly thorough coverage of cavity trees in CN13, missing a few cavity trees on W side of CN5.

2027—BH, ER, and SY arrive in CN5 with the intent to listen for nesting vocalizations and eventually lure for the CN5/CN14 territorial males. We split up to listen. ER in W drainage, BH in E, and SY on small ridge in the middle. We hear and see nothing.

2127—We return to the parking spot to set up a N/S lure net ~30m NNE of the CN5 parking spot.

2137—Start PB.

Vegetation: Very open, pipo/psme/potr snags

Weather: Clear, slight breeze, 13C

X: 482104

Y:4333367

+/- 7m

2139—M gives TCs about 40m S of net, presumed CN14\_M.

2140—A second M begins giving TCs from about 30m NNW of the net. This is the presumed CN5\_M. The CN14\_M begins giving TECs and hoarse TCs and jumps within 20m of the net on the N side of the rd, still on the S side of the net.

2141—Both CN14\_M and CN5\_M within 10m of the net. The presumed CN14\_M gives more hoarse and aggressive HECs and stays mostly on the S side of the net while the presumed CN5\_M gives TECs on the N side of the net.

2142—The M giving hoarse calls goes silent, while the M giving TECs (CN5\_M) still calls. **An unbanded FLOW captured in the 3rd shelf on the N side of net. This is the presumed CN14 territorial M. We band him #1833-03270.**

**Band # 1833-03270 (on R leg)**

91.0 g LWC: 120 mm

- 34.0 g LLP(5): 90 mm

57.0 g LLP(6): 98 mm

Rect: 56 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 2.5 |
| P2 | 1.5 | 2.5 |
| P3 | 1.5 | 2 |
| P4 | 1 | 2 |
| P5 | 0.5 | 1.5 |
| P6 | 0.5 | 1 |
| P7 | 0.5 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1.5 | 0.5 |
| P4 | 1.5 | 0.5 |
| P5 | 2 | 1.5 |
| P6 | 2 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 3 | 3 |

2153—The CN5\_M goes silent, so we check the net. **An unbanded FLOW captured in the 1st shelf on the N side of net. This is the CN5 territorial M!**

**Band # 1833-03271 (on R leg)**

72.0 g LWC: 132 mm

- 16.0 g LLP(5): 99 mm

56.0 g LLP(6): 109 mm

Rect: 57 mm

We bleed his L wing.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 2.5 | 3 |
| P5 | 2 | 2 |
| P6 | 2 | 1.5 |
| P7 | 2 | 1.5 |
| P8 | 1.5 | 1 |
| P9 | 1.5 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 1 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 2 |
| P7 | 2.5 | 2.5 |
| P8 | 2.5 | 3 |
| P9 | 2.5 | 2.5 |
| P10 | 3 | 3 |

2220—**Third FLOW captured in N side of net, unbanded. Silent into the net, decidedly CN5 floater M.**

**Band # 1833-03272 (on L leg)**

88.5 g LWC: 129 mm

- 30.0 g LLP(5): 96 mm

58.5 g LLP(6): 105 mm

Rect: 57 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 2 |
| P2 | 2 | 2 |
| P3 | 2 | 2 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1 |
| P6 | 1 | 1 |
| P7 | 1 | 0.5 |
| P8 | 0.5 | 0.5 |
| P9 | 0 | 0 |
| P10 | 0 | 0 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 1 | 1 |
| P3 | 1 | 1 |
| P4 | 1 | 1 |
| P5 | 1 | 1.5 |
| P6 | 2 | 1.5 |
| P7 | 3 | 2.5 |
| P8 | 3 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

*Note: Blood samples taken from all 3 birds captured.*

2225—CN14 M released (**Band #1833-03270**) strong ascending flight W.

2238—CN5 M released (**Band #1833-03271**) strong ascending flight NW.

2241—TCs given consistently from S, presumably **Band #1833-03270** CN14\_M.

2248—CN14\_M gives TCs from about 50m S of net.

2255—CN5 Floater M released (**Band#1833-03272**) circled area before heading SE.

2258—PB off. We crash the net and split up to listen and spotmap in CN5. We head to NE near where the CN5\_M came from during the lure net.

2310—We hear TCs down drainage to the W – we chase.

2314-2316—The CN14\_M gives TCs from his position S of the road.

2322—From the N confluence of the E and W drainages in CN5 (near the past lowest nest in the drainage, ER and SY hear LCs from about 40m up the small ridge. SY pursues.

2323—**SY taps cavity tree #1033 and a F FLOW flushes to the N. This is the CN5\_2015 nest tree!** Tree #1033 is a broken-top pipo in the mid to upper slope on the E-facing slope of the central ridge in CN5. The cavity is W-facing and is the highest on the tree, less than 1 meter from the top, located under a staub. We leave to let F back on cavity.

2339—We head into CN14 intending to spotmap and listen for nesting vocalizations.

2353—We hear TCs ~40m SE of the CN5 parking spot. We chase. M goes silent for a few seconds and then gives two HECs. We look for cavity trees in the area.

2359—The CN14\_M gives a few more HECs in our immediate area, <100m S of the standard CN5 parking spot.

2404—After not hearing anything more, we leave.

## 19 June 2015

2110—MC and BH arrive at the CN11 parking spot to listen for any possible nesting vocalizations in the area where BH and SY heard a M calling on 6-12-15.

2135—We walk around the area, tapping and giving hoots. After hearing nothing we leave.

## 8 July 2015

2142—RC and BH spread out in mid-upper CN11 drainage to tap/listen/nest search, based on previous observations and capture of territorial M near 2013 nest area (RC/LL/LP 6/1/15). BH starts near net site where this M was captured ~100m down dr from CN11\_2013 nest area and RC moves up to the CN11\_2013 area. We both move up dr as we tap.

2145—DL and SY spread out in the CN13/CN14 area (S and W of the CN5 parking spot and in the upper part of the CN12 drainage.

Weather: 11C, cloudy/foggy, calm.

2207—Fog rolls in extremely thick – visibility down to 5m.

2252—RC arrives in clump of cavity trees near CN11\_2012, taps tree #1161. **FLOW flushes from tree and, after a fluttery flight, perches nearby to the NW. F FLOW makes short flight to another perch and then flies out of sight. This is the CN14\_2015 nest tree!**

2253—RC positions himself under nest tree and hears raspy N begs.

2258—**F flutters at nest tree then enters a NOFL-sized cavity facing SW down dr. Cavity height=16’3” (from subsequent peep). Nest tree is a full snag potr with dbh = 20-25cm. Cavity is in a patch of remaining bark on tree and looks like the most obvious choice for a flam nest.** RC backs out to meet BH, who arrives shortly with capture net and peeper.

2316—RC and BH arrive back in nest site. BH spots while RC approaches tree to attempt M capture. F comes up on approach. We kill lights, drop gear, and sit.

2320—F flushes after several minutes in the dark with no movement. **We peep and see 3 Ns, all active with eyes open and heads up. 2 Ns have significant gray coming in on scaps (~11-12 days) and 1 with seemingly some (but just the beginnings of) gray on head. N possibly has some gray on scaps as well (~7-9 days), but N falls flat on his back while craning at peeper and we lose sight of his scaps while he is helplessly waving his little legs in the air.** We pull peeper and back out to allow F back on.

2350—We arrive back in nest site for a final attempt at M capture. BH remains outside site while RC approaches. F down on arrival.

2355—RC at tree. F down.

2358—F flushes as net is being raised. We back out and head up dr to assist SY/DL with listening effort.

2400-2430—RC moves due N from CN14\_2015 nest tree and BH moves NE in dr bottom. We both tap and listen until RC pops out just W of CN11 parking spot and BH pops out at CN5 parking spot. Nothing seen or heard. We leave.

2430—DL and SY depart – nothing heard from the CN13/CN14 area.

## 10 July 2015

2205—RC and DL arrive in CN14\_2015 nest area to capture M/F and peep nest to determine status. After spotting tree, DL leaves to peep CN11 while RC prepares for capture attempt.

Weather: Partly cloudy and clearing, mostly calm, 9C.

2207—RC approaches nest tree to observe.

2214—F flushes as RC kills headlamp. *From this position, there is a good silhouette, but no view of the cavity itself.*

2220—F comes back on.

2224—M PD.

2225—M PD.

2229—M PD.

2230—RC approaches tree with capture net.

2234—At tree. DL arrives back to nest site shortly hereafter.

2242—**M makes PD and is captured! This M is previously banded, and has been captured twice previously.** *M was originally banded as a silent lure net capture in 2014 near current CN14 nest site by RC and RD. Second capture was on 6/1/15 by RC/LL/LP—M was identified as territorial, captured in lure net ~80m down dr from CN11\_2013 nest tree after giving plentiful HECs in net site.* **Peep reveals F is off (either making PDs or more likely flushed after capture during lengthy extraction process) and 3 Ns. Eldest 2 appear to have significant gray on backs and bodies but still fairly white heads (11-12 days). Youngest owlet is mostly covered up, but appears to have some gray coming in on head and scaps (~9-10 days). All owlets are active with heads up and eyes open but appear to be lounging in cavity, lying on their sides.** RC backs out to process M.

**Band # 1783-64531 (on R leg)**

66.0 g LWC: 133 mm

- 15.5 g LLP(5): 99 mm

50.5 g LLP(6): 110 mm

Rect: 64 mm

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1.5 | 1.5 |
| P2 | 1.5 | 1 |
| P3 | 1.5 | 1 |
| P4 | 2 | 2 |
| P5 | 2 | 1.5 |
| P6 | 1.5 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 1 | 0.5 |
| P10 | 1 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0 appears ~1cm short | 0 |
| P2 | 0.5 | 0.5 |
| P3 | 1 frayed tip | 1 frayed tip |
| P4 | 0 | 0 |
| P5 | 0.5 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1 | 1.5 |
| P8 | 1.5 | 1.5 |
| P9 | 2 | 2 |
| P10 | 2 | 2 |

Note: M was previously bled on 6/1/15 so we do not collect blood sample on this capture.

2312—M released with strong ascending flight S (clips a tree branch, but still manages a good flight).

2317—RC and DL approach nest area to observe.

2320—F flushes after a couple minutes of silent observation in the dark. *Ns have been giving loud raspy begs tonight and at least since 7/8/15. Eldest owlets are definitely homeothermic and youngest may be as well (and is also currently being smothered by fuzzy nestling warmth). Based on these facts and our observations of the F coming back on within a few minutes after every flush yet observed, we decide another capture attempt is reasonable.*

2324—F comes back on.

2330—RC approaches with net to attempt F capture.

2338—**RC gets net over cavity and F flushes into the bag!** F is unbanded. Due to questionable runt age and number of F flushes, we release F after banding and do not take a blood sample or any measurements.

**Band # 1833-03265 (on R leg)**

2343—F released with strong flight. We re-peep to confirm N ages and see nothing that changes our previous estimates.

2346—We leave.

## 14 July 2015

2256—MC and ER arrive in the CN14\_2015 nest vicinity with the intent of F capture. While looking for the nest cavity, we see the F make a PD. Then both the M and F begin giving LCs in the nest site.

2259—M makes a PD to the nest while the F gives LCs and FSCs a few meters S of the nest.

2301—F makes a PD to the Ns. MC begins approach of the nest. Ns beg.

2302—MC has the net at cavity height.

2305—ER approaches the nest to peep. **The three Ns are all mostly gray. The eldest has a pretty well developed facial disk (15-16days), and the youngest still has a white face, but the head is mostly gray.**

Weather: Partly cloudy, calm.

2310—Silent PD from unknown ID FLOW. MC lets pass.

2314—M gives LCs and F gives FSCs about 30m SE of the nest, down drainage. Ns begging in the cavity.

2327—Silent PD. MC adjusts net height.

2328—F gives LCs from about 3m E of the nest and the M gives LCs about 10m NW.

2330—F makes a PD to the Ns. MC swings the net over the cavity, and the F proceeds to stay down in the cavity. MC taps and no one pops up. The M scolds MC in the nest site and proceeds to give quiet TCs and TECs.

2332—MC takes the net off the tree, wondering if the F had snuck out.

2348—MC scratches tree and F pops up and flushes. MC takes the net down and we back off.

2405—After debating whether to push the F any more, we decide to leave to listen S of the CN5 parking spot.

2410-2425—MC and ER listen and solicit calls S of the CN5 parking spot, but hear nothing.

## 17 July 2015

1628—RC, MC, BH, and LP arrive at CN14\_2015 nest tree to band and bleed Ns.

1629—RC positions ladder.

1631—**We peep nest to find 1N. We assume this is the youngest owlet and that the other two have already fledged the nest.**

1634—RC climbs ladder and begins enlarging cavity.

Initial Cav. Dimensions:

Entrance: 54 mm x 64 mm

Horizontal depth: 100 mm

Thickness: 19 mm

Vertical depth: 324 mm

Cav. Height: 15’ 10”

d.o.h: 24.5 mm

1654—Owl extracted.

1656—RC off ladder.

1700—MC and BH start making concentric circles around the nest tree to search for the 2 fledglings. RC and LP process N. MC locates F (presumably) on roost 5-10m SW of nest tree, ~10m up a live pipo next to the trunk, in sight of cavity entrance.

**Owlet**

32.6 g

P#5: 21 mm

P#6: 21 mm

Rect: 2 mm

Band#: 1833-03169 (R. leg)

Notes: Bled (L) no hematoma

1712—After no sign of fledglings, MC and BH return to nest tree to assist with ladder.

1714—RC climbs ladder

1717—N returned to nest.

1720—We leave CN14.

2020—RC and LP arrive to the CN14\_2015 nest area with intent to locate and potentially band/bleed the two CN14\_2015 fledglings that fledged in past few nights and capture and bleed F. We begin walking concentric circles around the nest tree looking and listening for fledglings.

~2045—LP hears a few LCs 40m W of nest.

2046—RC hears a few LCs 40m E of nest.

2059—PDs observed to cavity from both M and F. The one remaining nestling is begging. A total of ~3 PDs, with many more aborted PDs. M and F are also giving LCs.

2107—F begins giving 1 and 3-note LCs in the nest site and calls consistently while flying 40m N of nest. F forages in low psme branch. RC initially thinks this is a fledgling, but a thorough search of the area all but eliminates this possibility. F moves 10m further N then goes silent.

~2120—F LCs out of nest site again to 40m NW. Another likely forage in a low psme branch, then a low (~2ft from ground) flight 15m N, then silent again. LP and RC search around this area and location where F had flown before, listening and occasionally soliciting N begs, but neither seeing nor hearing anything. Afterward, we continue searching in increasingly large concentric circles, eventually getting up to at least 100m away from nest (a bit less on E and S side and more on W and N).

2143—Possible M LCs heard N of nest site from 30m S. RC pursues but picks nothing up.

2202—LP raises capture net to within ~2m of cavity entrance with intent to capture F on a PD.

2202-2310—Several PDs are made in this time period. Some with LCs from M, and some silently.

~2205—BH arrives to help fledgling search.

~2240—LP swings at adult making PD, but doesn’t get the net in front of cavity in time so the bird is not captured.

2245—RC leaves to peep CN11 nest.

2305—RC arrives back in CN14.

2307—PD to nest. LP swings. Bird escapes, then gives LCs (M).

2310—Capture net is lowered as we prepare to leave the area. BH hears solitary FSC ~30m E of nest tree. BH and RC do a quick look around the area while we wait for LP to leave nest tree, but F is not seen nor heard again.

2313—We leave CN14.

# CN14—2016

## 2 June 2016

1520-1610— Flam crew arrives at CN14/CN11 to cheery pick and peep. We tap and peep all past nest trees and any nice-looking cavity trees from ~15m up drainage from the CN14\_2015 nest tree down to ~30m down drainage from the CN11\_2015 nest tree. We do not find anything.

2025—RC and BH arrive in CN14/CN11 area to return to afternoon roost tree, listen for nesting vocalizations and find all nests! We spot FLOW on roost in same location as the afternoon and observe.

2035—1m further from trunk on same branch as perched FLOW, a second FLOW shifts in the foliage, then flies SW toward dr bottom. RC pursues while BH watches perched FLOW. Moving bird circles back to W and then to N and begins giving LCs. This is the M, and afternoon perched FLOW was apparently the F. As M gets close, F begins giving LCs as well, including a quiet, high-pitched 3-note call similar to the one RC heard during afternoon. *We suspect that M was roosting on same branch as F, but was missed earlier in the day. This observation comes within a couple of days of SY’s observation of two closely perched FLOWs in Hot Creek.*

2037—F makes a short flight W to psme. M joins. **Copulation attempt!** M flies N.

2039—F gives FSCs in place.

2041—M returns from a **second copulation attempt**. This makes a fair bit of noise, and M is promptly mobbed by AMROs. F stays put. AMROs also swoop RC and BH in their fury.

2043—AMROs calm down. M gives brief 3-note call 20m NE of perched F. F makes a strong flight to join M.

2046—M perches high up in CN11\_2013 nest tree, then makes a few short flights with the F on his tail. M returns to 2013 nest tree once. F never perches here.

2048—M and F perch 10m up a psme 10m S of 2013 nest tree and **allopreen** for ~1min.

2050—Both birds make long-strong flights to the center of the dr bottom to the NW, then quickly move up to R top NW of dr. We pursue, and are able to keep up with pair for ~25 mins.

2056—PD ~120m NNW of roost tree.

X: 481422

Y: 4333212

2057—Second PD in this vicinity.

2101-2108—We intermittently catch up to and lose pair.

2108-2112—We hear brief, faint FSCs to SW from R top, then lose the pair. **Based on this pair’s behavior and location (marked PD location ~700m up dr from CN11\_2015 nest), we deem them CN14 in courthship** and then move down to CN11 proper to listen for nesting vocalizations from a southern pair.

2122—BH and RC split up in the CN11 drainage to listen for FLOW nesting vocalizations. BH starts at N end of CN11 cavity tree clump and works SW; RC begins ~200m up dr of CN11\_2015 nest tree and works SW as well.

2140—RC taps CN11\_2015. Nada.

2144—BH hears M give faint LC on E slope of CN11 drainage, 100m up dr of CN11\_2015 nest tree.

2151—BH hears M give TCs on lower E slope of drainage, finds him calling in clump of large pipos nearby cavity tree Tag #1238.

2153—BH spots M make short flight midway across drainage to another pipo, where he continues to call.

X: 481129

Y: 4332838

+/- 6.6 m

2157—M goes silent. RC leaves to retrieve net gear while BH remains in this area.

2211—M gives 1 LC ~30m W of BH, who remains in the stand of pipos where the male was first heard.

2215—BH moves N up drainage to listen and tap cavity trees while RC begins setting up a lure net on R top to SE of dr, 10m S of where logger rd reaches R top after crossing cr. Net is set up adjacent to a small stand of psme/pipo ~150m ENE of CN11\_2015 nest tree, in the same location used by RC in 2015 to capture CN11 M early season.

2225—PB started.

Vegetation: Young-mature pipo/psme, very open.

Weather: Clear, mostly calm, 11.5C.

X: 481219

Y: 4332873

+/- 8m

2239—CN11 M rapidly approaches net site from dr bottom to SW. M jumps across net and calls for ~3min, giving TC/TECs including 2- and 4-note calls.

2242—CN11 M suddenly leaves net site, flying 80m up dr and continuing to call. M potentially has an encounter, but we can confirm no second M. M then flies quickly down dr to vicinity of CN11\_2015 nest and continues to call.

2250—CN11 M silent/out of range. M loses interest in PB for remainder of time in CN11. RC walks SW with PB briefly from 2306-2318 and picks up M calling in 2015 nest vicinity, but M never approaches net again.

2322—After silence in the drainage bottom, BH meets up with RC at the lure net.

2328—PB off. We break down and move back up dr to lure for CN14 M.

2350—We set up lure net in small potr stand near large rock outcrop ~80m down drainage from CN11\_2013 nest tree. RC has set up in this stand in the past and had success at drawing in both CN11 and CN14 birds.

2400—PB started.

Vegetation: Young to mature pipo/potr, fairly open

Weather: Clear, calm, 9.5C.

X: 481353

Y: 4333057

+/- 8m

2407—CN14 M gives brief TCs 80m N up dr then goes silent, never approaching net.

2416—CN11 M gives ~4 distant TCs from S down drainage, never approaches.

2432—PB off. We break down nets and leave CN11.

## 7 June 2016

Afternoon—Flam Crew arrives in Hayman to selectively peep past nest trees and particularly nice-looking cavities in CN5, CN10, CN11, and CN14. **We found the CN5\_2016, CN14\_2016, and CN8\_2016 nests.**

1555—BH is heading down the CN11 dr. towards the CN11\_2015 nest tree when from afar, she sees a particularly full looking cavity on the CN11\_2013 nest tree. **From ~10m N of the tree, BH sights cavity in binoculars and confirms there is a FLOW in the CN11\_2013 nest cavity (where BL staged fledge watch and captured two fledglings). This is the CN14\_2016 nest tree! Tree is #1289. Nest cavity is NOFL sized ~7m up ENE side of a live potr, facing up drainage.** F stays up while BH is in the site.

1601—BH and RC leave CN14\_2016 nest site to search for a CN11 nest down dr.

2021—BH arrives at CN14\_2016 nest tree to peep nest contents upon F flush. F is up in cavity entrance on my approach from the E slope of CN11 dr. F proceeds to stay up in cavity until her flush.

2037—M enters nest site from E giving LCs. F immediately responds with FSCs from cavity. M retreats E within the minute.

2042—F flushes, making a short, semi-gravid flight SE.

2043—**I peep nest cavity to find no eggs. Based on F behavior, this might suggest she is using cavity entrance as a day roost until she begins clutch formation.**

~2044—BH leaves CN14 to go listen for nesting behavior around the CN11\_2015 nest tree.

2105—Soon after arriving at CN11\_2015, BH hears M give a few 3-note LCs ~20m down dr. from CN11\_2015 tree, localized where the SE side dr. meets the main CN11 dr.

2106—M gives 4 LCs from a clump of mature psme then goes silent.

2125—RC arrives in CN14 and begins heading down dr to meet BH, who is tracking CN11 pair near confluence w/ E side dr just below CN11\_2015 nest.

2127—RC hears CN14 M in 2016 nest site as he passes on his way down dr. BH hears M giving 3 note LCs on E side of dr, flies W and goes silent. Half a minute later, BH hears a solitary LC on E side of dr, which leads her to believe that a F FLOW is also in the vicinity.

~2130—RC joins BH in confluence area to track CN11 pair. Silent on arrival.

~2140—BH and RC chase M as he bounces around giving LCs in the same centralized area ~30m SSW of CN11\_2015 nest tree. No F vocalizations during this time.

2146—RC hangs a live psme for reference at SW end of confluence below CN11\_2015 nest. M gave LC/TCs in this tree for 1-2 minutes before flying NE.

2148—RC hangs 2nd live psme 10m NE of first psme. M gave TC/TECs here for 1-2 mins in the vicinity of two marked cavity trees before flying up the E side dr ~50m (at 2150), continuing to TC. RC pursues, but M quickly goes silent. BH remains in confluence area.

2156—BH picks up M giving LCs in confluence area once again. RC joins. FSCs follow shortly in close proximity to M. W spot F, then M, both making short flights around cavity trees #1264 and #1265.

2159, 2201, 2204, 2207—PDs in rapid succession within 5m of these two cavity trees. F vocalizing consistently. F and M perch multiple times on potr snag leaning against cavity tree #1265. F flies twice during this period to a small cavity entrance ~10m up SE side of #1265, leans in a little bit but struggles to fit—fully extending her wings, backing out, and flying to nearby psme.

2208—**F successfully enters cavity in #1265 and stays down! This is the CN11\_2016 nest tree!** Cavity is a very small WISA excavation 10m up, facing SE just under a bend in the tree (no bark around cavity).

2210—We confirm tag, label tree, and back out of nest site. F stays on during this time.

2230—RC and BH arrive in vicinity of CN11/14 interface to lure for both territorial Ms.

2241—PB begin. Net is set up 40m NW of logger rd/cr crossing, on low SE-facing slope.

Vegetation: Mixed pipo/psme, open (net flanks a couple of medium psme snags)

Weather: mostly clear, calm, 8C.

X: 481202

Y: 4333032

+/- 8m

2254—M begins TCing 50m SE of net in dr bottom.

2257—M tosses in some TECs as well, but stays in dr bottom.

2258—M silent. We are unsure if this M is CN11 or CN14 M, but suspect it is the former.

2311—TCs from CN11 M 120m SW of net in dr bottom. M moves up dr toward net site over the next 3 mins, but never leaves dr bottom.

2315-2325—RC walks PB SE toward logger rd/cr crossing to lure in M. M is TCing on SE side of dr, likely on NW-facing slope. M approaches by about 20m during this time, giving TC/TECs, but never leaves dr bottom. T42/Megascops used. PB returned to net site.

2339—PB off. We break down net and move to opposite site of dr to run PB and set up net if M stays interested. M continues to call in dr bottom as we brak down and move to opposite R, then goes silent as we arrive in this area.

2349—PB begin 10m NW of spot where logger rd crests out on R. M silent. RC walks PB toward dr bottom and back but does not pick up M again.

2403—PB off. We hear M TCing in dr bottom again as we leave. We play another brief PB at him, but he retreats down dr and we decide to move up dr to target CN14.

2416—PB begin in upper CN14 while we set up net. Net erected 150-200m NE of CN14\_2016/CN11\_2013 nest.

2428—Net fully up after a few tangle troubles.

Vegetation: young-mature pipo/potr, live and snag, fairly dense.

Weather: mostly clear, calm, 7C.

X: 481489

Y: 4333182

+/- 9m

2453—PB off. We heard a single hoot of indeterminate direction during net up time, distant and never approaching. We break down and leave.

## 17 June 2016

2027—BH arrives at CN14\_2016 nest tree to peep nest contents upon F flush.

2101—M enters nest site from N giving LCs. F flushes and the pair move E.

2102—**BH peeps to find 3 eggs centered, 2 of which are tightly touching**. I leave site to radio RC.

2107—BH reenters nest site and returns to observation spot on E slope while RC hikes up to meet BH for a CN14\_M capture attempt.

2110—F returns to nest site from E, giving LCs in a snag before returning to cavity.

2112, 15, 18—M makes PD.

~2120—RC begins capture approach.

2123—M makes PD, F comes up to cavity entrance after M flushes.

2124—F flushes. RC aborts approach, and we leave CN14\_2016 nest site to set up a lure net to target CN11 M.

~2230—RC, BH, and ER walk up R NE of CN11 dr ~200m NW from CN11 lure to erect net targeting CN14 M.

2237—PB begin. Net set up on R top, flanking a couple of small pipo ~150m ESE of CN14 nest.

Vegetation: young-mature pipo/psme, very open (edge of high burn)

Weather: clear, calm, 12C.

X: 481358

Y: 4332928

+/- 6m

2250—ER walks PB toward CN14 nest to attempt to lure in M. Unsuccessful.

2259—ER returns to net with PB.

## 1 July 2016

2024—BH arrives at CN14\_2016 nest tree to attempt F capture on her flush.

2030—I begin approaching nest tree with capture pole.

~2035—I raise capture net to cavity height (23’2”).

~2100—F comes up in cavity and looks down at me from cavity entrance.

2104—F flushes into capture net! F is unbanded. After an arduous extraction, I band her **#1783-74312.**

**Band # 1783-74312 (on R leg)**

**Notes:** *I do not process F in the interest of releasing her quickly. I can’t get a peep confirming hatching status/owlet age.*

~2112—While I am extracting F from net, M approaches nest tree for the first time in the night giving HECs.

2115— CN14\_F released, SAF W. I leave nest site to allow F back on before I reenter to observe activity.

2145—BH reenters CN14\_2016 nest site to observe before RC attempts to capture CN14\_M at the nest.

2153—M gives 2 LCs in site.

2154—M makes a PD.

2157—M makes a PD.

~2200—RC arrives at CN14.

2206—M flies to 3 different points on tree before successfully making a PD. Moments later, F comes up in cavity entrance. We turn off our lights and wait before beginning capture approach.

2209—BH spots cavity to find F down. RC resumes capture approach.

2212—PD.

2216—PD.

2217—PD.

~2220—RC positions capture net at cavity height.

2228—After no sign of the M, we leave CN14 to meet the crew for debrief.

## 8 July 2016

2032—DL arrives at the CN14\_2016 nest to capture the M.

2049—M makes a PD.

2050—M makes a PD.

2051—M makes two PDs.

2052—F flushes. I head toward the nest to peep.

2054—M makes a PD as I raise the peeper. I peep. **There are two owlets wearing all white. Elder has his eyes slit looking up at the camera. Runt is lying down with eyes closed and an egg tooth. There are still a lot of eggshells in the cavity.** F calls in site while I peep.

2056—I take the peeper out of the cavity and the M immediately makes a PD and stays on the cavity for ~1 minute while I back out of the site.

2102—F comes back on.

2105—M makes a PD. I start my approach to the nest with the capture pole.

2119—As I get my pole to height, the M comes into the site and lands on his approach perch. F pops up, looks at my net, and flushes.

2120—M makes a PD. I swing, and he flushes into the bag.

**Band # 1783-64531 (on x leg)**

84.5 g LWC: 134 mm

- 34.5 g LLP(5): 97 mm

50.0 g LLP(6): 104 mm

Rect: 60 mm

**Notes: This is CN14\_2014, 2015 M.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.5 | 3 |
| P2 | 2.5 | 3 |
| P3 | 2.5 | 2.5 |
| P4 | 2 | 2.5 |
| P5 | 1.5 | 2 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | .5 | .5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 1 | 1 |
| P2 | 1 | 1 |
| P3 | .5 | .5 |
| P4 | 1 | 1 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2 | 2.5 |
| P9 | 2 | 2.5 |
| P10 | 2.5 | 3 |

2142—Release. Strong ascending flight SW.

2047—I get back to my observation position to see if M is making PDs.

2053—M giving LCs in site.

2059—I leave to meet BH, KM, and ER. M did not make a PD while I was observing.

## 19 July 2016

1520—BH, MC, and BL arrive at the CN14\_2016 nest to attempt to process F and owlets. F not in entrance when we arrive. **We peep—F is in the cavity with 2 owlets.** BH keeps the camera in the cavity entrance to keep the F in check while MC climbs.

1526—MC starts climbing nest tree.

1531—MC arrives at cavity entrance.

1542—MC finishes accessing cavity and retrieves owlets and F.

**Cavity Dimensions**:

Entrance dimensions: 65 mm (horiz) X 45 mm (vert)

Entrance thickness: 45 mm

DOH: 25.0 cm

Horizontal depth: 120 mm

Vert depth: 205 mm

Cavity height: (23’ 6”) 7.2 m

**Female Data:**

**Band # 1783-74312 (on R leg)**

63.7 g LWC: 123 mm

- 7.3 g LLP(5): 96 mm

56.4 g LLP(6): 105 mm

Rect: 61 mm

**Notes: Blood sample taken on R wing (L wing failed), small hematoma; molt data—on L wing, P3 in shaft (approx. 1/3 length), and on R wing, P1 and 2 in shaft (approx. 1/3 length)**

**Owlet: 1783-74382**

52.8 g

P#5: 42 mm

P#6: 42 mm

Rect: 16 mm

Notes: Blood sample taken on L wing; approximate age based on primaries—18 days

**Owlet: 1783-74383**

54.6 g

P#5: 30 mm

P#6: 30 mm

Rect: too small

Notes: Blood sample taken on L wing (after several attempts on L and R); approximate age based on primaries—15 days

1620—Owlets returned to cavity.

1632—F released as we leave nest site—she shows strong, horizontal flight.

# CN14—2017

## 1 June 2017

Afternoon—A Flam crew contingent cherrypeeps in the CN14/CN11 drainage. The cherrypeep turns into a mostly exhaustive search; no nests are found.

2035—ZM, MC, and JE arrive at the main drainage in the N section of CN14. ZM stays at the N end, in between the CN14\_2015 and CN14\_2016 nest cavities while MC moves to the N end of CN11 (near the junction of the CN11 two-track and the cr.) and JE moves S on the two-track in CN11 east of the CN11\_2015 nest cavity.

Weather:~10% cloud cover, calm, 11C

2049—JE hears faint FSCs to the SE of her location. MC moves slightly S towards her position.

2200—We all stop listening and move towards MCs position at the junction of the CN11 two-track and the cr in order to set up our lure net.

2222—Playback starts with the lure net set up ~60m E of junction of the two-track and cr. The net was on the upper NW-facing slope with the net open to the NW and SE.

Vegetation: Mixed Pipo and Pisme

Weather: Clear, calm, 10C

X: 481280

Y: 4332901

+/- 3m

2250—MC leaves lure net in order to walk around the drainage below the net. He gives a few M TCs and elicits no response.

2330—After no response calls to the playback, MC took playback down into the drainage and to the S. ZM and JE walked up N into the drainage back towards the CN nest cavities in order to tap trees and listen. We gave some M TCs while up at the CN14\_2015 nest cavity and got no response.

2400—After we all returned to the lure net, we stopped the playback after hearing no FLOW calls. We then began our hike out.

2420—We all returned to the car and headed out of the study area.

## 16 June 2017

2039—ES and AW arrive in CN11 territory to listen for vocalizations with intent to find the CN11\_2017 nest site.

2045—LD and ZM begin listening for FLOW vocalizations with intent to find the CN14\_2017 nest site.

2045—ZM and ES hear GHOW calls about 100 m NW of C11/C14 drainage. The calls endure for about 15 minutes.

2112—LD hears a potential TC ~100m SE of CN14\_2016 nest site.

2201—ES and AW begin PB at a lure net 300 m SW and down drainage from the CN11/CN14 parking spot. Lure net is on the E-facing slope of the drainage in between the CN11/CN14 territories. AW goes down drainage to listen in CN11 while ES waits at lure net.

Vegetation: Mixed age pipo/potr

Weather: Clear, gentle breeze, 18C

X: 481282

Y: 4333041

+/- 3m

2232—ZM meets ES at lure net. ES goes down drainage into the northern part of CN11 to listen while ZM waits at lure net.

2235—LD joins AW in CN11 territory to listen for vocalizations with intent to find the CN11\_2017 nest site

2300—ES returns to lure net and helps ZM turn off PB and pack up net.

2310—LD and AW join ES and ZM at lure net after hearing nothing. We return to the vehicles after hearing no FLOW vocalizations tonight.

## 22 June 2017

Afternoon—Flam crew does extensive peep of CN11 and CN14, covering most known trees in the territory and enumerating several more. Many trees were fallen, so it is likely that a good number of known cavity trees not peeped had fallen and were unable to be identified.

## 7 July 2017

2300-2325—Bashful (ER), Sneezy (KM), and Dopey (ZM), hike into CN11/CN14 to play playback and hoot. We mainly focus our listening efforts on the W slopes of the territories. We do not hear anything. We hi ho out of there.

# CN14—2018

## 7 June 2018

1520-1545—Flam crew cherry peeps in the CN14 territory, targeting past nest sites and good-looking cavities.

2030—BL and ON arrive at CN14 territory to tap cavity trees and listen for FLOW nesting vocalizations.

2050—BL and ON split at CN14\_2016 nest tree (tag #1289). ON watches the cavity and listens for signs of FLOW activity at the tree, while BL moves to listen near cavity trees lower and higher in the drainage.

Weather: cloudy, calm, 19C

2115—No vocalizations are heard at 2016 nest tree so ON walks around the drainage and continues listening for vocalizations.

2255—ON meets up with BL ~200m up drainage from 2016 nest tree.

2221—We set up lure net and start PB T42.

Vegetation: mixed psme/pifl, new growth potr

Weather: clear, breezy, 17C

X: 481563

Y: 4333311

+/- 3m

2235—BL leaves net site to listen around area.

2247—ON hears M TCs coming into net site from S. He perches 15m SW of net and continues to give TCs, but especially HECs. We presume that he is the CN14 M.

2253—M moves NE 30m from net and continues vocalizing HECs (mostly HECs, and very hoarse) and TCs.

2300-2305: BL takes the playback and alternatively moves toward, then away, from the M.

2308—Vocalizations continue ~10m SE of net.

2312—M returns just E of net ~10m and is still giving HECs.

2314—ON hears rustling in net and M goes silent. **We check the net and find an unbanded M FLOW on the SW side of the bottom shelf—we presume this is the CN14\_2018 M, given his highly aggressive behavior around the playback**.

2316—BL extracts bird from net, and we proceed to process him.

**Band # 1833-32503 (on L leg)**

62.0 g LWC: 131 mm

- 7.0 g LLP(5): 98 mm

55.0 g LLP(6): 107 mm

Rect: 59 mm

**Notes: SF travels from the CN11\_2018 lure net and proceeds to collect his 1st blood sample; small hematoma.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 2.5 | 2.5 |
| P4 | 1.5 | 1.5 |
| P5 | 1.5 | 1.5 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 1 | 1 |
| P9 | 1 | 1 |
| P10 | 1 | 1 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

**Notes:** No evidence of head lice or any other ectoparasites.

2400—ON releases bird. SAF S, curves E.

2402—We cut PB and begin to break down lure net.

2411—We leave CN14 territory.

# CS1—2004

*Note (7/9/15): CS1\_2004 refers to the* ***secondary polygynous nest*** *found that year. It is sometimes referred to as CS1\_1 during the notes that follow. In other years, we use the wrong terminology, that will be corrected in future notes.*

## 18 June 2004

2315—EP hears what sounded like repeated female food solicitation calls from a drainage about a half mile SE of the parking area. EP and SY tap a few suitable cavities and mark a general area flag in the area before leaving back to the vehicles. GPS of area: (482714, 4324161)—accuracy of 10m.

*Note (7/9/15)*:  *For posterity’s sake, it’s important to remember that EP and SY, at the end of this night, departed in opposite directions, each thinking the other would soon be lost. Alas, it was SY who walked a significant distance away from the vehicles, became hopelessly disoriented, smashed into a barbed-wire fence ripping his vest and losing a dbh tape, before radioing BL in a panic for help. Calmly, BL talked him back to the vehicles. However, this whole process having taken over an hour, the rest of the crew attempted to hike back to their vehicles stashed back below on Trail Cr Rd. Upon arriving at the vehicles, BL and SY discover that the rest of the crew was not present, nor had they been passed on the road. Thus, another rescue mission commenced. Eventually the entire crew was found about a mile past the turnoff towards the cars wandering, wide-eyed and delirious, but thankful to have been rescued. The moral of the story: if you think someone is about to get lost, say something. And if you do get lost, don’t do it on a Friday night – it makes people grumpy.*

## 22 June 2004

2235—Flam crew arrives and heads SE about 200 m to where EP heard FS call on a previous night to attempt to find nest.

2312—EE and EP hear a F giving FS calls in aspen flat and pursue.

2317—We observe M make a prey delivery and through this we are able to find the nest—**this is the CS1\_2004 nest**. Nest is on the edge of a high burn area and in a burned aspen itself.

2317-2411—We observe M make 23 prey deliveries in 54 minutes. At the beginning of this the F was constantly giving FS calls, but towards the end she stopped. Consistency of prey deliveries and F FS calls indicate hatching may have occurred.

## 12 July 2004

2035—BL arrives at CS1 nest to attempt extraction of nestlings, and capture of adults. No response to tapping on nest tree.

2040—I climb to cavity, and enlarge the entrance.

2045—F is in the cavity—I remove her, and three very young owlets that are still in white down. **I give the unbanded F Band # 64418**.

85.0 g LWC: 122 mm

20.0 g LLP: 104 mm

65.0 g

Black Owlet Red Owlet Plain Owlet (runt)

41.0 g 29.0 g 24.0 g

- 16.5 g - 16.5 g - 16.5 g

24.5 g 12.5 g 7.5 g

~5 days old ~2 days old < 1 day old

2055—I return owlets (F released at 2050).

2125—I leave—an adult (probably F) has approached the cavity 3 times without fully entering cavity. No confirmed sighting of M.

2240—I return (after discovering CS2 nest). F at entrance, and she leaves a couple of minutes later.

2247—F attempts to deliver prey (she did not fully enter cavity).

2257—M arrives in nest area giving LC. He apparently delivers prey to F, who enters the nest with prey.

2303—F leaves cavity, and returns a few minutes later (apparently makes prey delivery).

2318—M delivers prey to F at cavity entrance.

2330—I leave.

## 13 July 2004

2057—EP and SY arrive at CS1 nest to attempt capture of the male.

2106—Female leaves the cavity.

2110—Aborted prey delivery (female).

2111—Aborted prey delivery (female).

2114—Female returns to cavity after scolding us for approx. 2 min.

2116—Female leaves cavity.

2118—Female returns to cavity.

2135—Female leaves cavity.

2136—Prey delivery (male).

2149—Prey delivery (male).

2150—Aborted prey delivery (female).

2153—The male makes an aborted prey delivery while the female scolds from a tree to the NE. A third owl flies past nest tree while the male gives LCs in a tree E of nest tree. The UFO goes to the SW of the nest tree. No TEC were given nor any aggressive behavior by the territory occupants even though the UFO was in the immediate vicinity of the territory occupants.

2213—Prey delivery (female).

2230—We leave.

## 15 July 2004

2034—EP and SY arrive at CS1 nest to attempt capture of the male.

2103—Female leaves the cavity.

2109—Female returns to the area and begins scolding us.

2116—Following 4 aborted prey deliveries in 3 min. EP moves away from the nest, female flushes to the N and continues scolding for approx. 2 min.

2232—Female returns to cavity and delivers prey received from male.

2250—After several aborted prey deliveries the male makes a successful delivery and is captured. He is a previously banded bird.

**Band#64419**

**Note: This individual was captured and banded approximately 1 hour earlier at CS2 nest, after making a prey delivery. First documentation of polygyny in the species!!**

## 19 July 2004

1621—JM and BL arrive to CS\_1 nest to owlet measurements.

1624—F flushes. We find only two owlets remaining in the nest.

Band# 64420 (black) RED

54.5 g 32.5 g

-11.0 g -11.0 g

43.5 g 21.5 g

LLP: 26 mm 4 mm (all in shaft)

Rect.: 4 mm

1643—Owlets returned to nest, and we leave. We find no remains of the missing owlet on the ground beneath the cavity.

## 21 July 2004

0942—BL and SY arrive at CS1 nest to assess status of owlets and attempt banding and bleeding. F flushes as BL climbs tree.

0947—The only remaining live owlet is retrieved from the cavity—the remains of the younger sibling’s carcass were also in the cavity and were removed. The owlet appeared to have died approximately 1-2 days ago, and the carcass was largely intact. The remaining live owlet is banded and bled.

Band # 64420

62.0 g LLP: 37 mm

16.0 g Rect: 4 mm

46.0 g

1000—The owlet is returned to the cavity after bleeding. We leave.

## 30 July 2004

2020—BL arrives at CN1 nest to assess status and behavior of the remaining owlet. F not at entrance, nor does she rise to entrance when tree is vigorously tapped.

2025—F flushes cavity (25 m to NE) as I climb nest tree. Owlet still in the cavity.

Band #: 64420

61.5 g LLP: 68 mm

16.0 g Rect: 24 mm

45.5 g

The owlet appeared fine, although he definitely was light in mass, and was not particularly active while out of the nest.

2036—I return owlet to cavity, and F scolds me several times as I climb nest tree.

2057—Owlet first gives BC.

2106—F arrives in nest area, giving BC, and owlet gives BC in response.

2109—Another F is heard giving scolding calls down the main drainage to the E, approximately 150 m—I wondered if this was CS2-F tending to her fledgling. She gives two scolding calls in close succession, and this was repeated every 20 sec or so for approximately 3-4 min. CS1-F immediately flushed in this direction upon hearing the first calls, and she does not return for about 15 min.

2126—F arrives in the nest area, and delivers prey at this time at the cavity entrance, where the owlet is begging in anticipation (this is the first time the owlet ascended to the entrance). The owlet stays in the entrance for a moment or two, then he descends in the cavity.

2222—F aborts in her attempt to deliver prey. Owlet ascends to beg at the entrance once again.

2227—Owlet fledges!! It flies nearly horizontally about 25 m to the N across the drainage. I do not pursue, but the female, who was perched approximately 20 m to the NE, flies off in this direction.

2230—I leave. **Note: This is the one of the latest confirmed fledging time (hr of night) for any owlet over the 24-year study. The F was the only adult in the nest area up to this time tonight. It appears likely, based on the owlet’s mass and observations on more than one evening, that the F has been the only adult tending this nest for perhaps a couple of weeks.**

# CS2—2004

## 22 June 2004

2325—After CS1 nest was found in the Manchester Cr drainage (see CS1 account), EP and BL move to the N approximately 250 m to attempt to spot map CS1, and attempt to elicit calling from the second M that BL heard while censusing on 17 June.

2340—BL hears M calling to the N (approximately 300 m N of CS1 nest), and marks one songpost at this time. This M was singing at the same time that the CS1-M was delivering prey at the nest, so this was concluded to be a separate M—CS2.

2405—BL marks a 2nd songpost on the CS2-M, approximately 100 m N of the first songpost. It is in this song tree that the CS2-M gives HECs, and I eventually find a UFO perched on the opposite side of the tree, at approximately the same height (about 10 m, or half the height of the crown).

2415—BL marks a 3rd songpost on the CS2-M, approximately 75 m to the W.

2420—The M stops calling, and I leave.

## 12 July 2004

2130-2155: BL looks and listens for nest activity in the area to the N and (mostly) E of CS1 area.

2157—I hear F giving FC, and young begging, from the vicinity of a *Potr* drainage bottom, approximately 400 m E of the CS1 nest.

2203—I find CS2 nest after M makes prey delivery to owlet in entrance of *Potr* cavity, approximately 7 m above ground on the S side of tree, just below crown.

GPS Coordinates of Nest:

X: 483169

Y: 4324176 (accuracy 8 m)

**Note**: *Potr* is fully live (although bark is charred at base), about 34 cm dbh, and is about 10 m out of the bottom of the drainage on the fairly steep E-facing slope. The mature *Potr* bottom area was mostly spared from the fire, although several stems are dead within the stand, and the stand is surrounded by some conifer stands that burned with intermediate intensity. I flag tree.

Young begging loudly from cavity (F is off the nest).

2215—F scolds me from upslope (to W)—owlet begging stops immediately.

2225—I leave for CS1 nest.

## 13 July 2004

1954—Flam crew (BL, EE, and JM) arrive at CS2 nest to attempt capture of male female and nestlings.

2006—Female is caught, banded, and bled—she was previously unbanded.

Band#92381

89.0 g

-26.0 g

63.0 g

WC: 136 mm

LLP: 104 mm

Rect.: 67 mm

2008—BL begins enlarging cavity entrance. Cavity Dimensions:

Entrance Horiz. x Vert.: 5.0 cm x 5.0 cm

Thickness: 6.0 cm

Horiz. Depth: 14 cm

Vert. Depth: 14 cm

DOH: 27.0 cm

2013—Three owlets removed from cavity.

Band# 64413 64414 64415

71.5 g 51.0 g 65.5 g

-11.5 g -11.5 g -11.5 g

60.0 g 39.5 g 54.0 g

LLP: 48 mm 30 mm 44 mm

Rect.: 22 mm -- 18 mm

64413 and 64415 were bled. 64414 was too young to bleed.

2027—Female was released after being bled.

2039—Owlets are put back in cavity.

2050—BL, JM, EE set up and prepare to capture and then bleed M.

2055—M gives F a prey delivery outside of the hole.

2058-2222—F and M (but mainly F) make 10 prey deliveries.

2229—We take the pole down and leave.

## 15 July 2004

2045—JM and BL arrive at CS2 nest to attempt capture of M (SY and EP at CS1 to capture M). Mostly cloudy, calm, 20 C. Getting dark quickly, due to cloud cover, so we get into capture position. At least one owlet is at the cavity entrance.

2047—F delivers prey to owlet at entrance.

2049—**JM captures M after he performs first prey delivery. M was previously unbanded**. (Light rain starts falling at this time, and continues for about 10 minutes).

Band #: 64419

73.5 g

21.0 g

52.5 g

Male is bled. First two primaries have been replaced on the left wing, and are about 1/3 grown.

2111—F delivers prey at entrance.

2113—F delivers prey at entrance.

2124—M is released and we leave. Owlet(s) still begging from cavity entrance.

NOTE: Approximately one hour later, this male is captured while attempting to deliver prey at the CS1 nest—where no other prey had been delivered by a M up to this point in the evening. This documents the first reported instance of polygyny in Flammulated Owls. Two of the owlets likely fledged on 17 + 1 July at CS2 nest.

## 19 July 2004

1531—JM and BL arrive to CS\_2 nest to measure and bleed owlet # 64414.

1535—F is at cavity entrance.

1539—BL removes F and the one and only owlet from nest.

Band# 92381 (Female) 64414

63.5

-15.5 g

wing chord: 128 m 48.0 g

LLP: 94 mm LLP: 51 mm

Rect.: 65 mm Rect: 18 mm

1504—Nestling was returned to the nest. We leave.

# CS2—2006

*Note (7/9/15): CS1\_2006, or CS1\_1\_2006 actually refers to CS2\_2006 – the same territory as the primary polygynous nest from 2004. It is sometimes referred to as CS1\_1 during the notes that follow. In other years, we use the wrong terminology, that will be corrected in future notes. We have changed the heading above, but left all the text untouched.*

## 1 June 2006

2045—EE, KC, and BL arrive in the CS1\_1\_2005 nest area to peep cavities and search for the 2006 nest. EM and SY are in the CS1\_2\_2005 nest area. PC, calm, approximately 16 C. At this time, **EE peeps the CS1\_1\_2005 nest cavity and discovers the flam F—this is the CS1\_2006 nest (3rd consecutive year)!** Also at this approximate time, the CS1\_1 M flew into an adjacent tree, where he perched for ~ ½ minute before flying out of the nest site.

2053—EE extends capture net into position in attempt to capture F. She stays in the bottom of the cavity when the tree is tapped.

2104—F flushes into the net, after the M had been giving LC in the nest area for the preceding ~ ½ minute. She is a previously banded F (Band # 92387)—in fact, we discover that she had fledged in the A4\_2004 territory, constituting the first recorded instance of F natal dispersal!! She is a 2-yr old breeder.

Band # 92387

96.5 g LLC: 127 mm

26.5 g LLP: 108 mm

70.0 g

2112—F released. **KC and EE peep the cavity and discover 3 eggs**, near the cavity center and touching. We leave the nest area to allow her to reenter the nest uninhibited.

2145—From the ridge top immediately to the W of the nest, KC, EE, and BL hear a M calling from the ridge immediately to the S. BL pursues, while EE returns to the nest to observe prey deliveries, and KC stays on the present ridge to attempt spot-mapping there.

2159—BL marks songpost #1 on the ridge to the S—this M presumably was the CS1\_2006 M, as was probably the case—but not definitively known—with the subsequent songposts marked on this ridge (although they were all attributed, on the flagging, to CS3 M). Starting at about this time, and continuing intermittently for the rest of the listening period, another M (the actual CS3 male) was heard calling further to the SE, in the vicinity of the Phantom Creek drainage. EE and BL mark a total of 4 songposts on this ridge from 2159 to approximately 2330, when the last songpost was flagged.

2159-2305—M makes 4 prey deliveries during this time. NOTE: SY and EM had M in the newly found CS4 nest area at the same time EE observed CS1 M making prey delivery. Suggests 2 different males.

2254—While CS1\_1 M is making prey delivery, another M is calling about 200 meters directly to the S for about 5 min. Same M that BL is spotmapping?

2405—EE moves about 200 m NW of CS1 nest to listen and hears nothing.

2430—We leave, after not hearing any singing in the past ½ hour.

## 6 July 2006

2015—EE, BL and KC are at CS1 nest to attempt to climb to nest and band/bleed owlets, and to capture M. Mostly cloudy, calm and 12 C. We peep and **see there are maybe two nestlings** underneath the F who is still in the nest. Unfortunately, the nest tree is too unstable to climb.

2040—EE sets up capture net for the M.

2049—The M gives a prey delivery after sitting on a tree the NW for 30 s. He then flew to the *Potr* 3m S of the nest tree, and the nestlings are heard begging.

2049—A nestling is in the entrance, begging from there, and we can see his head bobbing.

2053—F leaves.

2055—We peep the nest, **2 nestlings with grey plumage**—juvenile with scapulars and wings and face developing the adult coloration. Fledgling appearance.

2056—M comes into site as we take peeper out and makes a prey delivery.

2100—M returns, taking same approach as before, makes another prey delivery. F is heard from SW, giving SC’s.

2106—F makes prey delivery, then the M does too.

2107—M comes in from same direction, with same perches, makes a very quick prey delivery. The owlet is still in the entrance, and had given a begging call.

2108—Prey delivery by F who enters from S giving LC’s.

2109—F prey delivery.

2110—M prey delivery, he is caught in net, nestling still in entrance. **The male was previously banded—band #64436; he was the CS1\_2005 male.**

Band #64436

67.0g

20.5g

46.5g

LLP: 93mm

Rect: 61mm

2120—The M is released, flies strongly to the N, giving TC once he perched. Nestling still calling from entrance as we leave the site.

# CS2—2007

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 3 July 2007

1845-2115: Flam crew attempts to peep cavity trees in the CS1 and CS4 territories. We were in the process of peeping cavities in CS4 when a powerful thunderstorm arrived in the area, dropped a couple of inches of hail, and forcing us to abort our efforts.

## 12 July 2007

1940—The Flam Crew arrives in the CS4 and CS1 territories to peep cavity trees. Overcast, mostly calm, 17 C. By the time darkness settled in, we had peeped most of CS4 (but we had not yet moved to CS1), but did not find anything.

2047—EM and BL start listening in the *Potr* drainage bottom, in the vicinity of the CS1\_2004-2007 nests. Overcast, calm, 15 C.

2235—After unsuccessfully searching for a nest and listening for nesting vocalizations in the N-S *Potr* drainage containing the past CS1 nests, as well as in the main E-W drainage that the above drainage flows into, we join the rest of the flam crew to the W approximately 200 m, where we eventually find a *Otfl* nest (see CS4 field notes for details).

# CS2—2008

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 30 June 2008

1615—Flam Crew begins peeping the CS1 territory.

1619—KB and SY find a F flam in the cavity of tree CS1\_20. She does not come up to a tap. There is also at least one nestling in white down visible. **CS1\_20 is the CS1 2008 nest tree**. The cavity is about 40’ up, facing west.

1627—KB and SY leave the nest site. F never came up.

2025—QB, KB, and BL arrive at the CS1\_2008 nest to attempt capture of F and/or M. Partly to mostly cloudy, very breezy (steady at 10-12 mph, gusts to 20 mph), ~ 16 C.

2035—KB raises the capture net over the cavity (**capture pole at 41’ 3”**).

2056—F flushes from cavity, and manages to escape (apparently by going beneath the rim of net. We remove the net for possible repair.

2058— M arrives in area giving LC, and makes PD in cavity.

2100—F flies into cavity, then both M and F leave

2103—**We peep cavity and observe at least 2 owlets, one of which appears to be very young (all white down, very small, probably ~ 3 d old). The other owlet appears much larger and older, and possibly has grey down starting to appear on the back and head (~ 7 d old?). Egg shell fragments strewn around cavity, and no sign of any unhatched eggs (but could have been hidden).**

2112—M makes PD at cavity entrance (F reentered cavity sometime in the interim), and then both adults flush from cavity.

2114—F returns to cavity, and M makes PD at cavity entrance.

2119—M makes PD, completely entering the cavity.

2120—BL gets into capture position (capture pole at 40’ 0”, slightly upslope from nest tree).

2125—Net in position

2131—After flying around area giving LCs M makes PD, completely entering cavity, but we do not attempt capture to allow him to build confidence.

2136—M makes PD, but we do not get net over cavity in time.

2142—M in area, flies around for a while without making PD, leaves.

2209—M and F in area. M giving TCs (2209-2212). F makes PD.

2218—F flies into cavity, we move net over entrance.

2226—M in area giving LCs and TCs, does not make PD (2226-2233)

2233—M leaves, there has been no sign of F, so we leave.

## 8 July 2008

2037—SY, SC, and KB arrive at the CS1 nest site to attempt capture of the F and/or M.

Weather: Mostly clear, calm, 14C.

2042—Net in capture position for the F.

Net Height = 39’8”

2104—Saw-whet Owl in nest site. Remains for ~6min.

2113—We peep the cavity – no owls present. A few egg shell fragments visible as well as a non-flam feather (too dark).

We back off to continue observing the nest and the surrounding area to see if: 1) the Saw-whet has anything to do with this, and, 2) if there was a possible early fledging.

**Note**: Given nest chronology this is an apparent predation event.

2215—Nothing heard or seen (except Saw-whet fledglings), we leave.

# CS2—2009

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 22 June 2009

2106—KB, SC, JG arrive CS1 to listen and set up lure net.

2108—We tap and peep CS1 2008 nest tree. Cavity is empty. We decide to spread out and listen

in the drainage.

2130—SC hears M LC around the confluence of CS1 drainage and main drainage.

2136—We possibly hear F beg around the confluence, but cannot be sure because the creek is fairly loud.

~2145—JG and KB go on top of ridge to set up lure net. SC stays at the confluence to listen.

~2250—After having trouble with the playback and hearing nothing further in the drainage, we

leave.

## 26 June 2009

1625—Flam crew begins peeping CS1 and CS4.

1835—Crew finishes peeping. Nothing is found.

2005—SR, SC, SY and KB begin peeping upper CS4.

~2022—KB, SR, and AB (guest) arrive on western split in ridge between CS4 and CS1 to set up lure net and capture any territorial M. Weather: 17C, mostly clear, calm.

2025—SC and SY peep 2007 CS4 nest tree. It is empty.

2036—SC listens west at road junction while SY listens East in drainage.

2112—Net set up.

2115—SC, who is listening to the south west of lure net, hears M TC East in drainage.

2116—M caught. Silent beforehand, 2nd shelf from top, flew in on N-facing side.

137g M was previously banded—**Band #: 64542** This is the CS4\_2008 M.

-85g

52g LWC:133mm

LLP(5): 95mm

LLP(6): 105mm

Rect: 60mm.

2130—64542 released.

2131—M caught. Unbanded M.

78g **Band #: 64680.** Missing P1 on both wings. Bled on R wing.

-27g

51g LWC:125mm

LLP(5): 94mm

LLP(6): 104mm

Rect: 55mm

2135—Hoarse TC/TEC from S.

2142—First M caught again.

2148—First M released.

2157—Hoarse TC/TEC near net.

2200—Playback stopped. Another unbanded owl captured in net.

81.0g **Band #: 64685.** Missing P1 on both wings. Bled on R wing.

-27.5g

54.5g LWC:128mm

LLP(5): 86mm

LLP(6): 96mm

Rect: 56mm

SC sees bird fly to potr just south of lure net. Tree checked for cavities. SC stays in the

area to listen.

2202—Second owl released.

2209—SC possibly hears a faint FSC to the south in a high burn area. SY and SC look for new

cavities and listen.

2212—Third bird bled.

2222—Third bird released.

GPS: X=482901, Y=432450, +/- 5m

2230—Net down and we leave.

2245—SY and SC stop listening and leave. We hear great horned owl which may be affecting

flam activity.

# CS2—2010

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 17 June 2010

~2150—BG and SY arrive in vicinity of past CS1 nest to listen for nesting vocalizations

2201—BG sees silent bird fly (very low) to the E in bottom of drainage. Bird returns to W ~15 seconds later.

2216—We watch trees in bottom of drainage, hear LC from E ridge.

2233—We hear TCs from W ridge pretty far away, continue to listen for potential nesting vocalizations.

2245—LC from E ridge

2308—M gives TCs and TECs to the S ~150m. M briefly moves to the S end of the ridge that separates CS1 and CS4 (W ridge); then moves back to the ridge to the S.

2315—We leave.

Notes: While M was very quiet it seems likely that we were in very close proximity to a nest. Seems likely that nest is located on E side of drainage parallel to past nest tree.

## 24 June 2010

1600-1915: Flam Crew peeps throughout the CS1 and CS4 territories. Nothing found.

2055—BG, DW, and BL arrive in the CS1 drainage (in the vicinity of the large dbh CS1\_2004 *Potr* nest tree) to listen for nesting activity.

Weather: Partly cloudy, very breezy, 22 C.

2116—BG hears a few possible TCs (low volume and hard to hear over wind) toward head of drainage (N).

2145—BG leaves to set up mist net on middle ridge (ridge between CS1 and CS4). DW and BL move farther N and S in the drainage to listen.

2215—BL hears M singing in the vicinity of the confluence of the CS1 drainage and the main drainage (E—W running). M gives rather quiet TCs just upslope and S of the main drainage until 2223.

2240—JG, who came down from listening in the CS4 area, hears apparently the same M now giving TCs approximately 100 m to the W of the drainage confluence (just E of the CS4\_2007 nest tree, which has fallen).

2249—JG songposts CS1\_1 ~75 m E of the CS4\_2007 fallen nest tree.

2310—JG hears the M again in the same area as at 2240 and 2249 and pursues, but the M goes toward the playback, so I stop following him.

2320—JG, BL, and DW leave the area. Nothing found, and no nesting vocalizations heard.

2147—BG, JV, and JSG reach Wrong Ridge between CS1 and CS4 territories to set up lure net.

2219—Lure net is set up and we start playback.

Vegetation: high burn, mixed age conifer

Weather: some wind, 18C

X: 482983

Y: 4324289

+/-5

2225—Hear 1 TC SE of net.

2243—M TCs to NE (only 4 TCs).

2246—TCs from SW, then 2 Ms in area, one SE and one SW.

2247—TCs from SE stop, SW M gives TCs and TECs.

2248—All vocalizations stop.

2249—TCs start up again from SW.

2251—TCs move to the SE (sounds like same M).

2305—JV gives some additional TC/TECs just S of net to further entice M to come closer. JV continues to do this for 5 minutes off and on.

2311—We move playback to top of stump to S of net.

2313—TCs stop.

2315—TCs from E of net (CS1 direction).

2316—TCs move more NE.

2319—TCs stop.

2320—A few more TCs from the NE.

2321—Stop playback and breakdown net.

2331—We leave.

# CS2—2011

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 23 June 2011

1625—Start peeping CS1 and CS4.

1840—Stop peeping, no nests found. Some trees need nighttime listening because peeping was not possible.

2030—BG starts listening up drainage from main CS1 cavity tree area, while PS starts listening at past CS1 nest tree CS1\_1000. PS finds old, broken eggshell under past nest tree from unknown species.

2128—BG reaches CS1 main cavity tree clump, listens near PS.

2235—BG and PS leave CS1 having heard nothing, and head to CS4 drainage to listen.

2320—Leave CS4 drainage to return to vehicle.

# CS2—2012

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

*Note: (7/21/15 - SY) – I think the pair recorded below as CS4 actually represents CS2 since the previous territorial CS4 M was captured in 2013 and because this M came into the net from the SE.*

## 19 June 2012

~2100—BL, AP and MD arrive at the S terminus of the ridge dividing CS1 and CS4 to set up a lure net to attempt to capture either M.

Vegetation: Mature Pipo overstory with younger trees and some snags in the vicinity of the net.

Weather: Clear and calm, 18C.

X: 482905

Y: 4324237

+/- 3M

~2110—We hear a M giving TCs from the drainage.

2112—We begin to set up the lure net, and the same M gives occasional TCs.

2128—Lure net is up.

2129—We start playback.

2142—BL goes to listen in the CS4 drainage.

2144—MD and BL hear a M give TCs from the opposite ridge of the net.

2153—M gives mostly TCs, some TECs near the net.

2158—While still vocalizing, M moves away from net back towards drainage before going silent.

2204-5—M gives TCs near the net, from the S.

2210—**A bird is in the net. He is an unbanded M. He is the presumed CS4\_2012 M.** He came from the SE and was in shelf 2 of the net.

2216—M in hand. BL arrives at lure net to assist. We band him, take measurements, bleed him on R wing, and blacklight him. Under the blacklight, L wing P1 is clear (feather not worn down) P2-6 is moderate (brightest pink), P7-10 is light. P6-10 show wear. R wing P1-4 is moderate (brightest pink), P5-10 is light and P5-10 show wear.

**Band # 1783-64320** (on L leg)

72.0 g LWC: 128 mm

- 15.5 g LLP(5): 98 mm

56.5 g LLP(6): 104 mm

Rect: 61 mm

2143—**A silent bird is in the net. It is an unbanded F. She is the presumed CS4\_2012 F.** She flew in from the SW and was in shelf 1 of the net.

2144—F is in hand. We band her, but do not take measurements except her mass.

**Band # 1783-64321** (on R leg)

87.5 g

- 21.5 g

66.0 g

2245—We release the F, she has a strong ascending flight to the SW.

2303—M is released, he has a strong ascending flight to the SW.

2307—We hear the M give mostly TCs and some TECs from near the net. When MD goes to check on the net, M is perched 5 ft E of the net.

2314—BL heads back to the drainage to tap and listen.

2320—While still giving TCs, M moves farther away from net, towards the drainage.

2326—**M is in the net. It is the same M, CS4\_2012.** He flew in from the SE and was in shelf 2 of the net.

2330—Release M, he has a strong flight to S.

2331—MD goes down to the drainage to listen.

2332—M gives TCs from the drainage.

2345—M comes closer to the net, still giving TCs.

2346—AP stops the playback and MD and BL return to break down the net.

2351—We hear 2 males calling from the drainage and the opposite ridge, one from the SE and one from the SW of our position. They are the presumed CS1 and CS4 Ms.

2400—Net is down, we leave.

**ADDENDUM (6/27/2020; BL): Nest information for CS2\_2012, which is indicated in Territory History, is unfortunately lacking in Field Note entries for both CS2 and CS4 territories (which often had copied entries, considering their linked histories). Nest location and chronology info is also lacking in Capture Progress, although it was noted that on 6/19/2012, suspected nest predation was documented.**

# CS2—2013

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 27 June 2013

Afternoon—Flam crew peeps in CS1.

1548—SY taps cavity tree #1366 – no response. As I raise the peeper a F FLOW rises to the cavity entrance and flushes. **This is the CS4\_2013 nest! Cavity is ~18 feet up the E side of a potr snag. Snag is in the main CS1 drainage just W of the creek, opposite the large rock face near the bottom of the drainage.**

2036—SY, RC, and CK arrive at CS4\_2013 nest site with intent to capture M/F and peep cavity.

2038—F flushes as net is being raised. **Peep reveals 2 standing nestlings with mobile heads, gray juvenile feathers growing in under natal down, and open eyes, as well as 1 un-hatched egg. SY believes the nestlings to be 7-8 days of age, and the egg to be a dud.** We leave to set up lure net.

2105—We start playback on ridge top of S end of ridge between CS1 and CS4. Net opens SSE.

Vegetation: Net around young to medium psme and young potr. Additionally, there was a mature pipo to the N of the net

Weather: Mostly clear with lightning in the distance to the SW. Calm to start then breezes (5-10 mph) after ~2 hours. 21C.

X: 482924

Y: 4324225

+/- 3m

2110—SY, RC and Abby leave to make capture attempt at CS1\_2013 M.

2116—SY, RC and Abby arrive at the CS4 nest to attempt to capture the M.

Weather: 13.5C, mostly clear, calm

2118—CK hears M come into the nest site ~20 m away and give strong HECs almost immediately. M calls from the SE in the direction of the E/W drainage connecting CS1 and CS4. This is the presumed CS1\_2013 M.

2124—M goes silent after going from the E side of the net to the W side. M calls continuously for ~2 minutes going S before going silent.

2127—M enters the net site from the S and gives a few TECs.

2136—M makes a PD at the nest.

2140—RC has net in capture position.

2150—M enters site from the S and gives a few HECs and TECs

2154—M makes a PD at the nest – net is placed over the cavity entrance, but the M does not come up.

2203—M finally exits the cavity and is capture! **He is previously banded.**  M is bled obtained both genetics and parasite smear.

**Band #1593-64542**

69.5 g LWC: 133 mm

- 17.0 g LLP(5): 91 mm

52.5 g LLP(6): 108 mm

Rect: 56 mm

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 2 | 0.5 |
| P5 | 2.5 | 0.5 |
| P6 | 3 | 2 |
| P7 | 3 | 3 |
| P8 | 3 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

2226—M is released – strong flight S.

2255—Playback is stopped.

2322—We start playback 200m W of the previous playback spot on the S facing slope of a side Ridge over the CS4 area.

Vegetation: Young potr with some med pipo/psme.

Weather: partly cloudy with some light storm systems moving through. Slight breeze (5 10 mph). Warm evening.

X: 482689

Y: 4324277

+/- 3m

2327—CK heads S/SE down the E/W drainage to the confluence with the CS1 drainage to listen for vocalizations. RC leaves to listen in CS4.

2338—CK and RC return to net, having heard and seen nothing in both CS1 and CS4.

2343—Playback is stopped – we break down the net and leave.

## 12 July 2013

2045—As BL approaches the CS1/CS4\_2013 nest area, I hear F giving harsh SC from the N end of the Potr bottom area. Shortly thereafter, the M also begins to give SC from upslope to the E of the nest area. Uncertain of the exact location of the nest tree, I watch and listen for possible fledglings as I look for the nest tree.

2105—I finally locate the nest tree, and as I approach I hear a nestling begging from the cavity entrance and see an adult exiting the area presumably after making a PD.

2110—I get into capture position below the nest tree (capture pole height approximately 16 ft), and the F begins giving incessant SC. This continues for most of my time in the nest area. At times I clearly hear 2 owlets begging from the nest cavity, and one owlet was in the entrance until ~2130, except when harsh SC from the F directed it back to the cavity bottom. **Note: based on nestling behavior in the cavity entrance (very active here—thought he might go), I would expect fledging to start on 13 July.**

~2125—M makes PD in the cavity.

~2205—M makes PD in the cavity.

~2207—F makes PD in the cavity (uncertain of ID until she exits).

2329—**F finally makes a PD and she is captured as she exits cavity. F was not previously banded—I band her with Band # 1783-64447. NOTE: THIS WAS THE 1000TH FLAM BANDED IN THIS STUDY!**

**Band # 1783-64447** (on l leg)

82.0 g LWC: 131 mm

- 23.0 g LLP(5): 98 mm

59.0 g LLP(6): 108 mm

Rect: 56 mm

Blood taken from L wing (genetic and parasite screen). No molt.

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 (60%) | Not taken (all) |
| P2 | 2 (60%) |  |
| P3 | 2 (60%) |  |
| P4 | 2 (60%) |  |
| P5 | 2 (60%) |  |
| P6 | 1.5 |  |
| P7 | 1.5 |  |
| P8 | 1.5 |  |
| P9 | 1.5 |  |
| P10 | 0.5 |  |

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 |  |
| P2 | 0.5 |  |
| P3 | 0.5 |  |
| P4 | 0.5 |  |
| P5 | 1 |  |
| P6 | 1.5 |  |
| P7 | 1.5 |  |
| P8 | 2.5 |  |
| P9 | 2.5 |  |
| P10 | 2.5 |  |

2353—F released, and she shows strong 20 m flight to the E. I leave.

# CS2—2014

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 24 June 2014

\*These notes also entered in CS4

2036—RC, JS, RD, and SY arrive in the CS1 territory to search for a nest. We spread out along the side drainage that contained last year’s nest to tap and listen.

Weather: ~16C, mostly cloudy, calm

2045—JS hears LCs mid-slope E of drainage. She pursues but M goes silent moments later.

2051—JS hears M giving LCs again NE of her position on the E side of the drainage.

2054—M gives two more hoots, JS has a visual.

2057—JS sees M swoop into middle of drainage towards two tall potrs.

2102—SY joins the scene and JS has eyes on the M again prey laden with a worm. Moments later we both witness the M give a PD! **We found the CS1\_2014 nest!** **Enumerated tree CS1\_1063 is the lucky winner. The tree is a potr full-snag located in the marshy bottom of the CS1 drainage on the E side. The cavity is ~22 feet up the tree on the N side, just at a small “s curve” in the tree. Cavity entrance is small – sapsucker size.**

2104—F flushes. **We peep: 3 eggs centered and touching.**

2108—M perched on adjacent tree, attempts a PD but F is not there. He continues to give LCs in the nest vicinity.

2111—F back on. In the process of getting the capture net ready the M gives a PD.

2112—M gives a PD.

2113—M gives a PD.

2117—RC is ready with the net at the cavity. All is silent in the nest area, but we can hear CS1 M giving TCs and occasional TECs consistently to N 100+m. We can hear no second bird, but M continues in this way until ~2150.

2131—RD and SY start PB at a net on the W side of the main CS ridge – just south of where the two-track leaves the ridge and heads into the drainage. The intent is to target a potential CS4 M (if present).

Vegetation: Sm. to med. Pipo/psme on upper slope. adjacent to high burn on the ridge top.

Weather: ~14C, mostly clear, calm.

X: 482856

Y: 4324370

+/- 5m

2155—SY heads down to the CS4 area to tap and listen while lure net continues to run on upper slope of ridge.

2152—CS1 M is back in nest vicinity giving a few very hoarse LCs.

2154—**Unbanded M caught** on his way out of a PD at CS1\_2014 nest! This is the CS1\_2014 M.

**Band # 1783-64535 (on L leg)**

89.0 g LWC: 137 mm

- 29.0 g LLP(5): 101 mm

60.0 g LLP(6): 110 mm

Rect: 65 mm

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2.5 | 2.5 |

Note: M very rufous and feisty. He was bled on L wing, no hematoma.

2227—M released, strong ascending flight up and N. We leave to join SY and RD in CS4.

2245—RC and JS spread out in the confluence of the N-S CS4 drainage and E-W drainage between CS1 and CS4 to listen.

2155—From 80m E down drainage toward CS1 from the CS4 road, RC hears CS1 M TCing distantly E toward CS1 drainage confluence.

2318—RC hears more TCs from CS1 M onN-facing slope across from N-S CS1 (nest) drainage.

2329—RC hangs song post CS1\_1 in live pipo previously hung as song post on 6/23/11 as CS4 by JV. M TCs here for 5-10min before going silent as SY and JS arrive. We do not hear from M again and head back up drainage after listening for 10-15 more minutes in this area.

2400—SY, JS, and RC return to the lure net. RD sat on lure net for the night, no activity. PB stopped, net broken down and all leave.

## 1 July 2014

2028—JV, MP, and SY arrive at the CS1\_2014 nest to attempt to capture the F.

Weather: 14C, cloudy, calm

2036—Net in capture position – F rises to cavity entrance ~45 seconds after net is in place.

2045—F flushes into the net and is captured! **She is previously banded.**

**Band #1593-64762 - she is the CN2\_2010 F!**

**This is likely the longest observed breeding dispersal in the study!**

**We peep the nest: 2 eggs, 1 very young nestling and a couple large pieces of eggshell are present. The N is less than 24 hours old and still appears “naked” – likely just hatched. N is motionless and prostrate on the cavity bottom.**

2048—We release the F. Strong flight S - M gives TECs and F flies to him and gives an FSC. We depart

# CS2—2015

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 14 July 2015

2052—RC, BL, and DL arrive in upper Polygyny Cr to listen for nesting vocalizations in CS1 territory. We spread out between 2013 and 2014 nest areas.

2054—LCs and FSCs near the CS1\_2013 nest tree. DL spots bird.

2059—M approaches 2013 nest tree giving LCs, then DL observes PD to the CS1\_2013 nest cavity. **This is the CS1\_2015 nest! Tree is full snag potr #1366. Nest is in NOFL-sized cavity 15ft up, facing ESE. Nest snag is in the main CS1 drainage just W of Polygyny Creek, opposite the large rock face that is approximately 60 m N of the S end of the drainage.**

2101—We peep. M enters site prey-laden as we do so and flies away as peeper goes up. **Raspy begs in cavity.** **Peep reveals 2 Ns. One is apparently in nearly full juvenile plumage, but is face down and unmoving so we are unable to determine if facial disk is present. Second N still has a good bit of natal down, but appears to have a significant amount of gray on head/scaps and coming in on body. BL estimates age of eldest owlet at ~16 days, and runt at 13-14 days.** We back off to observe.

Weather: Overcast but clearing, wet from light rain that lasted most of afternoon/early evening, calm, 11C.

~2114—RC approaches nest tree with capture pole while DL stays at the perimeter of the nest area, and BL leaves to set up lure net on the E end of Stampede Ridge.

2116—RC at tree.

~2118—Net in place. **Cavity height: 14’ 10”**

2121—**M makes a PD and is captured!** **M is previously banded with Band # 1783-64535; this was the CS1\_2014 M**.

~2125—DL heads back in to nest site to attempt F capture on PD while RC processes M.

**Band # 1783-64535 (on L leg)**

70.5 g LWC: 132 mm

- 15.5 g LLP(5): 100 mm

55.0 g LLP(6): 109 mm

Rect: 63 mm

Note: L&RS1 look unworn and 0.5-1 cm short. Likely recently molted.

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 | 1.5 |
| P2 | 2 | 1.5 |
| P3 | 1 | 2 |
| P4 | 1.5 | 1.5 |
| P5 | 1 | 1 |
| P6 | 0.5 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 1 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

Note: M was bled previously in 2014 so we do not collect blood sample.

2143—BL completes set-up of lure net and starts playback on Stampede Ridge.

Vegetation: Open overstory consisting of mature Pipo and Psme, with a few scattered sub-dominant conifers.

Weather: Mostly overcast (trees still dripping from pm rain), calm, 14 C.

X: 13S 483015

Y: 4324295

+/- 4 m

2149—M released with strong ascending flight S to nearby pipo.

2153—M gives brief LCs on this perch.

2157—On spotlight, M has flown perch. RC hears M giving TCs ~50m W, approaching BL’s lure net.

2200-2217: M gives TC/TEC in the immediate vicinity of the lure net, approaching to within 2-3 m of net and occasionally flying over net, but is never captured. At the end of this time interval, M flies off to the NNE (nest is nearly due E of net), and does not return for the remainder of the trapping session.

2232—M makes a silent PD and is captured.

2233—M released. RC takes over capture net.

2312—M makes silent PD and is captured.

2313—M released.

2321—M makes a silent PD and is nearly captured, but crawls up side of tree to evade net. Band is spotted on L leg during this process.

2330—BL turns off playback and starts to break down lure net.

*NOTE: Besides the presence of the CS1\_2015 in the net area noted above, no other FLOW were seen or heard in the net area during the trapping session.*

2332—M enters site silently and flies briefly to cavity entrance before perching on edge of net, which I have not moved. M blasts in to the back of the net, successfully capturing himself and getting very tangled.

2338—M released with strong ascending flight S. TCs in nest site as we leave. **NOTES**: **No sign of F for entirety of our capture attempts, despite frequent, audible begging calls from owlets.**

2340—BL completes breakdown of lure net. We leave.

## 17 July 2015

2035—BL arrives in the CS1\_2015 nest area to attempt capture of F.

Weather: Mostly clear, calm, ~18 C.

2038—Capture net is placed over cavity, but there is no response after tapping the tree, except for owlets that were begging audibly (2 owlets present based on distinct begging—no fledging yet).

2040—A FLOW (which turns out to be the M) starts giving F-like single-note LC calls from 5 m away, in an area of low, dense Potr (4 m tall) to the N. I keep capture net ~ 1 m from cavity.

2041—F starts to give FSC 60 m down-drainage from the nest (to the S). She continues to give sporadic FSC for the next ~ 20 min, but never approaching closer than 50 m, while the M simultaneously gave his F-like LC until 2045.

2045—M makes PD in the cavity. **Note: M makes 10 additional PDs in the cavity until his capture at 2107, detouring around the capture net**.

2107—**M makes PD in the cavity, and he is immediately followed by the F into the cavity. I place the net over the cavity and seconds later capture them both!**

2109—**I first extract the unbanded F, and then extract and release the banded M** (1783-64535).

**Band # 1833-03189 (on R leg)**

62.0 g LWC: 124 mm

- 7.0 g LLP(5): 96 mm

55.0 g LLP(6): 105 mm

Rect: 57 mm

Notes:

* *F bled on L wing; small hematoma.*
* *P1-4 were in molt on L wing—P1/2 were 48 mm, P3/4 were just emerging from shaft and were 25 mm.*
* *P1-3 were in molt on R wing—all were ~ 45-48 mm.*
* *Feathers on top/back of head were a bit ratty looking, as though the reddish/grey ends of the feathers were worn off.*
* **Pin feathers emerging from shaft on entirety of incubation patch, except for the very center of the patch which was still naked**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | Molt | Molt |
| P2 | Molt | Molt |
| P3 | Molt | Molt |
| P4 | Molt | 1.5 |
| P5 | 1.5 | 1 |
| P6 | 1.5 | 1 |
| P7 | 1 | 1 |
| P8 | 1 | 1 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | NA | NA |
| P2 | NA | NA |
| P3 | NA | NA |
| P4 | NA | 0.5 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2144—F released, with a strong, ascending flight of 30 m.

2218—I leave. Owlets did not rise to the cavity entrance that I ever observed (or inferred, based on sound of begging calls), but they begged loudly up until the time of M/F capture.

# CS3—2005

## 16 June 2005

2145—From CS1\_1 SY, MS, MG and Andrea hear a M give several TCs distant to the E.

2208—From CS1\_1 nest SY, MS, MG and Andrea hear TCs for approx. 1 min. to the E approx. 150m. MG and SY pursue but are unable to songpost.

# CS3—2006

## 2 June 2006

2145—After leaving the CS1\_2006 nest area, KC, EE, and BL hear a M calling from the ridge immediately to the S. See entry in CS1\_2006, the M to whom we attributed the singing, for details.

# CS4—2005

*Note (7/9/15): CS1\_2005 actually refers to the* ***a new territory in the main Polygynous Creek and the vicinity of the secondary polygynous nest from 2004: CS4.*** *It is sometimes referred to as CS1\_1 during the notes that follow. In other years, we use the wrong terminology, that will be corrected in future notes. We have changed the territory heading to CS4—2005, but have left the text of all entries untouched.*

## 2 June 2005

2035—Flam Crew arrives on Phantom Cr Road on the W end of the CS1 territory to assess nesting status of male and to attempt spot-mapping. Light fog, calm, approx. 10 C. SY and DF move to the vicinity of the CS1\_1\_2004 nest tree, and EE, MS, and BL move to the vicinity of the CS1\_2\_2004 nest tree.

2113—BL pursues and locates F giving FSC approx. 100 m N of the CS1\_2\_2004 nest on a S-facing mid-slope. She had been vocalizing from this vicinity for several minutes before I arrived, but she quieted shortly thereafter, possibly flying down to the *Potr* drainage.

2121—M arrives at the N end of the *Potr* drainage, giving LC sporadically for the next 3-4 minutes.

2134—SY and DF hear M TC by CS1\_1\_2004 nest.

2141—MS hears F FSC in *Potr* drainage.

2201—EE hears F near CS1\_2\_2004 nest.

2208—BL taps last year’s nest and F comes up. Same nest as CS1\_2\_2004.

2215—MS and EE observe prey delivery. F gives FSC for ~10 minutes.

2221—F give scolding call to us.

2225—BL leaves the CS1\_2\_2005 nest tree to attempt spot-mapping of M heard singing N of the CS1 territory in 2004.

2240—M makes prey delivery to nest. F continues FSC for ~15minutes.

2256—M makes prey delivery to nest.

2258—M makes prey delivery to nest.

2300—M makes prey delivery to nest.

2307—MS and EE leave nest.

## 2 June 2005 (SY notes)

2041—DF and SY arrive at the vicinity of 2004 CS1 nest. Low clouds/foggy at times very light breeze, 15˚C.

2110—We hear F give FS call very near 2004 nest tree.

2112-2116—3-4 M LCs in same vicinity.

2130-2136—Several LC’s and FS calls approx. 10m N of 2004 nest tree.

2142—Several LCs and FS calls in a very localized area approx. 10m N of 2004 nest tree. DF observes a bird fly very close to the trunk of a marked cavity tree (CS1\_2). Potentially a prey delivery.

2156—We observe a prey delivery at above tree (CS1\_2) accompanied by FS and LCs– location of 2005 nest.

2159—Same.

2232—F gives FS from in the cavity – no sign of M.

2250—Same.

2257—Same.

2304—We leave.

## 9 June 2005

2015—Flam Crew arrives on Phantom Cr Road on the W end of the CS1 territory to attempt capture of both CS1 females. Mostly cloudy, calm, light occasional rain, approx. 10 C. SY and MS go to the CS1\_1\_2005 nest, and EE, DF, and BL go to the CS1\_2\_2005 nest.

2030—EE, DF, and BL arrive at the CS1\_2\_2005 nest.

2045—EE has net in capture position, but CS1\_2 F does not respond to tapping on tree.

2055—M arrives in the CS1\_2 nest area, giving LC. He attempts to enter the cavity through the capture net 2-3X, then lands in adjacent *Potr*. F giving FSC inside cavity.

2056—CS1\_2 F is captured as she attempts to exit cavity. Previously banded—band # 92381; this is the CS1\_2\_2004 F (the ‘primary’ polygynous female).

100.5 g

-26.5 g

74.0 g

2104—DF peeps the CS1\_2 nest and finds 3 eggs in the center of the cavity, all touching.

2106—We release CS1\_2 F, and move upslope to the top of the ridge and wait for the F to return to the cavity.

2130—We return to within nest observing distance and watch for prey deliveries

2146-2209—CS1\_2 M makes 6 prey deliveries to F in nest. F is continually giving FSC BL and DF leave to tap and spotmap nearby

2220—F stops FSC

2240—After 30 minute pause CS1\_2 M makes 1 prey delivery to F in nest. F begins FSC again

2252—EE leaves

## 9 June 2005

2028—SY and MS enter CS1\_1 nest area to capture female and peep nest cavity. High cloud cover with partial clearing at times, calm and 11 deg. C with periodic light rain showers.

2036—SY gets net in position over caivity. CS1\_1 F claps bill when net tree.

2039—MS taps tree. No response from F.

2103—MS taps tree and gives light scratches on trunk. Female rises to front of cavity immediately.

2105—**F flies into net and is capture**d. **Unbanded, SY put band #64432 on right leg**. F clapping bill throughout time we had her (rain has stopped at this time).

Band #: 64432

87.0g LLP: 9.50cm

- 32.5g Rect: 6.2cm

54.5g LWC: 126.0

2106—MS peeps nest tree and finds 2 eggs in center of nest touching.

2115—MS releases CS1\_1 F and she flies strongly west, landing in *POTR* 10m away.

2122—MS and SY collect equipment and move 20m to the south to allow female space return.

2146—CS1\_1 M gives LC from NE.

2150—Female returns to nest

2151—Prey Delivery by M.

2154—Prey Delivery by M.

2155—SY leaves.

2155-2253—CS1\_1 F giving FSC’s for two minutes at 2 minute intervals with no sign of male.

2254—MS leaves area..

Observation info—EE, SY/MS

2200-2300: SY, DF, and BL move to the area N of CS1 to attempt spot-mapping of M heard in 2004 and tap/listen around cavity trees. A few cavity trees flagged, but nothing found.

## 16 June 2005

2030—Flam Crew (along with Brenda Holmes and Andrea, volunteers, and MGlaser) arrives on Phantom Cr Road on the W end of the CS1 territory to attempt capture of the CS1 male. Mostly cloudy, calm, approx. 18 C. SY, MS, MG, and Andrea go to the CS1\_1\_2005 nest, and EE, DF, BL, and Brenda go to the CS1\_2\_2005 nest.

2051—We enter the nest area of CS1\_2. M calls from his roost on the next ridge top to the E.

2052—F flushes from the nest. We peep the cavity and observe that the **3 eggs appear unpipped and unhatched.**

2100—EE gets into capture position, but by 2115 we do see the F reenter the cavity so EE moves away from the nest.

2113—M gives LC’s from E of nest.

2114—M enters and exits cavity (aborted prey delivery), then perches on tree less than 5m from nest tree.

2137—F perches on same tree that M perches on, then enters nest cavity.

2139—DF and Brenda see an *Otfl* enter the nest cavity without vocalizing (while it’s possible that the F was just returning, this could also have been the M making a prey delivery after the F returned unobserved sometime earlier).

2144—M delivers prey to F in cavity (F giving FSC, M giving LC).

2145— M delivers prey to F in cavity (F giving FSC, M giving LC).

2150— M delivers prey to F in cavity (F giving FSC, M giving LC). EE gets into capture position.

2155-- M delivers prey to F in cavity (F giving FSC, M giving LC).

2155--2158— M delivers prey to F in cavity (F giving FSC, M giving LC). EE captures M as he exits cavity**. M previously unbanded—he is given band #: 64436**.

77.0 g EE took blood sample

26.0 g (tare) LWC: 127 mm

51.0 g LLP: 92 mm

Rect: 57 mm

2219—We release M.

2235-2300: DF, SY, MG, and BL tap flagged cavity trees in the drainage immediately S of the 2005 nest tree, after the team at the CS1\_1 nest heard a M giving TC from the S end of the ridge between the CS1\_1 and CS1\_2 nests. Nothing found.

## 16 June 2005 (MS observation)

2045—MG, MS, volunteer, and SY enter area of CS1\_1 nest tree to capture male (thought to be polygynous) and peep nest. Overcast changing to clear and bright sky later on, calm winds and 17 deg. C.

2046—We tap tree and there is no sign of female.

2047—MS peeps nest and we observe 2 eggs, touching, but pushed to the SE side of the nest. We all wait and watch for female or male to enter nest area.

2209—SY and MG leave to spotmap CS\_3 M.

2308—SY and MG return and we all leave area.

## 7 July 2005

1647—DF and BL arrive at the CS1\_2 nest to remove, band, and bleed the owlets. BL climbs the nest tree, where the F is roosting in the cavity bottom (she was forcibly removed), and removes 3 owlets.

Owlet 64458 Owlet 64459 Owlet 64485

90.5 g 89.5 g 77.5 g

- 30.0 g - 30.5 g - 30.0 g

60.5 g 59.0 g 47.5 g

LLP: 48 mm 44 mm 35 mm

Rect: 20 mm 18 mm 14 mm

1721—After bleeding all of the owlets, we return them to the cavity.

1730—We leave.

# CS4—2006

*Note (7/9/2015): This section (appropriately) refers to the CS4 territory which occupies the are in the vicinity of the CS1\_2004 nest (also known as the secondary polygynous nest).*

## 1 June 2006

2042—SY and EM arrive in the vicinity of the CS1\_2\_2004 nest area to peep and flag new trees.

2103—EM spots M flam in a snag 20m from CS1\_7, a North-facing sapsucker hole approx 18ft high. Male never made any sounds in the snag.

2104-2127—EM continues tracking the M flam by spot-lighting him while flying within the vicinity of CS1\_7. At 2127, M makes prey delivery at CS1\_7. SY and EM tap tree and female rises to cavity entrance. **THIS IS THE CS4\_2006 NEST TREE.**

2137-2148—EM and SY observe two prey deliveries. SY attempts male capture on second prey delivery. Attempt fails because net snags on branch in front of cavity entrance. Male escapes and 5s later, female flushes because Hastings pole makes loud noise during snag. Female flushed to tree 5m North of nest. SY and EM flee the scene so to allow F to return to nest.

2207—EM and SY return to nest to watch prey deliveries. On second prey delivery attempt, SY attempts another capture. Again, net gets caught on snag and male and female flush. EM and SY decide to leave the scene to allow F to return to nest.

2333—SY arrives at CS4 nest to check for activity.

2351—M makes prey delivery then flies to a tree approx. 3 m W and gives 5 TCs (presumably at me) then flies N.

2354—I leave nest.

2355—M gives TCs immediately west of nest site at base of ridge. I mark songpost CS4\_1 (see data sheet). While recording the songpost I hear the M give TCs approx 10 m S of songpost tree then approx. 30 m NNW of songpost tree.

## 6 July 2006

1934—Flam crew arrives to capture CS4 M, F, and owlets. All need to be banded and bled.

1935—F captured. She is unbanded. We band her with number #64533 and bleed her.

Band#64533

69.0 g

-16.5 g

52.5 g

WC: 133 mm

LLP: 94 mm

Rect.: 52 mm

1955—2 Owlets out of cavity. We band and bleed them

#64525 #64519

51.5g 52.0g

-12.0g -16.5g

39.5g 35.5g

LLP: 42mm LLP: 36mm (20 in shaft)

Rects: 13mm Rects: 10mm

2010—We return owlets and leave.

2042—EM and SY arrive at CS4 to attempt to capture M. Temperature is 24 C, with cloudy skies and no wind.

2045—SY sets up net and adjusts to correct height.

2049—M scolds at us from the E of the cavity.

2052—M aborts a Prey Delivery.

2054—M scolds at us several times and then flies off to the E.

2059—M in area 10m W of cavity. He scolds several more times at SY and EM.

2105—SY takes down net to allow for some prey deliveries and to bolster the M’s confidence.

2106—M comes in from W and gives 2 aborted prey deliveries, followed by a real prey delivery.

2107—M flies to a near *potr* and catches prey then immediately flies back to nest tree to deliver prey.

2108—F delivers prey.

2110—Prey delivery, during the delivery, SY captures **previously unbanded M.**

Band#64534

61.0 g

-16.5 g

44.5 g

WC: 130 mm

LLP: 95 mm

Rect.: 55 mm

Blood work performed (led to slight hematoma)

2119—While we are working on M, F delivers prey twice.

2136—We release M. he flies to the E.

# CS4—2007

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 3 July 2007

1845-2115: Flam crew attempts to peep cavity trees in the CS1 and CS4 territories. We were in the process of peeping cavities in CS4 when a powerful thunderstorm arrived in the area, dropped a couple inches of 1-1.5 cm diameter hail, and forcing us to abort our efforts.

## 12 July 2007

1940—The Flam Crew arrives in the CS4 and CS1 territories to peep cavity trees. Overcast, mostly calm, 17 C. By the time darkness settled in, we had peeped most of CS4 (but we had not yet moved to CS1), but did not find any active *Otfl* nests.

~2200—SY hears a F scold from a *pipo* in N-S running tributary of Main CS drainage between CS1 and CS4. F gives 3-4 scolds from several pipos at the confluence of the 2 drainages.

2215—SY observes F fly back into area – she perches on lower branches of a pipo. KB observes F fly into an adjacent pipo.

2220—EM and BL join the rest of the flam crew in listening for nesting/fledgling activity in the main E-W drainage (tributary of Phantom Cr) where the CS4\_2005/2006 nests had been located, but approximately 200 m E (down-drainage) of said nests.

~2230—After attempting to trace the source of owlet FSC that we heard in the drainage, we observe a prey transfer between a M and F in a *Psme* fire-scarred snag. The F then attempts to make a PD to a cavity in an adjacent *Potr* snag, where a nestling is heard giving FSC. **NOTE: We record this *Otfl* nest, whose location was generally equidistant between the CS1 and CS4 nests of the past couple of years, as the CS4\_2007 nest.** **Given that we had not heard evidence of any nesting activity in the CS1 and CS4 areas proper, it is possible this is a new territory whose area reflects the merging of areas formerly contained within the CS1 and CS4 territories—particularly since we subsequently determine the M and F to be unbanded adults (see below).** SY, and BL/EM, proceed to retrieve the capture poles and a peeper while CB and KB stay and observe nest activity.

2238—**We peep the nest cavity and find 3 owlets, which generally appear to be approximately 5 days from fledging,** given the lack of obvious facial disk and lack of strong adult coloration on the scapulars and wings. EM gets into capture position.

2255—An owl makes a PD, failed capture.

2256—EM captures the F after she attempts a PD in the cavity. F is unbanded—we proceed to band, measure and bleed her. Net is immediately put back in capture position.

F Band #: 64563

85.5 g LWC: 123 mm

- 29.5 g LP(#5): 88 mm

56.0 g LP (#6): 96 mm

Rect: 63 mm

Incubation patch is filling in with pin feathers around the perimeter. F is bled.

2258—PD by the M while we are still extricating the F from the net.

2305—PD M.

2308—PD – capture of the M.

New Band #64542

77.0g LP(5): 92mm

-28.0g LP(6): 101mm

49.0g Rect.: 60mm

WC: 127mm

M is bled. From L wing.

2325—We release F.

2331—We release M and leave area.

# CS4—2008

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 30 June 2008

1530-1800: Flam Crew peeps and taps cavities throughout the CS4 territory. Nothing found (but CS1 nest found—see CS1 field notes).

2017—DH and SC set up lure net on eastern boundary of CS4 to attempt to capture possible territory holders in the area.

Weather: 10-15mph wind, partly cloudy, 14C

Net is on south side of ridge just east of bike trail. The site has a few large Pipos and small snags. 482860

4324244 +or- 11m

2115—Start playback. We face playback to the east toward the CS1 nest in an attempt to lure the CS1 male.

2222—We are unable to detect any activity away from the net due to persistent wind. After no activity at the net, we stop playback and collapse net.

2242—After failed capture attempt, we leave.

# CS4—2009

## 22 June 2009

2103-2245—SY, SR, and DH listen and tap in main drainage as well as drainage running SW from historic CS4 sites. SR hears infrequent single hoots and SY hears one LC in the drainage that runs SW. After 2200 we hear occasional distant TCs, perhaps carrying over from ridge separating CS4 and CS1. Last TC heard at 2200. Weather: Breezy, thunderstorm to the E but clear over us.

# CS4—2010

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but the text was left alone.*

## 17 June 2010

2140—JSG, JV, and I walk into CS4 to tap cavity trees and listen for any nesting vocalizations.

2220—After not hearing any vocalizations, JG delivers TCs to gauge the presence of any males in the area and hears a response to the W in the main drainage running east to west. When I heard the response I was standing at the intersection of the trail that leads into CS4, and the main east to west drainage.

\*Note – over the next twenty minutes, we follow this M to the E, W, and N. It seems as though he is circling his present territory.

2234—JSG and JV hear a FSC in the area of cavity trees to the SW of the junction of the two-track and the main drainage.

2244—JSG and JV hear another FSC in the same area as 2234.

2245—After not hearing any more TCs to the N, JG moves back S toward where the F vocalization was heard earlier.

2250—I arrive in the main drainage and begin hearing a GHOW to the S very nearby.

2315—Having not heard any more vocalizations (other than the GHOW who seems to be in a territorial encounter with another GHOW to the far W), we leave.

## 24 June 2010

1538—Flam Crew prepares to tap/peep CS1 and CS4.

1929—We finish peeping having not found a nest in either territory. While we did not peep several of the trees on the cavity tree sheet, we notice a high number of downed cavity trees and suspect that several of the trees we couldn’t find have fallen. We also realize that toward the end of the day, we passed through the non-burned area of the main drainage just W of the CS1 side drainage.

2055—JG, JV, and JSG arrive in the CS4 drainage to listen for nesting vocalizations. We spread out from E of the junction of the trail and the drainage, near the junction, and W of the junction.

Weather: Wind ~5-7 mph, clear, 19 C

2101—JG sees a GHOW fly from the W portion of the main drainage to the N and land in a snag on the ridgetop to the N of the main drainage. The last time we were in CS4 we observed a GHOW to the S of the main drainage.

2115—JV hears TCs moving from W to E in the drainage.

2120—JV hears more TCs, this time to the S of the drainage near the trail. JV goes in the direction of the TCs, but does not hear anything else.

2145—JV and JSG move out to set up a lure net and JG remains in the drainage E of the junction of the trail and the drainage.

2230—Having not heard any nesting vocalizations, I head down drainage to where BL has been hearing a M in the CS1 area.

2147—BG, JV, and JSG reach Wrong Ridge between CS1 and CS4 territories to set up lure net.

2219—Lure net is set up and we start playback.

Vegetation: high burn, mixed age conifer

Weather: some wind, 18C

X: 482983

Y: 4324289

+/-5

2225—Hear 1 TC SE of net.

2243—M TCs to NE (only 4 TCs).

2246—TCs from SW, then 2 Ms in area, one SE and one SW.

2247—TCs from SE stop, SW M gives TCs and TECs.

2248—All vocalizations stop.

2249—TCs start up again from SW.

2251—TCs move to the SE (sounds like same M).

2305—JV gives some additional TC/TECs just S of net to further entice M to come closer. JV continues to do this for 5 minutes off and on.

2311—We move playback to top of stump to S of net.

2313—TCs stop.

2315—TCs from E of net (CS1 direction).

2316—TCs move more NE.

2319—TCs stop.

2320—A few more TCs from the NE.

2321—Stop playback and breakdown net.

2331—We leave.

# CS4—2011

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 23 June 2011

1625—Start peeping CS1 and CS4.

1840—Stop peeping, no nests found. Some trees need nighttime listening because peeping was not possible.

2030—BG starts listening up drainage from main CS1 cavity tree area, while PS starts listening at past CS1 nest tree CS1\_1000. PS finds old, broken eggshell under past nest tree from unknown species.

2040—JV and IJ arrive in the CS4 drainage to listen.

2118—JV hears TCs on the SW ridge at the top of the drainage. *\*Note: This drainage has very unusual sound channels so following the night’s events, we are not sure how close this bird was.*

2128—BG reaches CS1 main cavity tree clump, listens near PS.

2136—JG and JR have a territorial M calling at the net. He may have come from the CS4 drainage.

2230—Take down lure net in attempt to set it up again closer to the CS1 drainage.

2235—BG and PS leave CS1 having heard nothing, and head to CS4 drainage to listen.

2237—BL calls with car trouble so team decides to listen in the drainage for nesting vocalizations.

2240—JV, JG and PS hear CS4 M making TCs down drainage and follow him to confluence of CS4 and CS1 territory drainages.

2313—JV marks songpost CS4\_1. It is a live pipo with a dbh of 47.5 cm.

X: 483122

Y: 4324004 +/- 3m

2315—JV and PS mark songpost CS4\_2. It is a live pipo with a dbh of 41.0 cm.

X: 483133

Y: 4324017 +/- 3m

2320—Leave CS4 drainage to return to vehicle.

***The following notes are for a simultaneous lure net set up on a N-S ridge facing the confluence of the CS4 drainage and the main E-W drainage.***

2050—JG and JR arrive at ridge overlooking CS4 to the north to lure net.

2102—Playback started.

Vegetation: mixed mature pipo/psme; low to mid burn.

Weather: calm, clear, 16C.

X: 482872

Y: 4324251

+/-4

2105—Single TC heard from E, then silent.

2127—We hear wing flaps and check the net. There is an **unbanded silent male** caught in the 2nd shelf from the W. We believe that he is a CS4 male floater.

**Band # 1593-64822** (on L leg)

81.0 g LWC: 131 mm

- 22.0 g LLP(5): 96 mm

59.0 g LLP(6): 105 mm

Rect: 61 mm

Bled his L wing for genetics and a smear.

**Molt** – Fairly even fluorescence on all primaries, secondaries, and tertiaries – slightly more on secondaries than primaries, but no major differences suggesting a prior molt.

2136—TCs heard from W pretty continuously for next 12 minutes.

2148—After circling the net repeatedly delivering TCs, TECs, and HECs, a **banded territorial male is captured in the lure net**. 3rd shelf from the N. He is the CS4\_2007 male.

**Band # 1593-64542** (on L leg)

81.5g LWC: 128 mm

- 22.0g LLP(5): 96 mm

59.5g LLP(6): 108 mm

Rect: 59 mm

Bled L wing for genetics and a smear.

**Molt** - Strongest on P1 and 2, weak on the outermost secondary, but relatively strong on all primaries and secondaries. This is interesting since this male is at least 5 years old, yet shows strong fluorescence on most

2157—M CS4 floater released, strong flight.

2220—CS4 M released, strong flight.

2224—Turn off playback and leave. Refer to the above notes for 23 June 2011 for our listening effort in CS4.

# CS4—2012

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 19 June 2012

~2100—BL, AP and MD arrive at the S terminus of the ridge dividing CS1 and CS4 to set up a lure net to attempt to capture either M.

Vegetation: Mature Pipo overstory with younger trees and some snags in the vicinity of the net.

Weather: Clear and calm, 18C.

X: 482905

Y: 4324237

+/- 3M

~2110—We hear a M giving TCs from the drainage.

2112—We begin to set up the lure net, and the same M gives occasional TCs.

2128—Lure net is up.

2129—We start playback.

2142—BL goes to listen in the CS4 drainage.

2144—MD and BL hear a M give TCs from the opposite ridge of the net.

2153—M gives mostly TCs, some TECs near the net.

2158—While still vocalizing, M moves away from net back towards drainage before going silent.

2204-5—M gives TCs near the net, from the S.

2210—**A bird is in the net. He is an unbanded M. He is the presumed CS4\_2012 M.** He came from the SE and was in shelf 2 of the net.

2216—M in hand. BL arrives at lure net to assist. We band him, take measurements, bleed him on R wing, and blacklight him. Under the blacklight, L wing P1 is clear (feather not worn down) P2-6 is moderate (brightest pink), P7-10 is light. P6-10 show wear. R wing P1-4 is moderate (brightest pink), P5-10 is light and P5-10 show wear.

**Band # 1783-64320** (on L leg)

72.0 g LWC: 128 mm

- 15.5 g LLP(5): 98 mm

56.5 g LLP(6): 104 mm

Rect: 61 mm

2143—**A silent bird is in the net. It is an unbanded F. She is the presumed CS4\_2012 F.** She flew in from the SW and was in shelf 1 of the net.

2144—F is in hand. We band her, but do not take measurements except her mass.

**Band # 1783-64321** (on R leg)

87.5 g

- 21.5 g

66.0 g

2245—We release the F, she has a strong ascending flight to the SW.

2303—M is released, he has a strong ascending flight to the SW.

2307—We hear the M give mostly TCs and some TECs from near the net. When MD goes to check on the net, M is perched 5 ft E of the net.

2314—BL heads back to the drainage to tap and listen.

2320—While still giving TCs, M moves farther away from net, towards the drainage.

2326—**M is in the net. It is the same M, CS4\_2012.** He flew in from the SE and was in shelf 2 of the net.

2330—Release M, he has a strong flight to S.

2331—MD goes down to the drainage to listen.

2332—M gives TCs from the drainage.

2345—M comes closer to the net, still giving TCs.

2346—AP stops the playback and MD and BL return to break down the net.

2351—We hear 2 males calling from the drainage and the opposite ridge, one from the SE and one from the SW of our position. They are the presumed CS1 and CS4 Ms.

2400—Net is down, we leave.

**ADDENDUM (6/27/2020; BL): Nest information for CS2\_2012, which is indicated in Territory History, is unfortunately lacking in Field Note entries for both CS2 and CS4 territories (which often had copied entries, considering their linked histories). Nest location and chronology info is also lacking in Capture Progress, although it was noted that on 6/19/2012, suspected nest predation was documented.**

# CS4—2013

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 27 June 2013

Afternoon—Flam Crew peeps in CS4.

1548—SY taps cavity tree #1366 – no response. As I raise the pepper a F FLOW rises to the cavity entrance and flushes. **This is the CS4\_2013 nest! Cavity is ~18 feet up the E side of a potr snag. Snag is in the main CS1 drainage just W of the creek, opposite the large rock face near the bottom of the drainage.**

2036—SY, RC, and CK arrive at CS4\_2013 nest site with intent to capture M/F and peep cavity.

2038—F flushes as net is being raised. **Peep reveals 2 standing nestlings with mobile heads, gray juvenile feathers growing in under natal down, and open eyes, as well as 1 un-hatched egg. SY believes the nestlings to be 7-8 days of age, and the egg to be a dud.** We leave to set up lure net.

2105—We start playback on ridge top of S end of ridge between CS1 and CS4. Net opens SSE.

Vegetation: Net around young to medium psme and young potr. Additionally, there was a mature pipo to the N of the net

Weather: Mostly clear with lightning in the distance to the SW. Calm to start then breezes (5-10 mph) after ~2 hours. 21C.

X: 482924

Y: 4324225

+/- 3m

2110—SY, RC and Abby leave to make capture attempt at CS1\_2013 M.

2116—SY, RC and Abby arrive at the CS4 nest to attempt to capture the M.

Weather: 13.5C, mostly clear, calm

2118—CK hears M come into the nest site ~20 m away and give strong HECs almost immediately. M calls from the SE in the direction of the E/W drainage connecting CS1 and CS4. This is the presumed CS1\_2013 M.

2124—M goes silent after going from the E side of the net to the W side. M calls continuously for ~2 minutes going S before going silent.

2127—M enters the net site from the S and gives a few TECs.

2136—M makes a PD at the nest.

2140—RC has net in capture position.

2150—M enters site from the S and gives a few HECs and TECs

2154—M makes a PD at the nest – net is placed over the cavity entrance, but the M does not come up.

2203—M finally exits the cavity and is capture! **He is previously banded.**

**Band #1593-64542**

69.5 g LWC: 133 mm

- 17.0 g LLP(5): 91 mm

52.5 g LLP(6): 108 mm

Rect: 56 mm

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 2 | 0.5 |
| P5 | 2.5 | 0.5 |
| P6 | 3 | 2 |
| P7 | 3 | 3 |
| P8 | 3 | 3 |
| P9 | 3 | 3 |
| P10 | 3 | 3 |

2226—M is released – strong flight S.

2255—Playback is stopped.

2322—We start playback 200m W of the previous playback spot on the S facing slope of a side Ridge over the CS4 area.

Vegetation: Young potr with some med pipo/psme.

Weather: partly cloudy with some light storm systems moving through. Slight breeze (5 10 mph). Warm evening.

X: 482689

Y: 4324277

+/- 3m

2327—CK heads S/SE down the E/W drainage to the confluence with the CS1 drainage to listen for vocalizations. RC leaves to listen in CS4.

2338—CK and RC return to net, having heard and seen nothing in both CS1 and CS4.

2343—Playback is stopped – we break down the net and leave.

## 12 July 2013

2045—As BL approaches the CS1/CS4\_2013 nest area, he hears F giving harsh SC from the N end of the Potr bottom area. Shortly thereafter, the M also begins to give SC from upslope to the E of the nest area. Uncertain of the exact location of the nest tree, I watch and listen for possible fledglings as I look for the nest tree.

2105—I finally locate the nest tree, and as I approach I hear a nestling begging from the cavity entrance and see an adult exiting the area presumably after making a PD.

2110—I get into capture position below the nest tree (capture pole height approximately 16 ft), and the F begins giving incessant SC. This continues for most of my time in the nest area. At times I clearly hear 2 owlets begging from the nest cavity, and one owlet was in the entrance until ~2130, except when harsh SC from the F directed it back to the cavity bottom. **Note: based on nestling behavior in the cavity entrance (very active here—thought he would go tonight), I would expect fledging to start on 13 July.**

~2125—M makes PD in the cavity.

~2205—M makes PD in the cavity.

~2207—F makes PD in the cavity (uncertain of ID until she exits).

2329—**F finally makes a PD and she is captured as she exits cavity. F was not previously banded—I band her with Band # 1783-64447. NOTE: THIS WAS THE 1000TH FLAM BANDED IN THIS STUDY! WAA-HOOO!!**

**Band # 1783-64447** (on l leg)

82.0 g LWC: 131 mm

- 23.0 g LLP(5): 98 mm

59.0 g LLP(6): 108 mm

Rect: 56 mm

Blood taken from L wing (genetic and parasite screen). No molt.

**Blacklight data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2 (60%) | Not taken (all) |
| P2 | 2 (60%) |  |
| P3 | 2 (60%) |  |
| P4 | 2 (60%) |  |
| P5 | 2 (60%) |  |
| P6 | 1.5 |  |
| P7 | 1.5 |  |
| P8 | 1.5 |  |
| P9 | 1.5 |  |
| P10 | 0.5 |  |

**Primary wear data**:

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 |  |
| P2 | 0.5 |  |
| P3 | 0.5 |  |
| P4 | 0.5 |  |
| P5 | 1 |  |
| P6 | 1.5 |  |
| P7 | 1.5 |  |
| P8 | 2.5 |  |
| P9 | 2.5 |  |
| P10 | 2.5 |  |

2353—F released, and she shows strong 20 m flight to the E. I leave.

# CS4—2014

*Note: References to CS1, should really be CS2 (the same territory as the primary polygynous nest from 2004)… headings have been changed, but he text was left alone.*

## 24 June 2014

\*These notes also entered in CS1

2036—RC, JS, RD, and SY arrive in the CS1 territory to search for a nest. We spread out along the side drainage that contained last year’s nest to tap and listen.

Weather: ~16C, mostly cloudy, calm

2045—JS hears LCs mid-slope E of drainage. She pursues but M goes silent moments later.

2051—JS hears M giving LCs again NE of her position on the E side of the drainage.

2054—M gives two more hoots, JS has a visual.

2057—JS sees M swoop into middle of drainage towards two tall potrs.

2102—SY joins the scene and JS has eyes on the M again prey laden with a worm. Moments later we both witness the M give a PD! **We found the CS1\_2014 nest!** **Enumerated tree CS1\_1063** is the lucky winner.

2104—F flushes. **We peep: 3 eggs centered and touching.**

2108—M perched on adjacent tree, attempts a PD but F is not there. He continues to give LCs in the nest vicinity.

2111—F back on. In the process of getting the capture net ready the M gives a PD.

2112—M gives a PD.

2113—M gives a PD.

2117—RC is ready with the net at the cavity. All is silent in the nest area, but we can hear CS1 M giving TCs and occasional TECs consistently to N 100+m. We can hear no second bird, but M continues in this way until ~2150.

2131—RD and SY start PB at a net on the W side of the main CS ridge – just south of where the two-track leaves the ridge and heads into the drainage. The intent is to target a potential CS4 M (if present).

Vegetation: Sm. to med. Pipo/psme on upper slope. adjacent to high burn on the ridge top.

Weather: ~14C, mostly clear, calm.

X: 482856

Y: 4324370

+/- 5m

2155—SY heads down to the CS4 area to tap and listen while lure net continues to run on upper slope of ridge.

2152—CS1 M is back in nest vicinity giving a few very hoarse LCs.

2154—**Unbanded M caught** on his way out of a PD! This is the CS1\_2014 M.

**Band # 1783-64535 (on L leg)**

89.0 g LWC: 137 mm

- 29.0 g LLP(5): 101 mm

60.0 g LLP(6): 110 mm

Rect: 65 mm

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 0.5 | 0.5 |
| P5 | 1 | 0.5 |
| P6 | 1 | 1 |
| P7 | 1.5 | 1.5 |
| P8 | 2 | 2 |
| P9 | 2 | 2 |
| P10 | 2.5 | 2.5 |

Note: M very rufous and feisty. He was bled on L wing, no hematoma.

2227—M released, strong ascending flight up and N. We leave to join SY and RD in CS4.

2245—RC and JS spread out in the confluence of the N-S CS4 drainage and E-W drainage between CS1 and CS4 to listen.

2155—From 80m E down drainage toward CS1 from the CS4 road, RC hears CS1 M TCing distantly E toward CS1 drainage confluence.

2318—RC hears more TCs from CS1 M onN-facing slope across from N-S CS1 (nest) drainage.

2329—RC hangs song post CS1\_1 in live pipo previously hung as song post on 6/23/11 as CS4 by JV. M TCs here for 5-10min before going silent as SY and JS arrive. We do not hear from M again and head back up drainage after listening for 10-15 more minutes in this area.

2400—SY, JS, and RC return to the lure net. RD sat on lure net for the night, no activity. PB stopped, net broken down and all leave.

# CNG1\_2012

## 12 July 2012

2100—BL arrives on the Cedar Mountain Rd, just W of CN8 territory, to begin lure netting in hopes of attaching geolocators to territorial males in the area.

2115—I finish erecting lure net and start playback at this time.

Habitat: lower midslope in low-burn area ~ 200 m W of the CN8/9 picnic area (Little Turkey Cr), in open, mixed age Pipo with some scattered Psme

Weather: clear, mostly calm, 25 C.

X: 477657

Y: 4331089

+/- 3 m

2150—I hear M give 3-4 rather quiet TCs approximately 30 m downslope (N) of lure net, and then 3-4 minutes later, he gives 2-3 TCs approximately 40 m upslope (S) of net. Then he quiets.

2203—**I hear a squeal from the net, and find a captured FLOW—presumably the M that was singing just minutes earlier.** The FLOW was captured in the 2nd shelf from the top and was previously unbanded (and showed no incubation patch). I extricate FLOW, and keep playback going (in case singing M might still be nearby).

**Male: Band # 1783-64365**

81.5 g

- 30.0 g

51.5 g

**No blood or feather measurements taken.**

**Molt**: **P2-4 were in molt on both wings**, and were approximately ¾ grown; no evidence of molt in P1 or P5-10. **P2-4 were particularly darkly pigmented across vane, and the spots that would normally be white on unmolted feathers were distinctly tan colored**.

**Geolocator: I attach Unit # 001.**

2235—M is released in the vicinity of the net—he makes a strong 30+ m flight, ascending to the tree tops, to the N.

2237—I turn off the playback.

2254—I leave, having been joined by JR and JV, to continue lure-netting.

# CNG1\_2013

## 30 May 2013

2103—BDG and BL arrive at the S side of the S Turkey Cr crossing and Cedar Mtn Rd (just S of the dinner/camp site that is W of CN8) to attempt lure-netting of the CNG1\_2012 male and retrieval of geolocator. Almost immediately we hear M giving TCs near the creek about 20 m S of the road, and then we hear F giving BC from the same area. We spot them in the mature Pipo/Psme overhead, and after 3-4 min in this area they fly in the direction of the road to the NNW and we lose track of them.

2115—After spending a few minutes looking for cavity trees in the vicinity of the initial observation, we move to set up the lure net about 25 m W of the creek and 25 m N of the road.

2127—Start playback with one net set up near the ecotone between a stand of mature Pipo/Psme that extends to the creek and a mostly open area dominated by Cemo and scattered subdominant Pipo.

Weather: mostly clr, calm, 5 C.

X: 477643

Y: 4330941

+/- 3 m

2135—We hear a F giving sporadic BC down near the creek, and shortly thereafter BDG sees FLOW fly into a Pipo adjacent to our staging position.

2139—We see the FLOW fly from the Pipo in the direction of the lure net, and shortly thereafter we hear wings hitting the net. **We check the net and find a FLOW captured in the bottom shelf of the net, on the E side (our listening side). This owl was previously unbanded and appeared to have an incubation patch—most likely the F we heard from the beginning of the evening. We band her with band # 1783-64388.** We attempt to mass her, but she is too heavy—based on the tare weight of 21.5 g, this F must have been 80+ g since she bottomed out on the scale.

2146—We release F. Playback still going (did not turn off).

2200—BL leaves to check for cavity trees along Turkey Cr.

2208—BDG turns playback off.

2218—BDG turns playback on.

2243—BDG hears TCs distantly to the E and then much closer to the W.

2244—BDG finds a FLOW captured in the top shelf of the lure net (W side). While we are extracting this previously unbanded FLOW, we hear a M giving TC ~ 20 m E of the net. He subsequently starts buzzing our heads, giving, HECs, as we finish extraction.

2248—BDG hears distant TCs to the NNE.

2250—Close M giving TC/HECs is captured in the 3rd shelf (from bottom) of the lure net (E side). We extract him and proceed to process both owls.

2252—BDG hears male giving TCs distantly to the NE.

**1st FLOW—Band # 1783-64389** (on l leg)

85.5 g LWC: 133 mm

- 34.5 g LLP(5): 104 mm

51.0 g LLP(6): 110 mm

Rect: NA mm

Owl successfully bled—no blacklight data (no blacklight)

**2nd FLOW—Band # 1783-64390** (on l leg)

74.5 g LWC: 128 mm

- 22.5 g LLP(5): 96 mm

52.0 g LLP(6): 106 mm

Rect: 56 mm

Owl successfully bled—no blacklight data (no blacklight)

2344—Both owls released.

2345—We turn off playback.

2349—M is heard giving TCs to the N for 30s.

~2400—We leave.

## 23 July 2013

2132—JV and BDG have lure net set up and start playback for a geolocating attempt W of the CN8 picnic spot where BDG and BL had captured two territorial Ms earlier in the season.

Vegetation: mature pipo/psme at ecotone w/ mountain mahogany

Weather: clear, calm, 14C

X: 477647

Y: 4330935

+/- 3m

2135—a M (who may have been heard while setting up the net just upslope to the W) comes into the net site from the SSW giving rapid fire TECs.

2144—After flying over the net the M goes W upslope giving TCs. Then goes silent.

2148—BDG turns down playback a smidge and the M is still giving TCs from the W.

2200—Capture a silent bird in the top shelf (w/ 5 poles) coming from the SE.

2210—Have the bird out of the net. This is the **CN8\_2013 F**. According to our capture progress, we don’t have any blood for her so we take measurements and blood (genetics and smear). ***We later find out that we already had blood on her.***

**Band # 1783-64394 (on R leg)**

88.5 g LWC: 125 mm

- 29.5 g LLP(5): 94 mm

59.0 g LLP(6): 105 mm

Rect: 60 mm

2231—BDG releases F while JV is with SY geolocating CNG2\_2013M. She has a strong flight ~25ft up in a mature pipo.

2250—F give FECs 20m S of net.

2258—F scolds the playback from just W of the net.

2310—JV and BDG walk around for a bit trying to solicit any scolds from the F after switching the playback to FSCs but nothing.

2340—Switch playback to original TC/TEC calls.

2349—a M responds to the playback with TCs over 150m to the SSW (possibly CN9?).

2410—Turn off playback and take down net.

# CNG1—2014

## 30 June 2014

2403—MP and BL arrive in CNG1 to attempt to capture territorial Ms to put on geolocators.

2412—PB begins at lure net location ~100m upslope from CNG1 parking spot/camp site.

Vegetation: young-medium, open, pipo

Weather: cloudy, calm, 19C

X: 477653

Y: 4330943

+/- 4m

2426—BL leaves to look for cavity trees, MP stays by net.

2448—PB ends, nothing has been heard, we depart.

# CNG1--2015

## 26 June 2015

~2250—SY and LP arrive at CNG1 with intent to capture a CNG1 M and put geolocater on bird. We park on side of road ~50m above campsite due to there being campers at site with fire.

2058—Lure net is set up on mid slope ~80m above (and to SW of) campsite. PB is started. Net opens NW/SE on mid slope.

Vegetation: mature rocky mountain juniper, young-medium pipo, fairly dense

Weather: calm, mostly clear, 15C

X: 480958

Y: 4330175

+/- 9m

2346—We hear nothing the entire duration that PB is on. PB is turned off. Lure net is taken down. We leave area for cars. This is the end of our night.

# CNG1—2018

## 20 July 2018

2113—ES and KA start PB at a lure net in the CNG1 territory. Our goal is to capture a territorial M to put a migration PinPoint on. The net is ~200 m SW of the large campsite and on the upper SE facing slope. Net open E/W.

Vegetation: Open, mature jusc

Weather: Clear, slight breeze, 21C

X: 477509

Y: 4330914

+/- 3m

2117—M gives TCs ~100 m SE down in the drainage.

2118—M comes into the net site and gives HECs while perched in a jusc ~3 m SE of the net.

2121—Second M gives TCs ~75 m NE of the net.

2122—Second M comes within 40 m of the net and gives HECs. The first M continues giving HECs in the net site.

2124—We change the PB to a higher pitched FLOW TC/TEC track. The second M goes quiet, and we don’t hear from him again tonight. BL hears a M soon after this at his CNG2 net, coming from our direction. This could be the same bird, but we can’t be sure.

2132—ES moves the PB up the slope to try to draw the first M into the net. He goes quiet.

2152—The first M (able to identify because of his higher pitched TCs) comes back into the net site giving TCs. Again, he comes from the drainage bottom to the SE.

2157—We hear wing flaps and are excited that we’ve finally caught the territorial M! ES and KA walk down to the net to find it empty. While walking back up the slope, ES sees the M perched low on a jusc uphill of the net—he must have hit the top or bottom of the net without getting caught. ES decides that this is her chance to make a hand capture and begins approaching the FLOW. He takes off to the E and flies right into the net—it’s a capture! **M is unbanded and in the 2nd shelf, having come in from the N.** ES walks the bird down to the road to meet up with BL and put a PinPoint on.

**Band # 1833-32521 (on L leg)**

65.5 g LWC: XXX mm

- 7.5 g LLP(5): XX mm

58.0 g LLP(6): XXX mm

Rect: XX mm

**Notes: PinPoint #48199 attached by ES and BL. LPs 3-6 look brand new, while 7-10 look fairly old.**

2222—After a quiet 20 mins at the net, KA cuts PB and leaves to join ES and BL.

2247—M released halfway between road and lure net. He shows a descending then ascending flight SE into a nearby pipo. We leave to let him preen.

2250—We restart PB at the same net location.

2305—After hearing nothing, we kill PB and leave the site.

# CNG1—2019

## 6 June 2019

2226—ES and ML start PB (T42) at our lure net in CNG1 in hopes of capturing the M we put a PinPoint on in 2018. Our lure net is ~20 m downslope of last year’s lure net location, ~200 m SW of the campsite on the upper SE facing slope of the main drainage. The net is open E/W. We can hear KA, AM, and ON’s PB ~200 m NE of us in CN8.

Vegetation: Mature jusc/pipo

Weather: Clear, calm, 15C

X: 477509

Y: 4330914

+/- 3m

2227—We hear TCs ~100 m NE, in between our net and the CN8 net.

2233—A second, higher pitched M gives TCs ~100 m S.

2239—The high pitched M pops up ~10 m W of the net. He gives TCs and TECs, moving to perch in a mature live pipo ~20 m S (downslope) of the net.

2246—The M goes silent.

2247—TCs ~100 m S, seemingly our high pitched M. We can no longer hear the M that was calling earlier to the NE.

2250—The high pitched M goes silent.

2251—The high pitched M (at this point the presumed CNG1 M) reappears ~15 m S of the net, in the same live pipo. ES changes the PB to Psiloscops AZ and moves around to try to get binocs on the M.

2301—After staring at the M (who’s perched in a low branch of the live pipo, sometimes giving TCs but mostly silently watching me and the PB) ES is confident there is no PinPoint on his back. As I’m watching through my binocs, he flushes to the S and **I see a metal antenna flash in my headlamp beam. I am confident that this bird has a PinPoint on him!**

2303—The M returns to the live pipo from the S (up drainage). ES walks the PB in his direction and lets it run for a few minutes within 5 m of his perch. He watches the PB and gives some quiet TCs/TECs.

2305—ES returns the PB to the lure net and I give some of my own TECs/HECs near the net, hoping to get the M riled up enough to come into the net. I walk closer to him, give HECs, walk back to the net. He increases his volume and frequency of TECs and moves to a fallen psme branch ~3 m closer to the net, but never comes in any closer.

2318—The M flushes to the S, and we decide it’s time to stop PB and break down the net for the night. We will be back!

## 7 June 2019

1615-1700—ES, KA, SL, ON, and ML arrive in CNG1 to peep cavity trees in hopes of finding the CNG1 nest. We flag and peep ~10 new cavity trees in the drainage bottom, SE of last night’s lure net, where ES and ML thought the CNG1 M was retreating to. We find some nice looking cavity trees but no FLOW nest.

## 27 June 2019

1620-1700—Flam Crew continues peeping in the CNG1 territory, looking for a potential CNG1 nest to capture the presumed PinPoint M. We flag a few more cavity trees, but don’t find a nest. There is one pipo snag in the vicinity of the suspected nest that has two good looking cavities over 50 feet that we’re not able to peep. Other than this tree, we think we did a pretty sufficient peep job in the area of the potential nest.

## 11 July 2019

2110—AM, JE, ON, and KC arrive in CNG1 to set up a lure net in hopes of retrieving the migration pinpoint we deployed in 2018. As we set up the lure net, we hear M TCs down in the drainage bottom, ~60m S of us.

2122—We start PB, T42 on the SE-facing slope, 50m N of the drainage bottom, 200m W of the road with the net open NW/SE. Net is ~50m further up-drainage than the previously used site.

Vegetation: partly open, mixed age pipo, jusc

Weather: 10% cloud cover, calm, 16℃

X: 477546

Y: 4330864

+/- 3m

2128—We quickly hear two M FLOWs giving TCs, TECs, and HECs at the net and at each other. One is calling ~80m E and the other FLOW is calling from ~30m S of the net.

2031—After a plane passes overhead, only one M is heard making HECs ~40m E of the net. This bird seemingly jumps around the area S, E and SE of the net and is seemingly approaching.

2034—FLOW flushes over us from the downslope then begins calling from the N. A 2nd bird is still heard E of the net, but now even closer at only ~10-15m away.

2135—JE hears wing flaps and checks the net to find **a FLOW in the 3rd shelf on the NW side with a shiny metal antennae sticking off his back! He is previously banded on the L leg #1833-32521 and is carrying Pinpoint #48199 that had a migration schedule! This is the presumed CNG1\_2019 M.**

**Band # 1833-32521 (on L leg)**

74.0 g LWC: 137 mm

- 20.0 g LLP(5): 102 mm

54.0 g LLP(6): 110 mm

Rect: 65 mm

**Notes: Carrying migration pinpoint #48199. Bled R wing, medium hematoma.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 3 | 3 |
| P2 | 3 | 3 |
| P3 | 3 | 3 |
| P4 | 3 | 3 |
| P5 | 2.5 | 2.5 |
| P6 | 2.5 | 2.5 |
| P7 | 2.5 | 2.5 |
| P8 | 1 | 1 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | 0.5 | 0.5 |
| P3 | 0.5 | 0.5 |
| P4 | 1 | 1 |
| P5 | 1 | 1 |
| P6 | 1.5 | 1.5 |
| P7 | 2 | 2 |
| P8 | 2.5 | 2.5 |
| P9 | 2.5 | 2.5 |
| P10 | 2.5 | 2.5 |

2154—While we are processing the presumptive CNG1\_2019 M, **JE checks the net and finds a silent FLOW in the net, first shelf from the NW. He is unbanded. We check for a brood patch and don’t find one. Note: because we previously heard two M FLOWs vocalizing, and we hear no other FLOWs while both birds are in hand, we presume this bird to be the other territorial M previously heard (IDed on blood vial as CNG1 floater).** We turn off the PB.

**Band # 1833-32524 (on L leg)**

84.0 g LWC: 132 mm

- 29.0 g LLP(5): 98 mm

55.0 g LLP(6): 108 mm

Rect: 61 mm

**Notes: Hippoboscid flies present. Signs of feather lice on primaries and head feathers. P2 and P3 in shaft on both wings. Bled R, small hematoma. Body feather on belly in shaft but we do not believe this to be a F.**

**Blacklight data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 0.5 | 0.5 |
| P2 | In shaft | In shaft |
| P3 | In shaft | In shaft |
| P4 | 2.0 | 2.0 |
| P5 | 2.0 | 2.0 |
| P6 | 2.0 | 2.0 |
| P7 | 2.0 | 2.0 |
| P8 | 1.0 | 1.0 |
| P9 | 0.5 | 0.5 |
| P10 | 0.5 | 0.5 |

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 | 2.0 | 1.5 |
| P2 | In shaft | In shaft |
| P3 | In shaft | In shaft |
| P4 | 1.5 | 3.0 |
| P5 | 1.5 | 2.5 |
| P6 | 2.5 | 3.0 |
| P7 | 3.0 | 3.0 |
| P8 | 3.0 | 3.0 |
| P9 | 3.0 | 3.0 |
| P10 | 3.0 | 3.0 |

2218—We release the 1st M. He has a strong horizontal then ascending flight SE.

2223—As we break down the net, we hear M TCs ~40 SE from drainage.

2229—We release the 2nd M. Strong horizontal then ascending flight to the E. We leave.

## 23 July 2019

2040—ES, AM and SL arrive in CNG1 to lure with the intent of attaching a pinpoint GPS to the previously captured CNG1\_2019 M that carried the recovered pinpoint (see field notes July 11, 2019) attached during the 2018 field season.

2109—Start PB T42. Lure net open N/S on low S facing slope ~ 50m N of the CNG1 creek and 200m W of the road.

Vegetation: mixed, jusc, pipo, psme

Weather:20% cc, gentle breeze, 19C

X: 477586

Y:4339884

+/- 3m

2114—M TCs ~50m S.

2115—M TCs ~30m SW. **(note: This M’s TCs are notably high pitched and resemble the vocalization of the CNG1 M who carried the recovered pinpoint).**

2119—ES changes PB to Psciloscops AZ.

2121—M giving TCs in net site on SW side.

2122—M giving TCs ~ 60m SE.

2124—All is quiet.

2125—ES changes PB back to T42 and moves PB downhill.

2127—M TCs ~35m SW.

2130—M giving TCs in net site.

2133—ES walks PB towards calling M and changes PB to Megascops.

2125—All is quiet.

2136—M giving TCs in net site on the downslope side. ES moves the PB upslope of the lure net.

2140—M TCs~50m S.

2145—All is quiet. ES moves PB farther upslope and changes PB back to T42.

2149—M TCs ~45m S.

2153—ES changes PB to Megascops.

2200—All is quiet. We stop PB and break down to the lure net. AM goes to look for a new lure net site.

2220—Start PB T42. Our new lure net is open N/S on low S facing slope ~ 40m N of the CNG1 creek and ~60m W of the previous net. This is the same location as the lure net site used on July 11, 2019.

Vegetation: mixed, jusc, pipo, psme

Weather: 10% cc, moderate breeze with treetops slightly swaying, 19C

X: 477549

Y:4339869

+/- 3m

2236—M TCs ~ 35m SW.

2237—M TCs in net site.

2239—M TCs and TECs in net site.

2243—ES changes PB to Megascops. All is quiet.

2246—M TCs in net site.

2252—All is quiet.

2256—SL changes PB to T42.

2256—M TCs and TECs ~25m W. He seems to have jumped over our net.

2301—M TCs above the net to the SE.

2309—ES walks PB down drainage.

2317—ES brings PB back to net site.

2319—ES hears one TC 60m S.

2321—M giving TCs in set site on S side.

2325—All is quiet.

2329—We stop PB, break down net and leave CNG1 territory. Only one FLOW (the presumed CNG1 M) is heard tonight. Future lure net attempts should consider luring close to this location, but should use a different site as there were several tall potrs near the net that allowed the FLOW to stay high.

# CNG1—2020

## 20 July 2020

2120—ES begins PB (T42) at lure net in CNG1, hoping to recapture the CNG1\_2018-2019 M that carried a migration PinPoint to Guatemala so that we can affix him with another migration PinPoint. My net is on the SE-facing slope, 50m N of the drainage bottom, 200m W of the road with the net open N/S (this is about ~20m W of where JE, ON, AM, and KC recaptured the CNG1 M in 2019).

Vegetation: Young pipo

Weather: 10% cloud cover, gusty on ridges but calm in drainage, ~22C

X: 477514

Y: 4330864

+/- 3m

2124—I hear a few TCs ~50m S, in the drainage.

2128—Distinctly high pitched TCs ~60m SW. The pitch and direction of approach make me think that this is likely the CNG1\_2018-2019 M. He comes in and gives TECs ~20m S of the net.

2131—I change PB to Psiloscops AZ.

2135—M comes in and gives TECs ~10m S of net. **This behavior is reminiscent of the CNG1\_2018-2019 M, who called consistently at the PB from downslope of the net but was reluctant to fly upslope of PB.**

2141—M backs off ~30m SE, and I hear a second M calling ~100 m SE.

2142—Both M’s go quiet.

2148—I change PB to Megascops.

2150—I hear lower pitched TCs ~150m S and higher pitched TCs (presumably CNG1\_2020 M) ~50m S.

2151—High pitched TECs ~15m S.

2154—M moves ~40m W, again responding to lower pitched M ~50m SW.

2258—Presumed CNG1\_2020 (high pitched M) give TECs/HECs from the pipo ~2m S of the net. His calls are not very hoarse and fairly quiet. He goes quiet at one point, and I shine a light and see him sitting in a low branch in the pipo ~1m off the ground.

2202—I disconnect my phone’s Bluetooth from the speaker and play Megascops from my phone ~10m N (upslope) of the net, hoping to get him to fly into the net.

2205—M is still perched silently in the pipo S of my net, so I decide to use the technique that led to his capture in 2018. **I walk around the net until I am downhill of the M, then begin approaching him from behind. It works—he flushes** **away from me and into the net! M is banded on the L (1833-32521) and is the CNG1\_2018-2019 M who carried the migration PinPoint to Guatemala! He came into the 3rd shelf from the S. M had been silently watching PB for several minutes leading up to capture.** I turn off PB and bring the M down to the CNG1 parking spot so that BL can attach a PinPoint.

**Band # 1833-32521 (on L leg)**

60.0 g LWC: 134 mm

- 7.5 g LLP(5): 100 mm

52.5 g LLP(6): 112 mm

Rect: 67 mm

**Notes: BL attaches PinPoint #49660 with migration schedule. LP2 and LP3 in molt. RP2 in molt, RP3 apparently had not begun molting yet. The rest of wear and blacklight not taken. Bled in 2019.**

**Primary wear data:**

|  |  |  |
| --- | --- | --- |
|  | Left wing (scale 0-3) | Right wing (scale 0-3) |
| P1 |  |  |
| P2 | Molt (30mm out of shaft) | Molt (20mm out of shaft) |
| P3 | Molt (in shaft) | Old |
| P4 |  |  |
| P5 |  |  |
| P6 |  |  |
| P7 |  |  |
| P8 |  |  |
| P9 |  |  |
| P10 |  |  |

2249—ES releases CNG1\_2020 M with PinPoint. He perches actively on my finger for ~3 minutes before showing a SAF to a moderately high perch.

2301—I resume PB at the lure net.

2303—I hear high pitched TECs near the CNG1 parking spot, where I released the M.

2310—CNG1 M gives TCs ~40m N of the net for about a minute.

2345—Stop PB and break down net. I did not hear from the second M again tonight.

# CNG2—2013

## 23 July 2013

~2125—SY, MC, and LL arrive ~50m N of the Teller County line on Cedar Mountain Road with intention of lure netting for a M that is out of the study area, so that we can attach a geolocator to him.

2135—Playback is started. Our net is ~50m N of Cedar Mountain Road on the ridge top just past the Teller County line and before the high burn area. Right after playback starts we hear M give TCs distantly to the S <30secs. We think this could potentially be JV and BDG’s playback.

Vegetation: Young to mature pipo/pisme, very open

Weather: Calm, partly cloudy, 20 C

X: 477635

Y: 4331283

+/- 4m

2139—SY hears M give a couple TCs distantly to the S.

2152—M gives TCs/TECs in immediate net vicinity, just a little E of net. M bounces around net quite a bit over the next 6 mins, going as far as ~30m N of the net, but mostly staying in immediate net vicinity.

2159—M TCs more distantly to the N (~50m), then moves in closer from N.

2200—M goes silent.

2205—M gives single TC ~50m S.

2214—M gives TCs ~50m E of net. M moves in to immediate net vicinity giving TCs/TECs.

2216—M goes silent right as SY is going to check to see how he is evading capture. **SY finds M captured in top shelf of net, having come in from the E side. The M is unbanded—he is given band # 1783-64396 (NOTE: Band # was missing in original notes, but was added by BL on 6/26/2020)**.

~2220—SY takes M to JV and BDG to attach the geolocator, while MC and LL remain at the lure net.

2250—Playback is stopped. We pack up and head further S to lure net for another potential geo M in a new location.

# CNG2—2014

## 19 June 2014

2229—AW and MC begin playback attempting to capture CNG\_2 geolocator M. Lure net is located ~150 m E of Cedar Mountain Rd ~ 50 m N of Teller County line. Net is located on the upper slope, just S of where net was located last year when SY, LL, and MC captured M and attached geolocator.

Vegetation: open, mixed aged pipo/psme

Weather: calm, clear, 15C

X: 477639

Y: 4331272

+/- 4m

2234—M responds with TCs from drainage bottom to E ~50 m.

2316—End playback. M has called mostly continuously since 2234 with only occasional 1-5 minute periods of silence. M seemed to call from a group of trees just SW of net site. He appeared low enough to be captured, but apparently never made a flight to any of our targeted trees. We decide to move net to different location in the drainage bottom.

2338—We start playback at second net site. Net is located just E of previously net site ~ 100 m in the main CN8 drainage bottom. We choose a denser site hoping M will make flights closer to net.

Vegetation: young-mature pipo/psme

Weather: calm, clear, 14C

X: 477685

Y: 4331228

+/- 6m

2348—M responds with TCs from mid-slope to the W-SW. He continues to call as he moves towards the drainage bottom.

2455—End playback. M has called continuously since 2348. For the first ~ 30 minutes, M gave quiet HECs from the vicinity of the net. At one point, MC observed M perch on the same tree playback was located in. M called from low perches almost this entire time. MC changes location of playback to force M to use different perches. After moving playback, M seems to change behavior and calls from higher perches further from net. AW attempts turning playback on/off, giving own calls, and walking around net site with playback in hand to no avail. M is never captured despite being in the vicinity of our lure nets for the past ~2.5 hours.

## 30 June 2014

2248—MC, RC, and ER set up a lure net in the original CNG2 lure net location about 50m N of the Teller County boundary on cedar Mountain Rd. and 100m E of the junction with the blocked off 2-track at the top of the hill past CNG1.

Vegetation: Small and medium Pipos, open on the edge of high severity burn

Weather: Clear, calm, 14C

X: 477626

Y: 4331279

+/- 3m

2250—The CNG2\_M begins giving TCs from the drainage about 100m S of our net site. Over the course of the next six minutes the CNG2\_M gives consistent TCs gradually hopping closer to the lure net until he is calling within 10m of the net.

2258—With the CNG2\_M silent for the last couple minutes, we check the net to find **an unbanded male in the 1st shelf on the N side! This is the 2014 CNG2\_M!**

2307—**BL and MP meet us at the road, and we attach geolocator #N694 successfully.**

**Band # 1783-64503 (on R leg)**

74.0 g LWC: 129 mm

- 20.0 g LLP(5): XX mm

54.0 g LLP(6): XXX mm

Rect: 54 mm

2340—The geolocator is attached, it is riding nicely in the middle of the back with the stalk upright.

2342—We release the CNG2\_M, we did not get any primary measurements or blood in the interest of time. He flies nearly vertically to a pipo just E of the road and proceeds to investigate and peck at his geolocator straps and band.

2355—Playback is stopped and we break down the lure net. The M is still in the same tree, after hopping to another branch. He is still checking out his new back-pack but has settled down some. We leave for CN8.

# CNG2—2015

## 05 June 2015

2045—DL and SY arrive in the standard CNG2 net spot to set up a lure net and attempt to recover the geo from the CNG2 M.

2056—Begin playback.

Vegetation: very open – few young psme/pipo near net.

Weather: 10C, recent rain, lightning/thunder to the distant N/E

X: 477595

Y: 4331284

+/- 9.4

2112—Possible single TC E of net ~50m, not sure because of creek noise (which is unconscionable).

2125-2155—SY listens on slope to the S and SE down near the drainage. Creek is making it almost impossible to hear. Nothing is heard.

2202—We hear TCs to the distant SW (>100m). This male continues to call on and off for 20-25 minutes, but never approaches the net.

*Note: This is NOT likely CNG2, based on location and distance.*

2244-2318—SY wanders down road towards creek and CNG1 to listen, nothing heard.

2322—We hear a single TC~20-30m to the ~E.

2330—Stop PB.

2337—Net is taken down and we leave.

## 19 June 2015

~2200—SY and LP arrive at CNG2 with intent to lure the CNG2 M and recover geolocater.

2209—Lure net is set up and PB is started at the standard CNG2 lure location on the top of the ridge. Net opens E/W. *Note: Ambient sounds of creek and wind are quite loud throughout time of PB hindering our ability to detect vocalizations.*

Vegetation: young-mature psme (net flanked by young psme), open

Weather: calm, clear, 15C

X: 477574

Y: 4331299

+/- 6m

2223—M gives one TC to N of net, ~25m.

2225—M in net area gives few TCs?

2229—PB track changed.

2235—M gives few TCs ~100m S of net.

2245—SY walks down slope N and E of net to listen for vocalizations. He hears nothing during the ~25 minutes he is down there.

2330—PB off. Lure net is taken down. We leave area. This is the end of our night.

# CNG2\_2018

## 20 July 2018

2050—BL arrives in CNG2 territory to attempt capture of M and attach GPS PinPoint device. Lure net is located ~150 m E of Cedar Mountain Rd ~ 50 m N of Teller County line. Net is ~100 m E of the ridge-top parking area that is just N of the Cedar Mtn Rd, at the E end of a ridge spur, and near the PIPO/meadow ecotone.

Vegetation: Open mixed age PIPO/meadow ecotone

Weather: Mostly clear (10% cloud cover), calm with occasional breezy conditions, 24 C.

X: 477632

Y: 4331260

+/- 4 m

2115—BL starts playback.

2135—M begins giving TC approximately 30 m SSE of the net.

2142—M goes quiet after approaching to within 20 min. This M may have come from the vicinity of the CNG1 lure net, where KA and ES reported that one of two males in the area went quiet at approximately the same time the M started calling here.

~2200—I leave to help ES and KA attach GPS unit to M captured at CNG1 net; playback terminated.

2245—Playback back on.

2305—BL turns off playback and begins breakdown.

2315—BL leaves area; nothing more heard.

# CNG2—2019

## 23 July 2019

2240—ON and BL arrive at CNG2 territory to look for a net site with the intent of luring for a territorial M on which to deploy a migration pinpoint. We first assess trapping conditions near the ridge top position where the CNG2 net has been placed historically, but it is too breezy here tonight.

2245—We find a location in the drainage N of the CNG1 territory and begin net set up. Net is open NE/SW on SW-facing mid slope ~30 m NE of Little Turkey Cr and ~250 m N of CNG1 parking spot.

2254—Begin PB T42.

Vegetation: Mixed age pipo/psme

Weather: Clear, breezy, 21 C

X: 477784

Y: 4331200

+/- 3 m

2329—We cut PB and break down the net after a completely silent night.

2337—We head out for the night to meet up with the rest of the crew. No more signs of FLOW activity are seen nor heard.

# CNG2—2020

## 20 July 2020

2105—BL arrives at the crest of the ridge in CNG2 territory to attempt targeting a territorial M for GPS or geolocator attachment. I set up lure net in similar area to the past—approximately 100 m E of the spur 2-track on the crest of the ridge (which is ~400 m W of the CNG1 camp site), and approximately 60 m N of the Cedar Mountain Rd.

Vegetation: ecotone between low burn severity and high burn severity in mixed age Pipo-Psme

Weather: 25% cloud cover, light breeze, 21 C

X: 477620

Y: 4331276

+/- 3 n

2120—Playback started.

2200—I turn off playback and leave to attach GPS harness on the CNG1\_2020 M at the CNG1 camp site. Over the next hour and a half, we also attach harnesses to a M capture in CN8 territory (GPS), and a M capture in CN10 territory (geolocator) at the camp site.

2340—I return to break down the lure net. Nothing heard before I left at 2200.

2350—I leave.

# CNG3—2018

## 20 July 2018

2223—AM and SF set up a lure net in CNG3 territory 400m NE of CN7. Net is 30m E of the road and 100m E of the main parking spot near the bend in the road before it starts descending towards CN10. PB is started, T42, on the ridgetop open N-S.

Vegetation: mixed age pipo/psme, very open.

Weather: 10% cloud cover, slight breeze, 20.5 C

X: 478962

Y:4330797

+/- 3m

2307—We cut playback and break down. No vocalizations were heard throughout the night. We leave.

# CNG Miscellaneous—2012

## 12 July 2012

2310—AW, CC, and NS begin setting up lure net attempting to capture territorial Ms to attach geolocators. Lure net is located 3/10 mi W of CN11 along road on a high slope. We start playback before net is fully set up.

Vegetation: young to medium pipo/psme; high burn

Weather: wind <5 mph, clear, 14 C

X: 481271

Y: 4333907

+/- 3 m

2325—Finish setting up lure net.

2340—**An unbanded, silent F is captured in the bottom shelve.** She flew in from the N. **Her identification is the CNG Miscellaneous 1!**

**Band # 1783-64359** (on L leg)

95.0 g LWC: 131 mm

- 34.0 g LLP(5): 41 mm (in molt)

61.0 g LLP(6): 109 mm

Rect: 64 mm

Blood is taken from the R wing resulting in a small hematoma. Genetics and a smear are

obtained.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Primary | Blacklight, L wing, 0-3 | Blacklight, L wing, 0-5 | Blacklight, R wing, 0-3 | Blacklight, R wing, 0-5 | Wear, L wing, 1-5 | Wear, L wing, 1-5 |
| 1 | 0 | 0 | 0 | 0 | 2 | 2 |
| 2 | 3 | 5 | 3 | 5 | 1 | 1 |
| 3 | 3 | 5 | 3 | 5 | 1 | 1 |
| 4 | 3 | 4 | 3 | 4 | 1 | 1 |
| 5 | 0\* | 0\* | 0\* | 0\* | 1\* | 1\* |
| 6 | 1 | 1 | 1 | 1 | 3 | 3 |
| 7 | 1 | 1 | 1 | 1 | 3 | 3 |
| 8 | 0 | 0 | 0 | 0 | 4 | 4 |
| 9 | 0 | 0 | 0 | 0 | 4 | 4 |
| 10 | 0 | 0 | 0 | 0 | 4 | 4 |

***\*Note: P5 was in molt (LP(5)=41 mm) and exhibited no fluorescence. P2-4 had also molted recently and were visibly shorter than usual. The highest degree of fluorescence was observed on P2-3 with P4 displaying slightly less fluorescence. Based on these observations, it appears as if P2-P5 are new feathers this year. Wear was also consistent with these observations of porphyrin amounts. P6-10 showed the most wear and the least fluorescence. P1 was chalky white, but showed less wear than P6-10. Pictures were obtained by CC.***

2415—F released with a short, but strong and ascending flight to nearby pipo. Perching was normal. She took off to the W.

2450—End playback and we leave.