from P003. moss
* cassiope not / heather
steller's / haramonella

Collared Pika Surveys Detection Datasheet

Site Code:	P005	**Observer:**	AD/RK	**GPS ID:**	unit 27
Date (yyyy-mm-dd):	2018-07-10	**Latitude (dd):**		**Longitude (dd):**	
Start Time:	10:30	**End Time:**	13:30	**GPS Track:**	date P005 u27 + unit 33
Temperature:	50 F	**Wind Speed:**	2.9 mi/hr	**Notes:**	

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
marmot	012											198°	215°	40	1	N
marmot2	012											198°	198°	17.5	1	N
pika	013				0	grass/moss/cassio	G+B	—	—	—	Y					
marmot?	013		Y													
pika	013	B	Y													
g squirrel	014											210°	255°	17	1	N
pika	015				0	grass/fireweed	B	—	—	—	Y					
pika	015	B	Y													
marmot	015	B	Y													
pika	016	~~Blk~~	~~Y~~		0	grass/forbs	B	—	—	—	Y					
pika	016	B	Y													
pika	017				note: 5 m from ADFG cairn haypile							40°	230°	3	1	Y
pika	018											20°	295°	~~[illegible]~~	1	
pika	019											182°	264°	61.5 cm	1	Y
pika	020				0	grass	B	—	—	—	N					
pika	021				0	grass	B	—	—	—	N					
pika	022				0	moss+ grass	B	—	—	—	N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys P005 page 2 **Detection Datasheet**

Site Information

Site Code:	**Observer:**	**GPS ID**:
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time**:	**GPS Track**:
Temperature:	**Wind Speed**:	**Notes**:

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
pika	023				0	grass. moss lichen	B	large			N					
pika	024				0	grass. forbs	B	—	—	—	N					
pika	025				0	moss. lichen	B	very small + sparse			N					
pika	026											32	220	28	1	off plot
pika	027				0	moss. lichen few grass	B	—	—	—	N					
pika	028				33	partridge. grass. lichens	B	—	—	—	N					
pika	002 unit 33				1	moss. heather grass	G+B	—	—	—	Y					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information top most transect done by Rachel & Marion - on unit 33

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code: P005	**Observer:** KC, SG, CB, JW, PS	**GPS ID:** 49
Date (yyyy-mm-dd): 2018-07-10	**Latitude** (dd):	**Longitude** (dd):
Start Time: 1100 WP126 = start	**End Time:** 1330	**GPS Track:**
Temperature: 50°F	**Wind Speed:** 2.9 mph	**Notes:** Precip: light rain

Detection Data

		Feces			Haypile (inches)							Animal				Audio
Species	WP	Color (~~G/B~~)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
COPI	126											20	59	45.5	1	N
HOMA	127											110	115	36	1	N
COPI	128	O	Y	C	3	EDS	G+B	1	1	1/2	Y					
COPI	130	O	Y	C	4	EDS	G+B	5	2	1/2	Y					
COPI	130											26	138	60	1	N
COPI	131				2	EDS	G+B	5	3	1						
HOMA	132											114	144	46	1	N
COPI	132				2	EDS	G+B	1	1	1/2	Y					
COPI	134	O	Y	C	1	EDS + LI	B									
HOMA	135											12	44	19	1	N
COPI	135											12	92	73	1	N
COPI	135											12	12	13.5	1	Y
COPI	136				5	EDS	B+B	1	2	1/2	Y					
COPI	137	N/O	Y	C												
COPI	138				5	EDS + LI	B+B				N					
COPI	139				0.5	EDS + LI	B				N	16	139	34.5	1	N
COPI	140											16	87	[illegible]	1	Y

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

* EDS = Ericaceous dwarf shrub
LI = lichen

ADD: precip
- water feature presence
- snow presence

Notes:

Collared Pika Surveys

continued from other side

Detection Datasheet

Site Information

Site Code:	**Observer:**	**GPS ID**:
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time**:	**GPS Track**:
Temperature:	**Wind Speed:**	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
COPI	140	old	N		5m	grass/forb	B				N					
Marm.	141		Y	C												
COPI	142											203	203	1.5	3	N
COPI	143				2m	grass/forb	B/G				N					
HOMA	144											174	153	26	1	N
Marm	145		Y	C												
COPI	147				3m	grass/forb	B				N					
COPI	146				1m	grass/forb	B									
COPI	147				0m	grass/forb	B									
COPI	148	B	N													
HOMA	148											17	36	27	2	N

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code: P003	**Observer:** JW/AD	**GPS ID:** Unit 45
Date (yyyy-mm-dd): 2018-07-09	**Latitude** (dd):	**Longitude** (dd):
Start Time: ~ 11:00	**End Time:** 15:00	**GPS Track:** 2018-07-09 P003-01
Temperature: 46.9°F	**Wind Speed:** 4.3 mph	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist (m)	Count	Y/N
UNK			Y													
PIKA	002											106°	106°	2	1	Y
PIKA	003											190°	256°	15.5	1	Y
PIKA	006											96°	20°	8	1	N
PIKA	008											—	—	—	1	Y
MARMOT	009											36°	2°	325	1	Y
PIKA	009											36°	2°	40	1	Y
PIKA	010											114°	194°	10	1	N
PIKA	011			notes:	at end of track							306°	269°	11	1	Y
PIKA	015				1m	ericaceous dwarf	B				Y					
PIKA	016				5m	ericaceous dwarf	B				Y					
PIKA	018				5m	ericaceous dwarf	B				Y					
PIKA	019				2m	ericaceous dwarf	G+B				Y					
PIKA	020											216°	216°	30.5	1	Y

track 01

track 02

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys

Detection Datasheet

Site Information

Site Code:	**Observer:**	**GPS ID:**
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time:**	**GPS Track:**
Temperature:	**Wind Speed:**	**Notes:**

Detection Data

		Feces			Haypile						Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes:

Collared Pika Surveys

Detection Datasheet

~~Water~~ Water? : Stream
Snow : Yes

Site Information

Site Code:	P003	**Observer:**	Paul, Rachel	**GPS ID:**	PS. 49
Date (yyyy-mm-dd):	2018-07-09	**Latitude** (dd):		**Longitude** (dd):	
Start Time:	12:15 pm	**End Time:**	5:15 pm	**GPS Track:**	2018-07-09 P003 49
Temperature:	46.9 F	**Wind Speed:**	4.3 mph	**Notes:**	

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
AGS	103	G	Y	C								298	26	133	1	Y
PTA	104	G	Y	C												
Pika	105											298	26	133	1	Y
Pika	106	G	Y	C	5m	cranberry dwarf shrub	G+B	7in	8in	1.5in	Y					
Pika	107											120	160	10.5	1	N
Pika	108	G	Y	C	6m	cranberry dwarf shrub	G+B	4in	4in	0.5in	Y					
Pika	109	G	Y	C	8m	" + grass	B	3 scattered patches		w/5m	Y					
Pika	110	G	Y	C	15m	"	G+B				Y					
Pika	111	G	N		8m	"	G+B	3in	3in	1in	N					
Pika	112	G	N		18m	"	B				N					
Pika	113	G	N		6m	"	B				N					
Pika	114	G	N		3m	"	G+B	3in	9in	½in	N					
Pika	115	G	N		2m	"	G+B	1in	1in	1in	N					
Pika	116											134	138	22.5	1	
Pika	117	G	N		1m	"	G+B	1	1	1	N					
Pika	118	G	N		2m	"	B				N					
Pika	119				3m	"	G				N	305	272	10	1	Y

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Water: Lake, pond, (stream), none
Snow: (Y/N)

Trail through site with ~50 people hiking today

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code:	Observer:	GPS ID:
Date (yyyy-mm-dd):	Latitude (dd):	Longitude (dd):
Start Time:	End Time:	GPS Track:
Temperature:	Wind Speed:	Notes:

Detection Data

		Feces			Haypile						Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
Pika	120	B	N	~~E~~	2m	"	B	~	~	~	N					
Pika	121	~~B~~	~	~	1m	"	B				Y	148	148	3	1	N
Pika	122	~	~	~		~		~	~	~	~	130	105	2	1	N
Pika	123	~	~	~	0m	"	G	very sm mound	beginning	45	fresh clips					
Pika	124	~	~	~	7m	"	B				N	~	~	~	~	
Pika	125	B	N		8m	"	B	~	~	~	N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys 2018 **Vegetation Plot Field Datasheet**

WP031 Unit 27

Site Information

Site Code: P005	**Date (yyyy-mm-dd):** 2018-07-10	**Plot Size** (m): 10 x 10		**Plot Radius** (m):
Latitude (dd):	**Longitude** (dd):	**Slope** (°): 20		**Vascular**: Highest cover
Survey Method: Visual Estimate	**Elevation** (m):	**Aspect** (°): 120	**Scope**	**Non-vascular**: none
Observer 2: AD	**Observer 1:** RK	**Cover Method:** semi-quant		**Lichen**: none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	—	—
Dwarf Shrub (< 0.2 m)	~~80~~ 90	5cm
Forb	5	
Ferns/Allies	—	
Grass	5	
Rush		
Sedge		
Moss	~~40~~ 50	
Lichen	10	

together

Ground Form	Ground Cover
Litter	KW - 5
Biotic Crust	—
Bare Ground	10
Rock	1/2 rs 15
Moss	~~40~~ ~~40~~ 50
Lichen	20
Water	—

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: ericaceous dwarf	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd):		**Observer 1:**		**Observer 2:**			
Taxon	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
Harimonella	70	7					
Empitrum							
ericaceous → partridge foot	60	3.5					
club moss	35	2					
alpine?							
→ Luetkea pectinata							

not surveyed: herbaceous forb (mesic?)

talus: ~20% of site

snow: no

WP029 on unit 27 roughly closest dist. to talus → large shrub patch

Collared Pika Surveys 2018 — Vegetation Plot Field Datasheet

Site Information

WP 029 (Unit 27)

Site Code: P005	**Date (yyyy-mm-dd):** 2018-07-10	**Plot Size** (m): 10 x 10		**Plot Radius** (m):
Latitude (dd):	**Longitude** (dd):	**Slope** (°): 35°	**Scope**	**Vascular**: Highest cover
Survey Method: Visual Estimate	**Elevation** (m): GPS	**Aspect** (°): 120°		**Non-vascular**: none
Observer 2: RK	**Observer 1:** AD	**Cover Method:** semi-quant		**Lichen**: none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	—	
Broadleaf	—	
Tall Shrub (> 1.5 m)	—	
Low Shrub (0.2 - 1.5 m)	80	~1m
Dwarf Shrub (< 0.2 m)	—	
Forb	80	
Ferns/Allies	3	
Grass		
Rush		
Sedge		
Moss	35	
Lichen	1	

} together 20%.

Ground Form	Ground Cover
Litter	rest
~~Biotic Crust~~	
Bare Ground	40
Rock	3
Moss	35
Lichen	1
Water	—

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: II.C.1 closed low scrub	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): 2018-07-10 | **Observer 1:** AD | **Observer 2:** RK

Taxon	Cover	Height	Vouch.	Taxon	Cover	Height	Vouch.
Salix	80						
Lupine	20						
UNK 1	60						

Collared Pika Surveys 2018 — Vegetation Plot Field Datasheet

Site Information

Site Code: P005	**Date (yyyy-mm-dd):** 2018-07-10	**Plot Size (m):** 10 x 10			**Plot Radius (m):**
Latitude (dd):	**Longitude** (dd):	**Slope (°):** 25			**Vascular**: Highest cover
Survey Method: Visual Estimate	**Elevation** (m):	**Aspect (°):** 118		**Scope**	**Non-vascular**: none
Observer 2: AO	**Observer 1:** RK	**Cover Method:** semi-quant			**Lichen**: none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	—	
Broadleaf	—	
Tall Shrub (> 1.5 m)	—	
Low Shrub (0.2 - 1.5 m)	—	
Dwarf Shrub (< 0.2 m)	27	
Forb	5	
Ferns/Allies	—	
Grass	80	
Rush		
Sedge		
Moss	~~70~~ 65	
Lichen	~~30~~ 25	

} together

Ground Form	Ground Cover
Litter	
Biotic Crust	
Bare Ground	
Rock	~~10~~ 10
Moss	65
Lichen	~~30~~ 25
Water	

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: mesic? graminoid	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): 2018-07-10		**Observer 1:**		**Observer 2:**			
Taxon	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
Some grass/Sedge							
moss							

Collared Pika Surveys

Detection Datasheet

Site Information

Site Code: P008	**Observer:** R. Kelly	**GPS ID:** 33
Date (yyyy-mm-dd): 2018-07-11	**Latitude** (dd):	**Longitude** (dd):
Start Time: 11:45 am	**End Time:** 4:20 pm	**GPS Track:** 2018-07-11 RK P008A 433
Temperature: 44° F	**Wind Speed:** 4.7 mph avg	**Notes:** 2018-07-11 RK P008B 433

↓ P007 & P015 WP can be deleted - accidentally took them

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
Pika	003	—	—	—	4m	Grass, sedge, twigs	B				Y					
marmot?	003	G	Y	C												
Pika	004	G+B	Y	C	1m	"	B				Y					
Pika	005				3m	"	B				Y					
marmot?	005	G	Y	C												
Pika	005	B	Y	C												
Pika	006	B+G	N	—	3m	"	G+B				Y	58	342	14.5	1	Y
Pika	006											58	58	10.5	1	Y
~~Pika~~	~~007~~	~~B+G~~	~~Y~~	~~C~~												
Pika	008											55	128	21	1	Y
Pika	009	B+G	N	—	1m	"	B				N					
Pika	010											220	108	28.5	1	Y
marmot	010											220	105	31.5	1	Y
Pika	010	B	N	—	1m	"	B				N					
marmot	011											238	238	40.5		Y
Pika	011											238	232	5		Y
Pika	012	B	N	—	2m	"	B				N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code:	Observer:	GPS ID:
Date (yyyy-mm-dd):	Latitude (dd):	Longitude (dd):
Start Time:	End Time:	GPS Track:
Temperature:	Wind Speed:	Notes:

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
Pika	013	B	N	—	0m	"	B				N					
Pika	014	B	N	—	0m	"	B				N					
AGS	014											248	248	17m	1	N
Pika	016	G/B	N	-	0m	"	G&B				Y					
Pika	017	B	N	—	3m	"	B				N					
Pika	018	B	N	—	1m	"	B/G	1 sm partridge	foam		N					
Pika	019	B	N	—	5m	"	B				N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys

Detection Datasheet

Site Information

Site Code: P008	**Observer:** AD	**GPS ID:** 27
Date (yyyy-mm-dd): 2018-07-11	**Latitude (dd):**	**Longitude (dd):**
Start Time: ~12PM	**End Time:**	**GPS Track:** 2018-07-11 P008 u27
Temperature: 40° F	**Wind Speed:** 4.7mph	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
pika	032				did not resight							50	162	~~158~~	1	N
marmot	032				saw in bipos when scanning for pika							50	144	45	1	N
marmot	032											50	198	27	1	Y
pika	033				1.5m	lletkea dwarf shrub	B	—	—	—	Y					
pika	034				<0.5m	forbs + dwarf shrub (vaccinium?)	B (very little G)	—	—	—	Y					
pika	035	B	Y													
pika	036				1m	lichen moss grass	G+B	large	—	—	Y					
pika	037	B	Y		~0m	vaccinium	B little G				N					
pika	038				→						↵					
marmot	039	B	Y													
marmot	040	B	Y													
pika	041				0	arctostaphylos	B				N					
pika	042				2	dwarf shrub	B	several piles near			N					
pika	042	B	Y													
pika	043											50	7	16	1	Y
pika	044				0	eric dwarf shrub	B	small			N					
pika	045				0	eric dwarf	B				N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Collared Pika Surveys

Detection Datasheet

Site Code:	Observer:	GPS ID:
Date (yyyy-mm-dd):	Latitude (dd):	Longitude (dd):
Start Time:	End Time:	GPS Track:
Temperature:	Wind Speed:	Notes:

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
pika	046	B	N													
pika	047	B	N													Y
ground squirrel ~~marmot~~	048											250	260	36	1	N
pika	049				<1.5m	grasses	G+B				N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code: P008	**Observer:** JW	**GPS ID:** 45
Date (yyyy-mm-dd): 2018-07-11	**Latitude** (dd):	**Longitude** (dd):
Start Time: 11:40	**End Time:** 1620	**GPS Track:** 2018-07-11 P008-45
Temperature: 44° F	**Wind Speed:** 4.7 mph avg	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio	
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N	
PIKA	022				1m	EDS	B				Y						
PIKA	023	B	Y	Coin	5m	EDS	B				Y						
PIKA	024																
~~HOMA~~	~~025~~	~~B+G~~	~~Y~~	~~C~~													JW
PIKA	026				1m	EDS	B				N						
AGS	027											72°	72°	43m	1	Y	
PIKA	028				0m	EDS	B				N						
PIKA	028											58°	71°	10.5m	1	Y	
PIKA	028											238°	213°	15m	1	Y	
PIKA	029	B+G	Y	C													
PIKA	030	B+G	N		5m	EDS/lichen	G+B			1cm	Y						
PIKA	031				3m	EDS	B				N						
PIKA	032				0M	EDS/Lichen	B				N						
PIKA	033				10M	EDS	B				N						
HOMA	033	G	Y	C													

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys

Detection Datasheet

Site Information

Site Code:	**Observer:**	**GPS ID**:
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time**:	**GPS Track**:
Temperature:	**Wind Speed:**	**Notes**:

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes:

Collared Pika Surveys 2018 — Vegetation Plot Field Datasheet

(*) for all P008 plots: aspect taken facing up → need to WP035 Unit 45 = 180°

Site Information

Site Code: P008	**Date (yyyy-mm-dd):** 2018-07-11	**Plot Size** (m): 10 x 10			**Plot Radius** (m):
Latitude (dd):	**Longitude** (dd):	**Slope** (°): 18			**Vascular**: Highest cover
Survey Method: Visual Estimate	**Elevation** (m):	**Aspect** (°): 312		**Scope**	**Non-vascular**: none
Observer 2:	**Observer 1:** AD, JW	**Cover Method:** semi-quant			**Lichen**: none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	15	0.5m
Dwarf Shrub (< 0.2 m)	80	10cm
Forb	10	
Ferns/Allies	—	
Grass	15	
Rush	—	
Sedge	—	
Moss	22	
Lichen	1	

Ground Form	Ground Cover
Litter	70
Biotic Crust	
Bare Ground	2
Rock	5
Moss	22
Lichen	1
Water	

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: ericaceous dwarf shrub	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): 2018-07-11		**Observer 1:** AD, JW		**Observer 2:**			
Taxon DS001	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
Vaccinium?	75	8cm	Y				
Empetrum	50	11cm					
grass 001	15	15cm	Y				

right beside talus.

higher elevation near top edge of talus is Harrimonella-Empetrum-Loutkea combo (not surveyed).

Collared Pika Surveys 2018 — Vegetation Plot Field Datasheet

Site Information

WP 034 unit 4S

Site Code: P008	**Date (yyyy-mm-dd):** 2018-07-11	**Plot Size (m):** 10 x 10		**Plot Radius (m):**
Latitude (dd):	**Longitude (dd):**	**Slope (°):** 25	**Scope**	**Vascular:** Highest cover
Survey Method: Visual Estimate	**Elevation (m):**	**Aspect (°):** 309		**Non-vascular:** none
Observer 2: JW	**Observer 1:** AD	**Cover Method:** semi-quant		**Lichen:** none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	82	0.5m
Dwarf Shrub (< 0.2 m)	20	8cm
Forb	65	
Ferns/Allies	1%	
Grass	20	
Rush	—	
Sedge	—	
Moss	40%	
Lichen	3%	

Ground Form	Ground Cover
Litter	50%
Biotic Crust	—
Bare Ground	1%
Rock	6%
Moss	40%
Lichen	<5% (3%)
Water	—

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: closed low shrub	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): July 11 2018 **Observer 1:** AD, JW **Observer 2:**

Taxon	Cover	Height	Vouch.	Taxon	Cover	Height	Vouch.
Salix sp.	82	0.5m					
FORB001 - wildrose?	35	16cm	Y				
FORB002 - geranium	25	13cm	Y				
Veratrum							

largest patch from talus
dist. to talus from shrub: 19m
two large shallow lakes
dist to water: 60m

% of plot:
- water: 15%
- talus: 35%

no snow

Collared Pika Surveys 2018

Vegetation Plot Field Datasheet

Site Information

Site Code: P003		**Date (yyyy-mm-dd):** 2018-07-09	**Plot Size (m):** 10 x 10		**Plot Radius (m):** 5
WP021 **Latitude (dd):**		**Longitude (dd):**	**Slope (°):** 15°	**Scope**	**Vascular:** Highest cover
Survey Method: Visual Estimate		**Elevation (m):**	**Aspect (°):** 230°		**Non-vascular:** none
Observer 2: JW/AD	**Observer 1:** PS/RK	**Cover Method:** semi-quant			**Lichen:** none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

Life Form	Absolute Cover	Height
Needleleaf	0	
Broadleaf	0	
Tall Shrub (> 1.5 m)	0	
Low Shrub (0.2 - 1.5 m)	10	
Dwarf Shrub (< 0.2 m)	95	
Forb	1	
Ferns/Allies	0	
Grass	1	
Rush	0	
Sedge	0	
Moss	90	
Lichen	2	

Ground Form	Ground Cover
Litter	7
Biotic Crust	—
Bare Ground	0
Rock	1
Moss	90
Lichen	2
Water	0

Environmental Characteristics

Physiography: Alpine	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: Ericaceous dwarf shrub	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): 2018-07-09		**Observer 1:** AD, RK, JW, PS		**Observer 2:**			
Taxon	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
Heramanella	90	2cm					
Empetrum nigrem	12						
~~Wild celery~~ Luetkea pectinata	25	1cm					

Collared Pika Surveys page 1/2 **Detection Datasheet**

Site Information

Site Code: P007	**Observer:** AD, RK	**GPS ID:** unit 33
Date (yyyy-mm-dd): 2018-07-13	**Latitude** (dd):	**Longitude** (dd):
Start Time: 11:30	**End Time:** 14:55	**GPS Track:** 2018-07-13 P007 U33
Temperature: 51F	**Wind Speed:** avg. 2.4mi/hr	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
pika	020				1m	eric. dw. sh.	B	large			Y(1)					
mouse? vole?	020	B,F	Y													
marmot	020	B,O	Y													
pika	020	B	Y													
g.squi.	020	B	Y													
g.squi.	021	B	N													
marmot	021	B	N													
pika	022	B,O	N													
marmot	↓	B,O	Y													
g squi.	↓	B,O	N													
vole	↓	B,F/O	N													
pika	022				0.5m	EDS	B	large	but decpicted		N					
vole	023	B,F	Y													
pika	024	B,O	N													
pika	025				0.25m	EDS	B, very old				N					
pika	026				0	EDS lichen grass	B, very old				N					
marmot	027											330	330	56	2	N

-fighting

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes: saw g. squirrel at bottom of talus ~~site~~ just before starting

Collared Pika Surveys

Detection Datasheet

Site Code:	Observer:	GPS ID:
Date (yyyy-mm-dd):	Latitude (dd):	Longitude (dd):
Start Time:	End Time:	GPS Track:
Temperature:	Wind Speed:	Notes: Pictures of WP035 HP

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
AGS	027											330	330	101	1	N
pika	028				1m	EDS	B	very	old		N					
marmot	028	B,old	N													
pika	029				0m	EDS	B	very	old		N					
marmot	030	B,old	~~N~~ Y													
vole?	030	B,old	N													
pika	031				2m	EDS	B				N					
pika	032							old haypile								
pika	033				4m	EDS	B,old	very large			N					
pika	033	B,old	N													
g.squi.	033	B,old	N													
pika	034	B,old	N													
pika	034				0m	EDS+S.can. Forbs	B,	very old			N					
marmot	034	B,old	N													
pika	035				3m	EDS+ grass	G+B	large			Y(2)					
pika	036	B+G new			1D	confirmed by RK						18	108	17m	1	N
pika	035	B old	Y													

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Collared Pika Surveys

page 2/2

Detection Datasheet

Site Information

Site Code: P007	**Observer:**	**GPS ID:** Unit 33
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time:**	**GPS Track:**
Temperature:	**Wind Speed:**	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
g.squi	37											NW 204	126	48	1	Y
pika	37				4m	EDS, moss lichen	G+B									
pika	38				0m	EDS, lichen	B, maybe same fish?				N					
pika	38	B, fresh	N													
pika	39											212	151	10	1	N
AGS	39											212	139	26	1	N
pika	040				4m	herbaceous grass, dry	Green, very large				Y(1)					
pika	041				4m	EDS + grass	G+B				N	saw active haying behavior				
pika	042				1m	"	"G+B				N	"				

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes: saw large raptor (vulture?) overhead for 1 min.

WP 037 from small hiking trail, close to Willow-F road

Collared Pika Surveys — Detection Datasheet

Site Information

Site Code: P007	**Observer:** Paul G.	**GPS ID:** 49
Date (yyyy-mm-dd): 2018-07-13	**Latitude (dd):**	**Longitude (dd):**
Start Time: 11:40am WP 149	**End Time:** 2:37pm, WP 162	**GPS Track:** 2018-07-13 P007 49
Temperature:	**Wind Speed:**	**Notes:**

Detection Data

Sunny, then cloudy & light wind for 2nd half of site

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
Marmot	150											220	206	60	2	N
AGS	150	—	—			—	—	—	—	—	—		—	—		Y
Pika	151	B	Y	C	3	Dwarf Er.-Castilleja	G+B	0.5	0.5	0.5	Y		—	—		
Marmot	151	G	Y	C	—	—	—	—	—	—	—		—	—		
Pika	152	B	N	—	15	Dwarf. Cas.	B		—		N					
Pika	152	—	—			—	—	—				38	76	47	1	Y
Pika	153	B	N	-	15	Dw. Er.; Cas	G+B	0.1	0.1	0.1	N		—	—		—
Pika	154	B	Y	C	3	"		12 in	5 in	1	Y		—	—		—
Pika	155	B	N	—	Mt	seen, but	large burrows +	deep tunnels			so could	be but	not visible			
Ptarmigan	156	B	Y	C		—	—	—	—	—	—		—	—		
Pika	157	B	N	—	Deep	crevasses	so hard to	know for sure								
Pika	158	B	N	-	8	Haypile seen (old one) ~10 m away Dwarf Er.	B				N					
Pika	159	B	N	—	8	Dw. Gr.	G+B	14"	6"	1"	Y	34	34	3m	1	N
Pika	160	B	N	—	6	"	B		—		N					
Pika	161	B	N	-	8	"	B		—		N					
Marmot	161	G	Y	C		—	—	—	—	—	—		—	—		

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Shown: Yes

Flowers: Yes. Castilleja - white
- yellow

% talus on site: 12 %.

Stream, pond: Stream

Road through site

Notes:

Collared Pika Surveys

Detection Datasheet

Site Code: P007	**Observer:** JW	**GPS ID:** 45
Date (yyyy-mm-dd): 2018-07-13	**Latitude** (dd):	**Longitude** (dd):
Start Time: 11:35	**End Time:** 14:55	**GPS Track:** 2018-07-13 P007-045
Temperature: 51°F	**Wind Speed:** avg 24mi/hr	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
PIKA	036				8m	EDS/Grass	G+B			3cm	Y					
Pfarm.	037	B	Y	C								~~22°~~	~~345°~~	~~10M~~	~~1~~	~~Y~~
PIKA	037											22°	345°	10m	1	Y
PIKA	038	B	Y	C												
PIKA	039				8m	EDS	B				N					
PIKA	040				10m	EDS/Grass	B				N					
PIKA	041	B	Y	C												
Pfarm.	042	B	Y	C												
HOMA	043	B	Y	C												
PIKA	044				5m	Moss	B				Y					
PIKA	045				10M	EDS	G+B				Y					
PIKA	046				5m	EDS	B				N					
PIKA	047				10m	EDS	B				N					
PIKA	048				2m	EDS	B				N					
AGS	049											42	71°	12m	1	N
UNK	050	B	Y	C												
PIKA	051				1m	EDS	B				N					

17m Apart

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP=waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count=#of animals detected; audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Notes:

Cont. from reverse

Collared Pika Surveys

Detection Datasheet

Site Information

Site Code:	**Observer:**	**GPS ID:**
Date (yyyy-mm-dd):	**Latitude** (dd):	**Longitude** (dd):
Start Time:	**End Time:**	**GPS Track:**
Temperature:	**Wind Speed:**	**Notes:**

Detection Data

		Feces			Haypile							Animal				Audio
Species	WP	Color (G/B)	Sample (Y/N)	Coin/ Vial	Dist Veg	Veg Type	Color (G/B)	Size (L)	Size (W)	Size (H)	Sample (Y/N)	Transect Bearing	Animal Bearing	Dist	Count	Y/N
PIKA	052	B	N	—												
PIKA	053				0m	EDS	B				N					
PIKA	054				6m	EDS	B				N					

Species: pika, marmot, AGS, vole, bl. or br. bear, sheep, unknown; WP:waypoint; Color: G=green, B=brown; Sample: Collected Y/N; Coin/Vial: feces in coin envelope or 1.5ml vial; Dist Veg and Veg Type: distance to Viereck III vegetation types; L=length, W=width, H=height(cm) of haypiles; Transect Bearing: compass reading for path of travel; Animal Bearing: compass reading to animals; Dist=distance(m) to animals with rangefinder; Count: #of animals detected; Audio(Y/N): if you hear an animal's call on site (you may not see it or know how far away).

Site Information

Notes:

Collared Pika Surveys 2018 **Vegetation Plot Field Datasheet**

*reverse aspect P008 from yesterday add 180°? took it facing up.

Site Information

Site Code: P007		**Date (yyyy-mm-dd):** 2018-07-13	**Plot Size (m):** 10 x 10		**Plot Radius (m):**
Latitude (dd):	**Longitude (dd):**		**Slope (°):** 25		**Vascular:** Highest cover
Survey Method: Visual Estimate	**Elevation (m):**		**Aspect (°):** 120	**Scope**	**Non-vascular:** none
Observer 2: RK, AD, PS	**Observer 1:**	**Cover Method:** semi-quant			**Lichen:** none

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

WP 043 Unit 33

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	1	8 inches
Dwarf Shrub (< 0.2 m)	80	2 1/2 inches
Forb	2	
Ferns/Allies	<1%	
Grass	2	
Rush		
Sedge		
Moss	40	
Lichen	25	

Ground Form	Ground Cover
Litter	10
Biotic Crust	~
Bare Ground	2% <1%
Rock	25
Moss	40
Lichen	25
Water	—

Environmental Characteristics

Physiography: /	**Strata:** /
Fine Geomorphology: /	**Disturbance Type:** /
Vegetation Class: ericaceous dwarf	**Disturbance:** small hiking trail ~3m away

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd): 2018-07-13		**Observer 1:** AD, RK, PS.		**Observer 2:**			
Taxon	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
DS 0023	40	2in.	Y				
Leutkea pect.	60	1-1/2in.	N				
Harimanella	30	2in.	N				

Collared Pika Surveys 2018 — Vegetation Plot Field Datasheet

Site Information

Site Code: P007	**Date (yyyy-mm-dd):** 2018-07-13	**Plot Size** (m): 10 x 10		**Plot Radius** (m):
Latitude (dd):	**Longitude** (dd):	**Slope** (°): 35		**Vascular**: Highest cover
Survey Method: Visual Estimate	**Elevation** (m):	**Aspect** (°): 138	**Scope**	**Non-vascular**: none
Observer 2:	**Observer 1:**	**Cover Method:** semi-quant		**Lichen**: none

AD, RK, JW, PS

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

WP 044 Unit 33

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	1	5inches
Dwarf Shrub (< 0.2 m)	10	3inches
Forb	2	
Ferns/Allies	—	
Grass	65	
Rush		
Sedge		
Moss	No 15	
Lichen	40	

<1% carex.

Ground Form	Ground Cover
Litter	20
Biotic Crust	~
Bare Ground	
Rock	25
Moss	No 15
Lichen	40
Water	—

Environmental Characteristics

Physiography:	**Strata:**
Fine Geomorphology:	**Disturbance Type:**
Vegetation Class: dry graminoid herb.	**Disturbance:**

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd):		**Observer 1:**		**Observer 2:**			
Taxon	**Cover**	**Height**	**Vouch.**	**Taxon**	**Cover**	**Height**	**Vouch.**
Grass 002 ?			Y			?.	
Grass 003 °			Y				
collected species.							
blue-green non-flowering							
Probably dominant?							
need to return @							
better time							
Grass 004			Y				
Grass 005			Y				

Collared Pika Surveys 2018 page 2/2 **Vegetation Plot Field Datasheet**

Site Information

Jul. 13 2018

Site Code: P007	Date (yyyy-mm-dd):	Plot Size (m): 10 x 10	Plot Radius (m):
Latitude (dd):	Longitude (dd):	Slope (°): 40	Vascular: Highest cover
Survey Method: Visual Estimate	Elevation (m):	Aspect (°): 118	Non-vascular: none
Observer 2:	Observer 1:	Cover Method: semi-quant	Lichen: none

AD, RK, JW, PS

General Cover

Instructions: Absolute cover is measured independently of other layers. Absolute cover can/often will sum to values > 100%. Ground cover must sum to 100%. The substrate underneath moss, lichen, and biotic crusts is ignored for ground cover.

WP045 Unit 33

Life Form	Absolute Cover	Height
Needleleaf	—	—
Broadleaf	—	—
Tall Shrub (> 1.5 m)	—	—
Low Shrub (0.2 - 1.5 m)	90	14 in. (0.5m)
Dwarf Shrub (< 0.2 m)	7	3 1/2 in.
Forb		
Ferns/Allies	2	
Grass		
Rush	3	
Sedge		
Moss	45	
Lichen	1	

Ground Form	Ground Cover
Litter	45
Biotic Crust	—
Bare Ground	—
Rock	5
Moss	50
Lichen	1
Water	—

Environmental Characteristics

Physiography:	Strata:
Fine Geomorphology:	Disturbance Type:
Vegetation Class:	Disturbance:

low shrub

Species Cover

Instructions: Each entity should be recorded at the finest taxonomic resolution possible. Use full names rather than codes or abbreviations. Cover values should be estimated based on absolute cover. Cover values can sum to greater than 100%.

Date (yyyy-mm-dd):		Observer 1:		Observer 2:			
Taxon	Cover	Height	Vouch.	Taxon	Cover	Height	Vouch.
Salix sp. (LS002) not an obvious 2nd/3rd dom. lupine, the rose geranium... fireweed + yellow unknown → (collected, w/ [illegible])	90		y				
	25.			↳ Ranunculus occidentalis (FORB003)			
DS002	7		y				

"rose" sanguisorba canadensis

↳ Salix reticulata? yes!