

Date: 5.19.16 Locality: CIND Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: _____ / 6.17

Elevation: _____ Weather: cloudy Temp: _____

#	Bombus Sp.	Caste	Host Plant	Notes
1	Imp	Q	dand	
* 2	Imp	Q	dand	
* 3	Imp	Q	dand	
4	Imp	Q	Flying	
* 5	Imp	Q	dand	
* 6	Imp	Q	dand	
* 7	Imp	Q	te	
* 8	Imp	Q	dand	
9	Imp	Q	Flying	died in vial
* 10	Imp	Q	dand	
* 11	Imp	Q	dand	
* 12	Imp	Q	dand	
13	Imp	Q	dand	
14	Imp	Q	dand	
15	Bimal	Q	dand	
16	Imp	Q	dand	
17	bimac	Q	te flying	
18	Bimac	Q	Flying	
19	Imp	Q	Flying	
20	bimac	Q	dand	

CIND 5-19-16

#	Bombus Sp.	Caste	Host Plant	Notes
21	Imp	Q	dandel	
22	Imp	Q	dandel	
23	Bimac	Q	dandel.	
24	Imp	Q	dandel	
25	Bimac	Q	dandel	
26	Imp	Q	dandel	
27	Tern	Q	" "	
28	Bimac	Q	dandel	
29	Bimac	Q	dandel	
30	Imp	Q	flight	
31	Imp	Q	flight	
32	Bimac	Q	Dandel	
33	Tern	Q	dandel.	
34	bimac	Q	dandel	
35				
36				
37				
38				
39				
30				

HB COLLECTED? _____ # _____

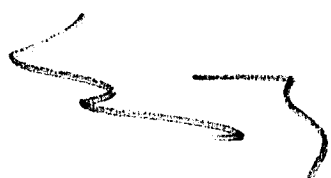
bimac - IIII ~~IIII~~

Date: 5-19-16 Locality: Mudge Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: 11:45 / 3:30

Elevation: _____ Weather: _____ Temp: _____

#	<i>Bombus</i> Sp.	Caste	Host Plant	Notes
1	tern	Q	wild strawberry	
2	Tern	Q	dand	
3	Imp.	Q	flying	
4	Vag	Q	Flying	
5	Vag	Q	dand	
6	tern	Q	dand.	
7	tern	Q	dand.	
8	tern	Q	dand.	
9	tern	Q	Dandy	
10	Tern	Q	dandy	
11	tern	Q	dand	
12	Vag	Q	dand	
13	Vag	Q	dang	
14	Imp.	Q	dand.	
15	Bimac	Q	dand.	
16	Tern.	Q	dand.	
17	Bimar	Q	dand	
18	Tern.	Q	" "	
19	Imp.	Q	" "	
20	Bimac	Q	" "	



Imp = IIII VI

bimac = IIII ~~VI~~

myz

#	Bombus Sp.	Caste	Host Plant	Notes
21	Tern.	Q	dand.	
22	Bimac.	Q	dand	
23	Imp.	Q	" "	
24	Perp.	Q	" "	
25	Perp.	Q	" "	
26	Vag.	Q	" "	
27	Tern.	Q	" "	
28	Bimac	Q	flying	
29	Imp.	Q	" "	
30	Tern.	Q	dand.	
31	Imp.	Q	dana	
32	Perp.	Q	dand.	
33	Bimac	Q	dandy	
34	Imp	Q	dand	
35	Vag	Q	flying	
36	Bimac	Q	dand	
37	Imp	Q	dand	
38	Vag	Q	dand	
39	Bimac	Q	Dandy	
40	bimac	Q	Dandy	

HB COLLECTED? _____ # _____

Imp 2 more

mudge 5/19/16

#	Bombus Sp.	Caste	Host Plant	Notes
41	Bimac	Q	dandy	
42	Bimac	Q	Flying	
43	Vagans	Q	dandy	
44	Bimac	Q	dandy	
45	Imp	Q	Flying	
46	Imp	Q	Flying	
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

HB COLLECTED? _____ # _____

BOST 300

5/17/16

#	Bombus Sp.	Caste	Host Plant	Notes
21	Bimac	Q	Flying	
22	Imp	Q	Flying	
23	bimac	Q	dandelion	
24	Imp	Q	Flying	
25	Imp	Q	Flying	
26	Imp	Q	Flying	
27	Imp	Q	Flying	
28	bimac	Q	grass	
29	tern.	Q	dandelion	
30	Bimac	Q	Flying	
31	Imp	Q	dandelion	
32	Imp	Q	Flying	
33	tern	Q	dandelion	
34	Imp	Q	Flying	
35	Bimac	Q	on ground	
36	bimac	Q	Flying	
37	Imp.	Q	Flying	
38	Imp	Q	Flying	
39	bimac	Q	Flying	
30	Imp	Q	Flying	

HB COLLECTED? _____ # _____

Bost 300

5/17/16

Date: _____ Locality: _____ Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: _____/_____

Elevation: _____ Weather: _____ Temp: _____

41
42

#	<i>Bombus</i> Sp.	Caste	Host Plant	Notes
1	Imp	Q	Flying	
2	Bimac	Q	Danly	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Date: 5/17/16 Locality: Bostwick Locality code: Bost 300

Latitude: _____ Longitude: _____ Start/End time: 10:55 / 1:45

Elevation: _____ Weather: Sunny Temp: 60°F

#	Bombus Sp.	Caste	Host Plant	Notes
1	Imp	Q	Bark	
2	Imp	Q	Host flying	
3	Imp	Q	flying	
4	Imp	Q	dand.	
5	bimac	Q	dand.	
6	Imp	Q	"	
7	Imp	Q	"	
8	Imp	Q	flying	
9	Imp	Q	flying	
10	Imp	Q	dand	
11	Imp Bimac	Q	host at violet	
12	Bimac Imp	Q	flying	
13	Imp	Q	flying	nest searching
14	Imp	Q	flying	"
15	Imp	Q	flying	"
16	Imp	Q	flying	"
17	Imp	Q	dand.	
18	Ferv	Q	grass/grand	
19	Imp	Q	flying	
20	Imp	Q	flying	

1 hr. Sampling effort
Alex & Sam (30 min. each)

COL 5-19-16

#	Bombus Sp.	Caste	Host Plant	Notes
* 21	Imp	Q	dand	
* 22	bimar	Q	dand	
* 23	bimar	Q	dand	
24	bimar	Q		
25	bimar	Q		
26	bimar	Q		
27	Imp	Q		
* 28	Imp	Q	dand	
* 29	Imp	Q	dand	
* 30	Imp	Q	Flying	
* 31	Imp	Q	Flying	
* 32	Imp	Q	dand.	
* 33	Imp	Q	dand.	
34	Imp	Q	dand.	
35	Imp	Q	dand.	
36	Imp	Q	dand.	
37	Imp	Q	dand.	
38				
39				
30				

HB COLLECTED? _____ # _____

Milly
green
sky
Alex &
Sam

* = Alex & Sam
(1 hr.
30 min.)

Date: 5.19.16 Locality: Leicester Forest Locality code: COL

Latitude: _____ Longitude: _____ Start/End time: 1030/11:20 each

Elevation: _____ Weather: Sunny Temp: _____

#	Bombus Sp.	Caste	Host Plant	Notes
1	Imp	Q	dand.	
2	bimac	Q	dand	
3	Bimac	Q	dandy	
* 4	ke	Q	dand.	
* 5	Imp	Q	dand	
* 6	Imp	Q	dandy	
* 7	Imp	Q	dandy	
* 8	Imp	Q	Flying	
* 9	Imp	Q	Dandy	
* 10	vag	Q	dand	
* 11	Imp	Q	dand	
12	Imp	Q	dand	
13	Bimac	Q	Fight	
14	Imp	Q	Fight	
15	Bimac	Q	Fight	
* 16	Ter	Q	Dandy	
* 17	Bimac	Q	Dandy	
* 18	Bimac	Q	Dandy	
19	Bimac	Q	Flying	
20	Imp	Q	Flying	

5-19-16
COL
Spp.

plant

* = Sam/Alex

FLAN 5/17/16

#	Bombus Sp.	Caste	Host Plant	Notes
21	Bimar	Q	Violet	
22	bimar	Violet Q	Violet	
23	Imp	A Q	flying	
24	bimar	Q	flying	
25	bimar	Q	flying	Lucky
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
30				

HB COLLECTED? # _____

Date: 5/17/16 Locality: FLAN Locality code: FLAN

Latitude: _____ Longitude: _____ Start/End time: 2:10/3:54

Elevation: _____ Weather: Sunny Temp: 60

#	Bombus Sp.	Caste	Host Plant	Notes
1	Imp	Q	dand	
2	Imp	Q	"	
3	Imp	Q	"	
4	Imp	Q	Flying	
5	Imp	Q	Flying	
6	Vag	Q	dandy	
7	bimac	Q	flying	
8	Imp	Q	flying	
9	TERN	Q	flying in grass	
10	vagans	Q	Cicis apple	
11	bimac	Q	flying	
12	Imp.	Q	dand.	
13	IMP	Q	Flying	
14	Bimac	Q	Violet	
15	Bimac	Q	grass	
16	BIMAC	Q	grass	
17	IMP	Q	mint	
18	IMP	Q	Violet	
19	Imp	Q	woody yellow	
20	Bimac	Q	Violet	

*
* hr: Max
* am
* (30 min
* each)

Best continued

Imp = ~~HHH~~ ~~HHH~~

7/7/16

41 ~~41~~

#	Bombus Sp.	Caste	Host Plant	Notes
21	bimac	RC		
22	Imp	RC		
23	Vag	RC		
24	Imp	RC		
25	Imp	RC		
26	Imp	RC		
27	bimac	RC		
28	bimac	RC		
29	bimac	RC		
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
30				

HB COLLECTED? _____ # _____

Date: 7.6.16 Locality: FLAN Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: _____/_____

Elevation: _____ Weather: _____ Temp: _____

(continued)

#	Bombus Sp.	Caste	Host Plant	Notes
1	Imp		STW	
2	Imp		STW	
3	Imp		CV	
4	Bimal		STW	
5	Bimal		CV	
6	Bimal		STW	
7	Bimal		STW	
8	Bimal		CV	
9	Bimal		STW	
10	Bimal		CV	
11	Bimal		STW	
12	Bimal		STW	
13	Imp		STW	
14	Imp		STW	
15	Imp		CV	
16	Imp		CV	
17				
18				
19				
20				

42

41

(12 hr. Alex) (12 hr. Sam)

* = exclude

Date: 7.11.16 Locality: CIND Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: 1:35/ _____

Elevation: _____ Weather: _____ Temp: _____

#	Bombus Sp.	Caste	Host Plant	Notes
* 1	bimac	worker	W.C.	
2	bimac		WC	
3	bimac		WC	
4	bimac		WC	
5	bimac		WC	
6	bimac		WC	
7	bimac		WC	
8	bimac		WC	
9	bimac		WC	
10	kern. ?		WC	pale, spiky
11	kern.		WC	
12	bimac		KW	
13	Imp		KW	
14	vag		WC	
15	vag		WC	
16	bimac		WC	
17	bimac		WC	
18				
19				
20				

1 hr.
Alex &
Sam
30 min.
each

other
field
across
from
stone
vine
montane

Date: 8-7-16 Locality: Col Locality code: _____

Latitude: _____ Longitude: _____ Start/End time: 3:16 / _____

Elevation: _____ Weather: _____ Temp: _____

#	<i>Bombus</i> Sp.	Caste	Host Plant	Notes
1	Imp.	w	RC	
2	Bore	w (Q?)	RC	
3	Bor	w	RC	
4	Imp	w	RC	
5	Imp	w	RC	
6	Imp	w	RC	
7	vac	w	RC	
8	himal	♂	RC	
9	Imp	w	RC	
10	vac	w	RC	
11	Imp	w	joeye	
12	vac	w	RC RC	
13	vac	w	RC	
14	ferr.?	w	RC	
15	Imp	w	jewelweed	
16	Imp	w	joeye	
17	Imp	w	RC	
18	Imp	w	RC	
19				
20				

Next
Sam
30min
each
=
1hr.

Imp-~~III~~ III

Date: 8/3/16 Locality: Bostwick Locality code: Bost

Latitude: _____ Longitude: _____ Start/End time: 10:17, ~~10:17~~ 2:50

Elevation: _____ Weather: Sunny Temp: 80°F

#	Bombus Sp.	Caste	Host Plant	Notes
1	Vag	♂	Thistle	
2	Bimac	W	RC	
3	Bor	W	Vetch	
4	Imp	W	RC	
5	Bor	♂	RC	
6	Imp	W	RC	
7	Bor	W	RC	
8	Vag	W	BF	
9	Bimac	W	RC	
10	Vag	W	Vetch	
11	Imp	W	RC	
12	Bimac	♂	RC	
13	Imp	W	RC	
14	Imp	W	RC	
15	Bimac	♂	RC	
16	Imp	W	RC	
17	Imp	♂	KW	
18	Imp	W	RC	
19	Imp	W	RC	
20	Imp	W W	WC	

21 | Imp

BF = Grinds feed

Imp = IIII

Bimac = II

	Caste	Sp.	Plant
22	W	Imp	RC
23	W	Imp	RC

Alex
1st hour
10:20
11:20

continued

Date: 9.9.16 Locality: _____ Locality code: FLAN

Latitude: _____ Longitude: _____ Start/End time: _____/_____

Elevation: _____ Weather: _____ Temp: _____

#	<i>Bombus</i> Sp.	Caste	Host Plant	Notes
41	Imp	WORKER	JW	
42	Imp	WORKER	JW	
93	Imp	WORKER	JW	
44	Imp	WORKER	JW	
95				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Date: 9.10.16 Locality: _____ Locality code: COL

Latitude: _____ Longitude: _____ Start/End time: _____/_____

Elevation: _____ Weather: _____ Temp: _____

#	<i>Bombus</i> Sp.	Caste	Host Plant	Notes
4 1	Imp	worker	RL	
4 2	Imp	worker	RL	
4 3	Imp	worker	RL	
4 4	Imp	worker	RL	
4 5	Imp	worker	RL	
4 6	Imp	worker	RL	
4 7	Imp	worker	RL	
4 8	Imp	worker	RL	
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

* = Alex & Jan
30 min survey

Date: 9-10-16 Locality: _____ Locality code: mudge

Latitude: _____ Longitude: _____ Start/End time: _____/_____

Elevation: _____ Weather: _____ Temp: _____

#	Bombus Sp.	Caste	Host Plant	Notes
* 1	Imp Imp	w	CV	
* 2	Imp	w	CV	
* 3	Imp	w	CV	
* 4	Imp	v	CV	
* 5	Imp	w	CV	
* 6	Imp	w	CV	
* 7	Imp	w	Solidago	
* 8	Imp	w	↓	
* 9	Imp	w	↓	
* 10	Imp	w	yellow flower needed to ID	
* 11	Imp	w	CV	
* 12	Vag.:	w	CV	
* 13	Imp	w	CV	
* 14	Imp	w	CV	
* 15	Imp.	w	CV	
* 16	↓	↓	↓	
* 17				
* 18				
* 19	↓	↓	↓	
* 20				

Mudge #
9-10-16
Imp
Plant