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ESI

Page___of___

FIXED TELEMETRY DATA (continued)

Project #:__________ **Date:**_________ **State:**_____ **County:**___________ **Initials:**____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				[illegible]	140°	
				[illegible]	—	
				[illegible]	[illegible]	
				[illegible]	—	
				[illegible]	—	
				[illegible]	—	
				[illegible]	160°	
				[illegible]	170°	
				[illegible]	180°	
				0115	190°	
				0120	250°	
				[illegible]	170°	
				[illegible]	180°	
				[illegible]	—	
				[illegible]	—	
				[illegible]	—	
				0150	200°	
				0155	—	
				0200	—	
				[illegible]	—	
				[illegible]	206°	
				[illegible]	—	
				0220	—	
				0225	206°	
				0230	—	
				[illegible]	206°	
				[illegible]	206°	

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FIXED TELEMETRY DATA

Project #: 340 **Date:** 27 Jul **Biologists:** J Basiger, M Forner

Project Name: [illegible] **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** A1 **Waypoint:** _____

Bat Species: M. sodalis

Transmitter Frequency: 172.219

Comments: 176 & 178 in Garage driveway

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			172.2180	2250	161°	
			"	2255	156°	
			↓	2300	220°	
				2305	220°	
				2310	—	
				2315	191°	
				2320	160°	
				2325	211°	
				2330	210°	
				2335	210°	
				2340	—	
				2345	210°	checked with [illegible] to see if she was moving at all. They said she was
				2356	210°	
				2355	190°	
				0000	160°	
				0005	210°	
				0010	180°	
				0015	160°	
				0020	180°	
				0025	208°	
				0030	200°	
				0035	160°	
				0040	197°	
				0045	—	
				0150	176°	
				0055	168°	
				0100	170°	
				0105	215°	
				0110	—	

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FIXED TELEMETRY DATA (continued)

Project #:_____ **Date:**_____ **State:**_____ **County:**_____ **Initials:**____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				0115	200°	
				0120	190°	
				0125	243°	
				0130	237°	
				0135	~~~	
				0140	~~~	
				0145	226	Very faint
				0150	~~~	
				0155	240°	
				0200	320°	
				0205	165°	
				0210	165°	
				0215	185°	
				~~	165°	
				0225	165°	
				0230	185°	

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FIXED TELEMETRY DATA

Project #: 340 **Date:** 27 July 11 **Biologists:** E. Basiger; A. Kleinhenz

Project Name: Republic Wind **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** Erin **Waypoint:** N/A

Bat Species: M. sodalis

Transmitter Frequency: 172.219

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
1	41° 12' 44.2"	82° 56' 28.8	172.219	2225	22	Good signal strength
	〃	〃		2230	10	
				2235	341	
2	41 12' 44.0	82° 56' 29.5		2240	1	
				2245	25	
				2250	29	
				2255	14	
				2300	2	
				2305	18	
				2310	—	missed due to visitor/good signal
				2315	359	
				2320	40	
				2325	354	
				2330	14	
				2335	19	
				2340	11	
				2345	2	
				2350	18	
				2355	19	
				2400	18	
				2405	28	
				2410	36	
				2415	30	
				2420	32	
				2425	46	
				2430	50	
				2435	55	
				2440	23	
				2445	55	

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FIXED TELEMETRY DATA (continued)

Project #: Republic-Wine **Date:** 27 July, 2011 **State:** OH **County:** Seneca **Initials:** EJB

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
2	41° 12 44.0	82° 56 29.5	172.219	2450	27	
				2455	10	
				0000	46	
				0005	19	
				0010	10	
				0015	26	
				0020	22	
				0025	355	
				0030	6	
				0035	6	
				0040	—	lost signal
				0045	265	
				0050	—	lost signal, lost bat at azimuth 240 before reading
				0055	274	
				0100	284	
				0105	12	
				0110	—	signal lost at azimuth 5 lost bat reading
				0115	24	
				0120	20	
				0125	15	
				0130	46	

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FIXED TELEMETRY DATA

Project #: 340.01 **Date:** 27 Jul 11 **Biologists:** M Flynn

Project Name: Republic **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** _____ **Waypoint:** MMF

Bat Species: Myotis sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
MMF			172.217	22:30	58°	
				22:35	56°	
				22:45	52°	
				22:50	56°	
				22:55	56°	
				23:00	45°	
				23:20	45°	
				23:25	80°	
				23:30	80°	
				23:35	66°	
				23:40	56°	
MMF2	41°13'17.7"	82°55'04.4"		0045	260°	
				0050	260°	
				0055	270°	
				0100	265°	
				0105	268°	
				0110	268°	
				0115	284°	
				0120	260°	
				0125	300°	
				0130	272°	
				0135	272	
				02:05	260°	
				02:15	290°	
				02:20	252°	
				02:30	280°	

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FIXED TELEMETRY DATA

Project #: 340 **Date:** 27-Jul-11 **Biologists:** S. Captain

Project Name: Tetratech **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** A7 **Waypoint:** _____

Bat Species: M. sodalis

Transmitter Frequency: 172.218

Comments: TA near Emerson Creek bridge (SC4)
SC5: 172.178

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
SC4	41°14'02.4	82° 57'23	218	2300	99	
				2305	—	
				2310	—	
				2315	—	
				2320	—	
				2325	—	
SC5	41°13'36.0	82°57'25.3	218	2340	139	
				2345	—	
				2350	120	[illegible]
				2355	116	
				[illegible]	152	
				0005	105	
				0010	132	
				0015	123	
				0020	129	
				0025	126	
				0030	—	
				0035	—	
				0040	126	
				0045	121	
				0050	116	
				0055	130	
				0100	119	
				0105	117	
				0110	—	
				0115	—	
				0120	—	
				0125	—	
				0130	—	

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4525 Este Avenue. Cincinnati, OH 45232 (Phone: 513-451-1777)

FIXED TELEMETRY DATA (continued)

Project #: 340 **Date:** 21 Jul 11 **State:** OH **County:** Seneca **Initials:** SC

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				0135	—	
				0140	—	
NMF1	41° 12' 45.1	82° 57' 53.1	2+6	0200	117	
				2205	—	
				0210	—	
				0215	—	
				0220	—	
				0225	—	
				0230	—	

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FIXED TELEMETRY DATA

Project #: 310.01 **Date:** 28 Jul 11 **Biologists:** M. Flynn

Project Name: Reptile **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** _____ **Waypoint:** _____

Bat Species: Myotis sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			172.218	2320	20°	
				2325	36°	
				2340	260	
				2345	348°	
				2350	346°	
				2359	0°	
				0000	354°	
				0005	268°	
				0010	320°	
				0020	18°	
				0025	20°	
				0030	26°	
				0035	32°	
				0040	8°	
				0045	30°	
				0050	6°	
				0055	6°	
				0000	20°	
				0005	12°	
				0010	12°	
				0015	20°	
				0025	354°	
				0530	180°	
				0535	25°	
				0540	0°	
				0545	12°	
				0550	12°	
				0555	12°	
				0100	346°	

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FIXED TELEMETRY DATA (continued)

Project #:_____ **Date:**_____ **State:**_____ **County:**_____ **Initials:**____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				0105	348°	
				3:0		
				0115	268°	
				0120	253°	
				0125		
				0130	212°	
				0135	245°	
				0140	252°	
				0145	22°	
				0150	28°	
				0155	22°	
				0200	216°	
				0205		
				0210	410°	
				0215	18°	
				0220	306°	
				0225		
				0230	15°	

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FIXED TELEMETRY DATA

Project #: 340 **Date:** 16-Jul-11 **Biologists:** S. Captain

Project Name: Talent **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** A7 **Waypoint:** _____

Bat Species: M. sodalis

Transmitter Frequency: 172.215

Comments: 178 & 76

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
SC6	41° 13' 36.9	-82° 57' 22.7	219	2245	159	
				2250	151	
				2255	162	
				2300	165	
				2305	150	
				2310	160	
				2315	133	
				2320	129	
				[illegible]	138	
				[illegible]	[illegible]	
				[illegible]	[illegible]	
				[illegible]	[illegible]	
				[illegible]	[illegible]	
				2350	124	
				2355	—	
				0000	—	
				[illegible]	121	
				0010	140	
				0015	126	
				0020	127	
				0025	137	
				0030	131	
				0035	131	
				[illegible]	131	
				0045	139	
				[illegible]	125	
				0055	128	
				0100	132	
				0105	—	

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FIXED TELEMETRY DATA (continued)

Project #: 340 **Date:** 20-Jul-11 **State:** KY **County:** _____ **Initials:** _____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
KC				0110	158	
				0115	160	
				0120	—	
				0125	—	
				0130	—	
	41° 13' 11.0	82° 57' 23.9	204	0145	120	
				0150	—	
				0155	103	
				2000	105	
				0205	99	
				0210	100	
				0215	109	
				0220	102	
				0225	—	
				0230	125	

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FIXED TELEMETRY DATA

Project #: 340.01 **Date:** 28 Jul 11 **Biologists:** J. Basiger

Project Name: Republic **State:** OH **County:** Sen

USGS Quad: _____ **GPS Unit #:** _____ **Waypoint:** _____

Bat Species: M. sodalis

Transmitter Frequency: 218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
	39° 12' 19.2"	82° 56' 6.6"	218	2300	100°	
			218	2305	22°	
			218	2310	34°	
			218	2315	24°	
			218	2320	19°	
			218	2325	41°	
			218	2330	26°	
			218	2335	72°	
			218	2340	29°	
			218	2345	72°	
			218	2350	90°	
			218	2355	41°	
			218	0000	39°	
			218	0005	36°	
			218	0010	24°	
			218	0015	17°	
			218	0020	60°	
			218	0025	48°	
			218	0030	43°	
			218	0035	23°	
			218	0040	119°	
			218	0045	8°	
			218	0050	358°	
			218	0055	128°	
			218	0100	138°	
			218	0105	89°	
			218	0110	120°	
			218	0115	—	No Signal
			218	0120	—	No Signal

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FIXED TELEMETRY DATA (continued)

Project #:_____ **Date:**_____ **State:**_____ **County:**_____ **Initials:**____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			218	0125	123°	
			218	0130	—	No Signal
			218	0135	—	NS
			218	0140	—	NS
			218	0145	38°	
			218	0150	101°	
			218	0155	84°	
			218	0200	109°	
			218	0205	100°	
			218	0210	52°	
			218	0215	111°	
			218	0220	108°	
			218	0225	112°	
			218	0230	109°	

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FIXED TELEMETRY DATA

Project #: 710 **Date:** 28 Jul 2011 **Biologists:** M. Forman

Project Name: Retratech **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** AS **Waypoint:** 20 on GPS # 165670

Bat Species: M. Sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			172.218	2240	260°	
				2245	229°	
				~~2250~~	210°	2250 LMW
				~~2255~~	210°	2255 LMW
				~~2300~~	210°	2300 LMW
				~~2305~~	225°	2305 LMW
				~~2310~~	230°	2310 LMW
				2315	210°	
				2320	245°	
				2325	218°	
				2330	190°	
				2335	210°	
				2340	220°	
				2345	215°	
				2350	215°	
				2355	200°	
				0000	218°	
				0005	220°	
				0010	———	
				0015	213°	
				0020	210°	
				0025	———	
				0030	210°	
				0035	210°	
				0040	210°	
				0045	190°	
				0050	200°	
				0055	———	
				0100	209°	

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FIXED TELEMETRY DATA (continued)

Project #:_____ **Date:**_____ **State:**_____ **County:**_____ **Initials:**____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				0105	318°	
				0110	200°	
				0115	202°	very very faint could not locate.
				0120	~~~	
				0125	~~~	
				0130	~~~	
				0135	~~~	
				0140	~~~	
				0145	200°	
				0150	180°	
				0155	180°	
				0200	161°	
				0205	161°	
				0210	108°	
				0219	214°	
				0220	200°	
				0225	206°	
				0230	206°	

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FIXED TELEMETRY DATA

Project #: _____ **Date:** _____ **Biologists:** _____

Project Name: _____ **State:** _____ **County:** _____

USGS Quad: _____ **GPS Unit #:** _____ **Waypoint:** _____

Bat Species: _____

Transmitter Frequency: _____

Comments: _____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
1?	41°12'43.16"	82°56'29.85"				

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FIXED TELEMETRY DATA

Project #: 340 **Date:** 29-Jul-11 **Biologists:** S. Captain

Project Name: Tetratech **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** A1 **Waypoint:** _____

Bat Species: M. sodalis

Transmitter Frequency: 172.219

Comments: 18 at white barn, near 32

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
SC6				2245	—	
				2250	—	
				2255	—	
				2300	—	
SC7	41°12'51.0	82°55'36.3	216	2330	320	
				2335	314	
				2340	308	
				2345	307	
				2350	318	
				2355	320	
				0000	—	
				0005	—	
				0010	—	
				0015	301	
				0020	314	
				0025	—	
				0030	49	
				0035	18	
				0040	—	
				0045	50	
				0050	12	
				0055	32	
				0100	332	
				0105	349	
				0110	334	
				0115	335	
				0120	332	
				0125	341	
				0130	352	

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FIXED TELEMETRY DATA (continued)

Project #: 340 **Date:** 29 Jul 11 **State:** OH **County:** [illegible] **Initials:** SC

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
SC7				0135	16	
				0140	26	
				0145	2	
				0150	4	
				0155	20	
				0200	41	
				0205	29	
				0210	360	
				0215	14	
				0220	332	
				0225	314	
				0230	302	
				0235	300	[illegible]
				0240	304	
				0245	304	

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FIXED TELEMETRY DATA

Project #: 340.1 **Date:** 29 Jul **Biologists:** D. Lewis

Project Name: Tetratech **State:** OH **County:** Seneca

USGS Quad: _____ **GPS Unit #:** AS **Waypoint:** 20 (on GPS# 465670)

Bat Species: Myotis sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
MF1				2255	180	
				2300	180	
				2305	180	
				2310	170	
				2315	150	
				2320	220	
				2325	242	
				2330	242	
				2335	228	
				2340	230	
				2345	238	
				2350	205	
				2355	200	
				0000	220	
				0005	225	
				0010	230	
				0015		
				0020		
				0025	90°	
				0030		
				0035	90°	
				0040	125	
				0045	110	
				0050	109	
				0055	125	
				0100	185	
				0105	141	
				0110	120	
				0115	120	

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FIXED TELEMETRY DATA (continued)

Project #:_____ **Date:**_____ **State:**_____ **County:**_____ **Initials:**_____

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
				0125	130	
				0130	—	
				0135	—	
				0140	115	
				0145	98	
				0150	100	
				0155	100	
				0200	130	
				0205	110	
				0210	110	
				0215	134	
				0220	149	
				0225	220	
				0230	—	
				0235	—	
				0240	—	
				0245	—	
				0250	—	

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781 Neeb Road. Cincinnati, OH 45233 (Phone: 513-451-1777)

ESI

BAT TRANSMITTER DATA

Project #: 340.02 Date: 27 July 2011 Biologists: Akinowski, Kleinhenz

Project Name: Republic - Wind Site Name/#: 4

State: OH County: Seneca Camera #: Can 671 (Jack)

Picture #: 0918 - 0921

Bat Species: E. fuscus Capture Time: 0140

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
JV	M	NR	14.9	46

Transmitter weight = 0.35 grams Frequency number: 172.122 (Best @ 172.121)

Transmitter + bat total weight = 15.0 grams Band/color number: N/A

FINAL CHECK:

1) Transmitter attachment (Y/N): Yes
2) Signal receiving (frequency): Yes
3) Band attachment (Y/N): No
4) Condition of animal: Healthy & active
5) Description of release:

RELEASE TIME: 0300 **TOTAL HOLD TIME:** 80 **minutes**

RELEASE LOCATION: Capture Site

COMMENTS:

ATS = 172.120
Com Spec = 172.1206

Property of: Environmental Solutions & Innovations, Inc.
781 Neeb Road. Cincinnati, OH 45233 (Phone: 513-451-1777)

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BAT TRANSMITTER DATA

Project #: 340 **Date:** 20 July 2011 **Biologists:** J. Basinger

Project Name: Republic **Site Name/#:** 9

State: OH **County:** Seneca **Camera #:** Canle71

Picture #: 879 - 881 waypt #016

Bat Species: Eptesicus fuscus **Capture Time:** 2145

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
JV	F	NR	13.5	45

Transmitter weight = .25 grams Frequency number: 172.239

Transmitter + bat total weight = 13.75 grams Band/color number:

FINAL CHECK:

1) Transmitter attachment (Y/N): Y
2) Signal receiving (frequency): 172.239
3) Band attachment (Y/N): N
4) Condition of animal: Good
5) Description of release: Normal

RELEASE TIME: 2230 **TOTAL HOLD TIME:** 41 **minutes**

RELEASE LOCATION:

COMMENTS:

Roost Pic 890-91

Property of: Environmental Solutions & Innovations, Inc.
781 Neeb Road. Cincinnati, OH 45233 (Phone: 513-451-1777)

ESI

BAT TRANSMITTER DATA

Project #: 340, 01 Date: July 30, 11 Biologists: Jack Basiger

Project Name: Republic Site Name/#: 12

State: Ohio County: Seneca Camera #: can671

Picture #: 965-969

Bat Species: fuscus Capture Time: 22:00

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Ad	F	PL	18.5	47

Transmitter weight = 30 grams Frequency number: 172.2250

Transmitter + bat total weight = 19 grams Band/color number: ~

FINAL CHECK:

1) Transmitter attachment (Y/N): Yes
2) Signal receiving (frequency): 172.2250
3) Band attachment (Y/N): Yes
4) Condition of animal: Great
5) Description of release: Fine

RELEASE TIME: 2250 **TOTAL HOLD TIME:** 50 **minutes**

RELEASE LOCATION: Capture site

COMMENTS:

Property of: Environmental Solutions & Innovations, Inc.
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ESI

BAT TRANSMITTER DATA

Project #: 310 Date: 24 Jul 11 Biologists: A. Kovaszhazi

Project Name: Republic Site Name/#: 14

State: OH County: Seneca Camera #:

Picture #:

Bat Species: E. fuscus Capture Time:

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Jv	F	NR	19.3	46

Transmitter weight = .35 grams Frequency number: 172.540

Transmitter + bat total weight = grams Band/color number: n/a

FINAL CHECK:

1) Transmitter attachment (Y/N): Y
2) Signal receiving (frequency): Y
3) Band attachment (Y/N): Y
4) Condition of animal: good
5) Description of release: good

RELEASE TIME: 0100 TOTAL HOLD TIME: 30 minutes

RELEASE LOCATION: Site 14

COMMENTS:

Property of: Environmental Solutions & Innovations, Inc.
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ESI

BAT TRANSMITTER DATA

Project #: 340.02 **Date:** 22 July 2011 **Biologists:** D Jeffrott, S Reeves

Project Name: Tetratech Republic **Site Name/#:** Site 16

State: OH **County:** Seneca **Camera #:** C4834

Picture #: 3736 - 3737

Bat Species: Eptesicus fuscus **Capture Time:** 2200

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Ad	F	L	19.	45.

Transmitter weight = 0.2 grams Frequency number: 172.118

Transmitter + bat total weight = 19.2 grams Band/color number: N/A

FINAL CHECK:

1) Transmitter attachment (Y/N): Y
2) Signal receiving (frequency): 172.172
3) Band attachment (Y/N): N
4) Condition of animal: healthy, excellent
5) Description of release: normal release

RELEASE TIME: 2300 **TOTAL HOLD TIME:** 60 **minutes**

RELEASE LOCATION: at capture location

COMMENTS:

N/A

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ESI

BAT TRANSMITTER DATA

Project #: 340 **Date:** 19-Jul-11 **Biologists:** E. Bat

Project Name: Republic **Site Name/#:** 24

State: OH **County:** Seneca **Camera #:** Can 671

Picture #: —

Bat Species: E. fuscus **Capture Time:** 2150

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Jv	F	NR	16.1	44

Transmitter weight = .35 grams Frequency number: 172.780

Transmitter + bat total weight = 16.15 grams Band/color number: x a

FINAL CHECK:

1) Transmitter attachment (Y/N): ✓
2) Signal receiving (frequency): ✓
3) Band attachment (Y/N): x
4) Condition of animal: good
5) Description of release: good

RELEASE TIME: 2220 **TOTAL HOLD TIME:** 30 **minutes**

RELEASE LOCATION: 3 on 24

COMMENTS:

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ESI

BAT TRANSMITTER DATA

Project #: 340.01 **Date:** 15Jul 2011 **Biologists:** J. Basinger + M. Flynn

Project Name: Republic **Site Name/#:** 26

State: OH **County:** Seneca **Camera #:** can 671

Picture #: 832 - 835

Bat Species: Eptesicus fuscus **Capture Time:** 2300

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Ad	F	PL	24.25	47

Transmitter weight = 0.35 grams Frequency number: 172740

Transmitter + bat total weight = 24.5 grams Band/color number: N/A

FINAL CHECK:

1) Transmitter attachment (Y/N): Y
2) Signal receiving (frequency): Y com 172398
3) Band attachment (Y/N): N/A
4) Condition of animal: good
5) Description of release: normal

RELEASE TIME: 0600 **TOTAL HOLD TIME:** 60 **minutes**

RELEASE LOCATION: capture site

COMMENTS:

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ESI

BAT TRANSMITTER DATA

Project #: 340.01 Date: 24 Jul '11 Biologists: J. Basigal

Project Name: Republic Site Name/#: 30

State: OH County: Seneca Camera #: Can 671

Picture #:

Bat Species: Eptesicus fuscus Capture Time: 2200

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Jv	F	NA	15.75	49

Transmitter weight = .35 grams Frequency number: 172.500

Transmitter + bat total weight = 16.10 grams Band/color number: —

FINAL CHECK:

1) Transmitter attachment (Y/N): Yes
2) Signal receiving (frequency): 172.4992
3) Band attachment (Y/N): N
4) Condition of animal: Good
5) Description of release: Normal

RELEASE TIME: 2230 TOTAL HOLD TIME: 30 minutes

RELEASE LOCATION: Capture site

COMMENTS:

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BAT TRANSMITTER DATA

Project #: 340.01 **Date:** 7/30/11 **Biologists:** A. Kniowski

Project Name: Jeppolic **Site Name/#:** 32

State: OH **County:** Seneca **Camera #:** 11

Picture #: 0676 - 0682

Bat Species: E. fuscus **Capture Time:** 2235

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Jv	F	NR	6.5	45

Transmitter weight = 0.35 grams Frequency number: 172.950

Transmitter + bat total weight = 6.7 grams Band/color number: —

FINAL CHECK:

1) Transmitter attachment (Y/N): Y
2) Signal receiving (frequency): 172.950
3) Band attachment (Y/N): Y
4) Condition of animal: OK
5) Description of release:

RELEASE TIME: 2350 **TOTAL HOLD TIME:** 15 **minutes**

RELEASE LOCATION: cap location

COMMENTS:

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ROOST TREE EMERGENCE DATA

Project #: 340 **Date:** 27 July 2011 **Biologists:** E Basiger; A Kleinhenz

Project Name: Republic - Wild **State:** OH **County:** Seneca

GPS Unit #: E9528 **Waypoint:** 017

Latitude: 41 ° 11 ' 55.0 "N **Longitude:** 82 ° 56 ' 53.1 "W

Roost Name/#: 118-1

Radio-tagged bat present in tree: Yes ✓ **No** ___

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Ep. fuscus **Sex(M/F):** F **Age(Ad/Jv):** Ad **Repro.:** L

Capture date: 22 July '11 **Capture site:** 11e **Frequency:** 172.118

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2055 **Departure time:** 2138 **Total Bats:** 117

Emergence Time	Number of Bats	Emergence Aspect
2100	~~0~~	
2102	~~0~~	
2104	~~0~~	
2106	2	W - NW
2110	~~0~~	
2112	7	N; S; W; E - All diff directions
2114	18	"
2116	19	"
2118	11	"
2120	27	"
2122	14	"
2124	9	N, E, S
2126	3	N, E

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

Transmittered Bat emerged @ 2116 (104)

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 12 Aug 11 **Biologists:** Lawin [illegible]

Project Name: Republic **State:** [illegible] **County:** [illegible]

GPS Unit #: E-9526 **Waypoint:** 017

Latitude: [illegible]° 11 ' 55.0 "N **Longitude:** [illegible]° [illegible] ' [illegible] "W

Roost Name/#: 118-1

Radio-tagged bat present in tree: Yes____ **No**____ Tx not found

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** Ad **Repro.:** L

Capture date: 22 July 2011 **Capture site:** 16 **Frequency:** 172.11-12

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help *distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to* the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2035 **Departure time:** 21[illegible] **Total Bats:** [illegible]

Emergence Time	Number of Bats	Emergence Aspect
2035	1	1) [illegible]
2047	3	back + South
2049	18	Since
2051	3	
2053	6	
2055	9	
2057	12	
2059	5	
2101	6	
2103	2	
2105	1	
2107	1	
2109	0	2111-2119=0

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Most flew out, circled a few times then flew South. Tagged bat not heard

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ROOST TREE DATA

Project #: 340 **Date:** 31 Jul 11 **Biologists:** J. Basiger

Project Name: [illegible] **State:** OH **County:** Seneca

GPS Unit #: [illegible] **Waypoint:** N/A **Camera #:** 671 **Picture #:** 982-983

Latitude: 41 ° 13 ' [illegible] "N **Longitude:** 82 ° 57 ' 0.4 "W

Bat Species: E. fuscus **Sex(M/F):** F **Age(Ad/Jv):** Jv **Repro.:** NA

Capture Date: 30 Jul 11 **Capture Site:** 12

Frequency: [illegible] **Roost Name/#:** 205-1

ROOST TREE DATA

Roost tree species: Barn dbh: ____ cm

Estimated height from ground to roost: 7 (meters) Tree height ____ (meters)

Exfoliating bark (%): ____ Distance from capture site: ____ m or km (circle one)

Tree health: __Live __Dead __Partial

Observed roost potential: __Exfoliating Bark __Cracks/crevasses __Hollow __Unknown

Bat vocalizations: __Yes ✓No

Guano on ground/foliage: ✓Yes __No

Is guano fresh (if present)?: ✓Yes __No

Guano volume (if present): light

DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh)

Subdominant Canopy Species (< 40 cm/16" dbh)

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated canopy closure at roost: 0 %

Slope: ___Steep ___Moderate ___Slight ✓None Slope aspect: ____

Subcanopy Clutter: ____Closed ____Moderate ✓Open

Distance to nearest water source: 300 (m or km (circle one)

Distance to nearest flight corridor: 0 meters

Habitat Description: Large area of crop land

Check all that apply:

__Mature Upland Forest	__Recently Logged Forest	✓Crop/Pasture Land	__Shrub/scrub Swamp
__Young Upland Forest	__Pine Plantation	__Stream/River	__Vernal Pool
__Mature Lowland Forest	__Woodlot/ForestEdge	__Emergent Wetland	__Deepwater Lake/Pond
__Young Lowland Forest	__Old Field	__Forested Swamp	__Other ____

Comments:

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ROOST TREE EMERGENCE DATA

Project #: [illegible] **Date:** 31 Jul 11 **Biologists:** [illegible]

Project Name: Republic **State:** OH **County:** [illegible]

GPS Unit #: _____ **Waypoint:** _____

Latitude: 41 ° 13 ' 39.0 "N **Longitude:** 82 ° 57 ' 06.3 "W

Roost Name/#: 225-1

Radio-tagged bat present in tree: Yes ✓ **No** ____

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** Ad **Repro.:** PC

Capture date: 30 Jul 11 **Capture site:** 12 **Frequency:** 172.425

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2030 **Departure time:** 2140 **Total Bats:** 36

Emergence Time	Number of Bats	Emergence Aspect
2117	First emerge data for us -	
	36 Total -	
	First day -	
	as a tallied may	
	have missed some	
2125	Last bat emerged	
2135	Survey done	
I didn't	know what I was looking	
Way	underexposed ...	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Tx bat emerge 2125

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ROOST TREE EMERGENCE DATA

Project #: 3[illegible].01 **Date:** 1 Aug 11 **Biologists:** Laura Tyson

Project Name: [illegible] **State:** OH **County:** [illegible]

GPS Unit #: EST-7 **Waypoint:** N/A

Latitude: 41 ° 13 ' 39.0 "N **Longitude:** [illegible] ° [illegible] ' [illegible] "W

Roost Name/#: 225

Radio-tagged bat present in tree: Yes ✓ **No** ____

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Optesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** Ad **Repro.:** PC

Capture date: 30 July 2011 **Capture site:** 12 **Frequency:** 172.225

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2030 **Departure time:** 2140 **Total Bats:** ____

Emergence Time	Number of Bats	Emergence Aspect
2102	1	NE
2104	7	NE
2106	13	
2109	11	
2110	12	
2112	7	
2114	21	
2116	18	
2118	14	
2120	12	
2122	3	
2124	2	
2126	1	2127 - 2131 [illegible]

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

2109 Tx bat left,

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ROOST TREE DATA

Project #: 340 **Date:** 7/25/11 **Biologists:** A Kurowski, M. Lemmon

Project Name: Republic **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340R14 **Camera #:** 11 **Picture #:** 0667

Latitude: 41 ° 16 ' 19.6 "N **Longitude:** 82 ° 54 ' 17.5 "W

Bat Species: E. fuscus **Sex(M/F):** F **Age(Ad/Jv):** Jv **Repro.:** NR

Capture Date: 7/24/11 **Capture Site:** 14

Frequency: 172.580 **Roost Name/#:** 580-1

ROOST TREE DATA

Roost tree species: Barn dbh: _____ cm

Estimated height from ground to roost: 20 (meters) Tree height _____ (meters)

Exfoliating bark (%): _____ Distance from capture site: 6 m or km (circle one)

Tree health: __Live __Dead __Partial

Observed roost potential: __Exfoliating Bark __Cracks/crevasses __Hollow __Unknown

Bat vocalizations: __Yes __No

Guano on ground/foliage: __Yes __No

Is guano fresh (if present)?: __Yes __No

Guano volume (if present): UK

DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh)

Not in forest.

Subdominant Canopy Species (< 40 cm/16" dbh)

not in forest

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated canopy closure at roost: _____%

Slope: ___Steep ___Moderate ___Slight ___None Slope aspect: _____

Subcanopy Clutter: ____Closed ____Moderate ____Open

Distance to nearest water source: _____m or km (circle one)

Distance to nearest flight corridor: _____meters

Habitat Description: Old barn - deserted minimal upkeep

Check all that apply:

__Mature Upland Forest __Recently Logged Forest X Crop/Pasture Land __Shrub/scrub Swamp
__Young Upland Forest __Pine Plantation __Stream/River __Vernal Pool
__Mature Lowland Forest X Woodlot/ForestEdge __Emergent Wetland __Deepwater Lake/Pond
__Young Lowland Forest X Old Field __Forested Swamp __Other _____

Comments:

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ROOST TREE EMERGENCE DATA

Project #: [illegible] **Date:** 17 Aug **Biologists:** Laura T (SEI)

Project Name: Rockville **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340 R 14

Latitude: 41 ° 16 ' 19.6 "N **Longitude:** 82 ° 54 ' 17.5 "W

Roost Name/#: 540 - 1

Radio-tagged bat present in tree: Yes____ No____ UNK - Tx 10

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: E fuscus **Sex(M/F):** F **Age(Ad/Jv):** ~~AD~~ JV **Repro.:** NR

Capture date: 24 July 2011 **Capture site:** 14 **Frequency:** [illegible]

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2025 **Departure time:** 2100 **Total Bats:** 23

Emergence Time	Number of Bats	Emergence Aspect
2036	1	West
38	4	
40	4	
42	III	
44	III	
48		
50		
52	II	
54	0	
56	0	
58		
2100		
2102	1	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Nice

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ROOST TREE EMERGENCE DATA

Project #: Sandusky **Date:** 18 July **Biologists:** Laura Tyson

Project Name: Rye Hill **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340 R 14

Latitude: 41 ° 16 ' 196 "N **Longitude:** 82 ° 54 ' 17.5 "W

Roost Name/#: 580 - 1

Radio-tagged bat present in tree: Yes____ No____ UNR - Tyler found

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** AD **Repro.:** PR

Capture date: 24 July 2011 **Capture site:** 14 **Frequency:** 142.340

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2032 **Departure time:** 2122 **Total Bats:** 23

Emergence Time	Number of Bats	Emergence Aspect
2034	III 3	Emerged the east
	III 3	low + to west.
	IIII 5	
	IIII I 6	S. side of barn
	IIII 4	slit above
2048	II 2	door.
50	0	
52	0	
54	0	
56	0	
58	0	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Most emerged at once + flew Northeast right away

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 22 July 11 **Biologists:** Laura Tyson

Project Name: Republic **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340 R 14

Latitude: 41 ° 16 ' 19.6 "N **Longitude:** 82 ° 54 ' 17.5 "W

Roost Name/#: 580-1

Radio-tagged bat present in tree: Yes____ No____ UNK Tyler tracked

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NK

Capture date: 29 July 2011 **Capture site:** 14 **Frequency:** 172.530

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2011 **Departure time:** 2059 **Total Bats:** 23

Emergence Time	Number of Bats	Emergence Aspect
2033	IIII 4	flew out
36	IIII 4	
38	IIII 4	
40	IIII 4	
42	++++ 5	
44	II 2	
46	2	
48	1	
50	1	
52	1	
54	0	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

circled around tree once then flew off to the south of tree

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ROOST TREE EMERGENCE DATA

Project #: 340.101 **Date:** 24 Aug 11 **Biologists:** Laura Tyson

Project Name: Republic **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340R14

Latitude: 41 ° 16 ' 19.6 "N **Longitude:** 82 ° 54 ' 17.5 "W

Roost Name/#: 580-1

Radio-tagged bat present in tree: Yes____ No____ UNK - Tree Found

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Lasionycteris noctivagans **Sex(M/F):** F **Age(Ad/Jv):** AD **Repro.:** NR

Capture date: 29 Jul 2011 **Capture site:** 14 **Frequency:** 172.340

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help *distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to* the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2014 **Departure time:** 2054 **Total Bats:** 14

Emergence Time	Number of Bats	Emergence Aspect
2022	1	
	11	
	11	
2032	++++	
2039	111	
	111	
2040	0	
	0	
	0	
	0	
	0	
	2	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

_____

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ROOST TREE EMERGENCE DATA

Project #: 3+0.01 **Date:** 26Aug **Biologists:** Laura Tyson

Project Name: Republic **State:** OH **County:** Sandusky

GPS Unit #: 7 **Waypoint:** 340 & 14

Latitude: 41 ° 16 ' 19.6 "N **Longitude:** 82 ° 54 ' 17.5 "W

Roost Name/#: 580-1

Radio-tagged bat present in tree: Yes____ **No**____ Unk-Tx'd heard

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Efusc **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture date: 24Sep09 **Capture site:** 14 **Frequency:** 172.580

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help *distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to* the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2001 **Departure time:** 2059 **Total Bats:** ≥2

Emergence Time	Number of Bats	Emergence Aspect
2025	1 (1)	came out the bottom
2027	1111 1 (6)	
2029	1111 1 (6)	Most are circling
2032	1111 (5)	without a break
2036	11 (2)	Were leaving
2038	11 (2)	
2040	2	
2042	3	
2044	0	
2046	0	
2048	0	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

_____

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ROOST TREE DATA

Project #: 340.02 **Date:** 19 July 2011 **Biologists:** E. Basiger; M. Flynn; A. Gantt

Project Name: Republic - Wind **State:** OH **County:** Seneca

GPS Unit #: _____ **Waypoint:** 14 **Camera #:** _____ **Picture #:** 7661 - 7668

Latitude: 41° 09' 53.7"N **Longitude:** 82° 56' 17.4"W

Bat Species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture Date: 18 July 2011 **Capture Site:** 24

Frequency: 172.780 **Roost Name/#:** 780 - 1

ROOST TREE DATA

Roost tree species: dilapidated brick garage dbh: N/A cm

Estimated height from ground to roost: 6 (meters) Tree height N/A (meters)

Exfoliating bark (%): N/A Distance from capture site: _____ m or km (circle one)

Tree health:	__Live	__Dead	__Partial	
Observed roost potential:	__Exfoliating Bark	✓Cracks/crevasses	✓Hollow	__Unknown
Bat vocalizations:	__Yes	✓No		
Guano on ground/foliage:	✓Yes - massive amounts!	__No		
Is guano fresh (if present)?:	✓Yes	__No		
Guano volume (if present):	lots!!			

inside brick building

DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh): Acer saccharum

Subdominant Canopy Species (< 40 cm/16" dbh): _____

Estimated dbh range (cm): Lg: 40 Sm: 40

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated canopy closure at roost: 0 %

Slope: ___Steep ___Moderate ___Slight ✓None Slope aspect: N/A

Subcanopy Clutter: ___Closed ___Moderate ✓Open

Distance to nearest water source: _____ m or km (circle one)

Distance to nearest flight corridor: 0 meters

Habitat Description: small town main street. No forest cover, bounding surrounded by other buildings and fields

Check all that apply:

__Mature Upland Forest	__Recently Logged Forest	✓Crop/Pasture Land	__Shrub/scrub Swamp
__Young Upland Forest	__Pine Plantation	__Stream/River	__Vernal Pool
__Mature Lowland Forest	__Woodlot/ForestEdge	__Emergent Wetland	__Deepwater Lake/Pond
__Young Lowland Forest	__Old Field	__Forested Swamp	✓Other small town building

Comments:

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ROOST TREE EMERGENCE DATA

Project #: 340 **Date:** 19 July 2011 **Biologists:** Alexa Gantt

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: ESI Wpt 670 **Waypoint:** N/A

Latitude: 41 ° 09 ' 53.7 "N **Longitude:** 82 ° 56 ' 17.4 "W

Roost Name/#: 172.780-1 Building

Radio-tagged bat present in tree: Yes X No ___

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture date: 18-Jul-11 **Capture site:** 24 **Frequency:** 172.780

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2130 **Departure time:** 2200 **Total Bats:** 73

Emergence Time	Number of Bats	Emergence Aspect
2130	11	
2132	22	
2134	36	
2136	37	
2138	48	
2140	67	
2142	72	
2144	73	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

Bats dispersed

Transmitted bat left at 2140 hours heading South

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ROOST TREE EMERGENCE DATA

Project #: 340 **Date:** 20 July 2011 **Biologists:** Alexa Lorenz

Project Name: Keystone **State:** OH **County:** Seneca

GPS Unit #: ESI Ute 56 **Waypoint:** NA

Latitude: 41 ° 09 ' 53.7 "N **Longitude:** 82 ° 56 ' 17.1 "W

Roost Name/#: 340-1

Radio-tagged bat present in tree: **Yes** X **No** ____ (Female)

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture date: 18-Jul-11 **Capture site:** 24 **Frequency:** 172.780

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2100 **Departure time:** 2200 **Total Bats:** 93

Emergence Time	Number of Bats	Emergence Aspect
2110	2	
2112	3	
2114	4	
2116	5	
2118	3	
2120	3	
2122	11	
2124	15	
2126	29	
2128	41	
2130	63	
2132	84	
2134	91	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

transmitted bat 421 – 2130, headed East

Bats mostly dispersed in an eastern direction

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 21 Jul 11 **Biologists:** M Flynn

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: 851 46561710 **Waypoint:** 016

Latitude: 41 ° 09 ' 53.7 "N **Longitude:** 82 ° 56 ' 17.4 "W

Roost Name/#: 172.780-1

Radio-tagged bat present in tree: Yes ✓ No ___ (old a)

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: E fuscus **Sex(M/F):** F **Age(Ad/Jv):** AV **Repro.:** NR

Capture date: 16-Jul-11 **Capture site:** 24 **Frequency:** 172.780

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 9:15 **Departure time:** 2200 **Total Bats:** 190 9:25

Emergence Time	Number of Bats	Emergence Aspect
9:16	|| (2)	
9:18	|||| (5)	
9:20	|||| |||| |||| | (11)	
9:22	|||| |||| |||| |||| |||| (25)	
9:24	|||| |||| |||| |||| | (21)	
9:26	|||| |||| |||| (15)	
9:28	|||| |||| |||| |||| (20)	
9:30	|||| |||| |||| |||| || (22)	
32	|||| |||| |||| | (17)	
34	|||| |||| |||| (15)	
36	|||| |||| | (11)	
38	|||| ||| (8)	
40	||| (3)	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

Transmittered bat left 9:25 heading west. Bats emerging headed in all directions

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 22 Jul 2011 **Biologists:** M Flynn

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: ESI 4456710 **Waypoint:** # 016

Latitude: 41 ° 09 ' 53.7 "N **Longitude:** 82 ° 56 ' 11.4 "W

Roost Name/#: 172.780

Radio-tagged bat present in tree: **Yes** ✓ (mid) **No** ____

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: E fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture date: 18 Jul 11 **Capture site:** 24 **Frequency:** 172.780

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2100 **Departure time:** 2200 **Total Bats:** 218

Emergence Time	Number of Bats	Emergence Aspect
9:14	III (3)	
9:16	++++ I (6)	
9:18	++++ ++++ ++++ I (16)	
9:20	++++ ++++ ++++ ++++ ++++ ++++ II (37)	
9:22	++++ ++++ ++++ ++++ ++++ ++++ ++++ (35)	
9:24	++++ ++++ ++++ ++++ ++++ ++++ II (32)	
9:26	++++ ++++ ++++ ++++ ++++ ++++ I (26)	
9:28	++++ ++++ ++++ III	(16)
9:30	++++ ++++ ++++ III	(18)
9:32	II (2)	
9:34	++++ II (7)	
9:36	III (3)	
9:38	IIII (4)	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

_____

_____

_____

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 24 Jul 11 **Biologists:** M Flynn

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: ESI 4165670 **Waypoint:** 016

Latitude: 41 ° 09 ' 53.7 "N **Longitude:** 82 ° 56 ' 17.4 "W

Roost Name/#: 172.780

Radio-tagged bat present in tree: Yes ✓ **No** ____

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: E. Aus. **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NR

Capture date: 14 Jul 11 **Capture site:** 24 **Frequency:** 172.780

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2100 **Departure time:** 2260 **Total Bats:** 156

Emergence Time	Number of Bats	Emergence Aspect
2100	8	
2102	1	
2104		
2106	3	
2109	4	
2110	11	
2112	11	
2114	25	
2116	12	
2118	14	
2120	9	
2122	13	
2124	21	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

Transmittered bat did not emerge. Emerging [illegible]

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ROOST TREE DATA

Project #: 340 **Date:** 25 Jul 11 **Biologists:** J. Basinger

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: ESI 4 **Waypoint:** _____ **Camera #:** Cam 671 **Picture #:** 899-901

Latitude: 41 ° 09 ' 40.3 "N **Longitude:** 83 ° 01 ' 56.9 "W

Bat Species: E. fuscus **Sex(M/F):** F **Age(Ad/Jv):** Jv **Repro.:** NR

Capture Date: 24 Jul 11 **Capture Site:** 30

Frequency: 172.500 **Roost Name/#:** 500-1

ROOST TREE DATA

Roost tree species: Barn dbh: ___ cm

Estimated height from ground to roost: _____ (meters) ~~Tree height~~ _____ (meters)

~~Exfoliating bark (%):~~ _____ Distance from capture site: 7 m or km (circle one)

Tree health: __Live __Dead __Partial

~~Observed roost potential:~~ __Exfoliating Bark __Cracks/crevasses __Hollow __Unknown

Bat vocalizations: __Yes ✓No

Guano on ground/foliage: ✓Yes __No

Is guano fresh (if present)?: ✓Yes __No

Guano volume (if present): light

DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh)

_____

_____

_____

Estimated dbh range (cm): Lg: ____ Sm: ____

Subdominant Canopy Species (< 40 cm/16" dbh)

_____

_____

_____

Estimated dbh range (cm): Lg: ____ Sm: ____

Estimated canopy closure at roost: 0 %

Slope: ___Steep ___Moderate ___Slight ✓None Slope aspect: _____

Subcanopy Clutter: ____Closed ____Moderate ✓Open

Distance to nearest water source: 500 m or km (circle one)

Distance to nearest flight corridor: 0 meters

Habitat Description: _____

Check all that apply:

__Mature Upland Forest __Recently Logged Forest ✓Crop/Pasture Land __Shrub/scrub Swamp
__Young Upland Forest __Pine Plantation __Stream/River __Vernal Pool
__Mature Lowland Forest __Woodlot/ForestEdge __Emergent Wetland __Deepwater Lake/Pond
__Young Lowland Forest __Old Field __Forested Swamp __Other _____

Comments:

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 29 July 11 **Biologists:** J. Basiger

Project Name: Republic **State:** OH **County:** Seneca

GPS Unit #: ESZ 7 **Waypoint:** N/A

Latitude: 41 ° 09 ' 40.3 "N **Longitude:** 82 ° 57 ' 51.7 "W

Roost Name/#: 500-1

Radio-tagged bat present in tree: Yes ✓ **No** ___

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NA

Capture date: 29 July 2011 **Capture site:** 30 **Frequency:** 172.500

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2045 **Departure time:** 2200 **Total Bats:** 14

Emergence Time	Number of Bats	Emergence Aspect
2110	II	
2112	0	
2114	III	
2116	0	
2122	IIII	
2124	II	
2126	II	

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Bat 500 emerged 2122. Flew SE

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** [illegible] **Biologists:** [illegible]

Project Name: Republic **State:** OK **County:** [illegible]

GPS Unit #: [illegible] **Waypoint:** N/A

Latitude: 41 ° 04 ' 23 "N **Longitude:** 82 ° 57 ' 32 6 "W

Roost Name/#: [illegible]

Radio-tagged bat present in tree: Yes ✓ **No** ____

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** N/A

Capture date: 24 July 2019 **Capture site:** 30 **Frequency:** [illegible]

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2042 **Departure time:** 2110 **Total Bats:** _____

Emergence Time	Number of Bats	Emergence Aspect
2053	2	SW
2057	3	[illegible]
2059	4	[illegible]
2101	1	[illegible]
2103	3	[illegible]
[illegible]	1	[illegible]
[illegible]	0	[illegible]
[illegible]	0	[illegible]
[illegible]	0	[illegible]
[illegible]	0	[illegible]
[illegible]	0	[illegible]
[illegible]	3	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmittered bat(s) emerge? What direction did the transmittered bat fly?

[illegible] Northeast [illegible]

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ROOST TREE EMERGENCE DATA

Project #: [illegible] **Date:** 9 Aug 11 **Biologists:** Laura [illegible]

Project Name: Republic **State:** OH **County:** [illegible]

GPS Unit #: 7 **Waypoint:** [illegible]

Latitude: 41 ° 09 ' 40.3 "N **Longitude:** 82 ° 57 ' 51.8 "W

Roost Name/#: [illegible]

Radio-tagged bat present in tree: Yes X **No** [illegible]

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: Eptesicus fuscus **Sex(M/F):** F **Age(Ad/Jv):** JV **Repro.:** NA

Capture date: 14 July 2011 **Capture site:** 30 **Frequency:** [illegible]

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2037 **Departure time:** 2128 **Total Bats:** 12

Emergence Time	Number of Bats	Emergence Aspect
2057	1	W - tree
2109		[illegible]
2113	0	
2120	2	
2121	1	
2123		
2125		
2126	2	
2127	1	
2128	0	
[illegible]	[illegible]	
[illegible]	1	
[illegible]	[illegible]	[illegible]

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

[illegible] were seen [illegible]

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ROOST TREE EMERGENCE DATA

Project #: 340.01 **Date:** 11Aug11 **Biologists:** Laura Tyrell

Project Name: Seneca **State:** OH **County:** Seneca

GPS Unit #: _____ **Waypoint:** _____

Latitude: 41 ° 09 ' 40.3 "N **Longitude:** 82 ° 57 ' 51.8 "W

Roost Name/#: 500-1

Radio-tagged bat present in tree: Yes____ No____ Ty not heard today

Complete the following information only if a radio-tagged bat is present in the roost

Bat species: E. fuscus **Sex(M/F):** F **Age(Ad/Jv):** Jv **Repro.:** NR

Capture date: 24July11 **Capture site:** 30 **Frequency:** 72.500

NOTE: Tallies of bat exits should be made at 2-minute intervals. Use the back lighting of the setting sun to help distinguish bats as silhouettes against the sky as they exit the roost. Please ensure that you are close enough to the roost to observe all exiting bats, but not close enough to influence emergence (do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2032 **Departure time:** 2118 **Total Bats:** _____

Emergence Time	Number of Bats	Emergence Aspect
2050	1	W, fairly close
2052	2	
2054	3	
2056	2	
2058	2	
2100	1	
02	0	
04	1	
06	0	
08	0	
10		
12	2	
14		

Describe emergence: Did bats emerge simultaneously, fly off in the same direction, loiter, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?

Ty not heard today (Baine and I, we [illegible]
[illegible] might have

APPENDIX D
PHOTOGRAPHS

Site 2

Site 3

Site 4

Site 10

Site 12

Site 14

Site 23

Site 26

Site 30

Site 31

Big brown bat (*Eptesicus fuscus*)

Northern bat (*Myotis septentrionalis*)

Eastern red bat (*Lasirius borealis*)

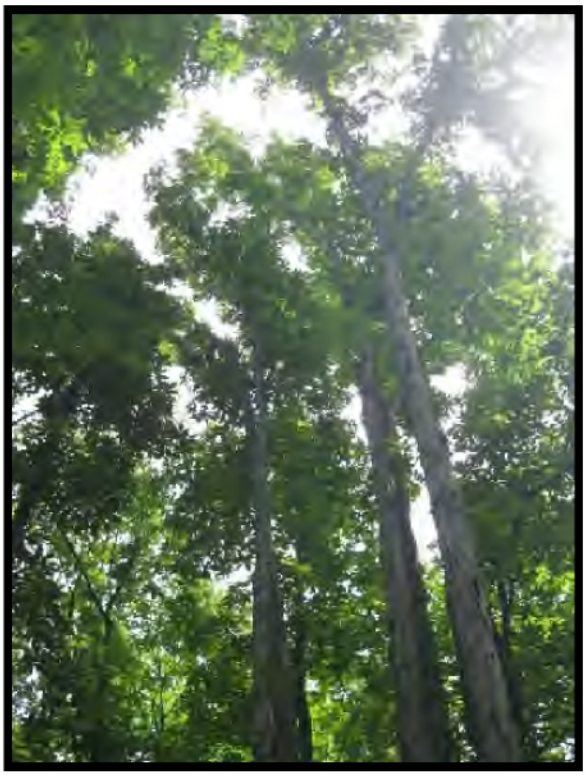
Little brown bat (*Myotis lucifugus*)

Hoary bat (*Lasiurus cinereus)*

Tri-colored bat (*Perimyotis subflavus*)

Evening bat (*Nycticeius humeralis*)

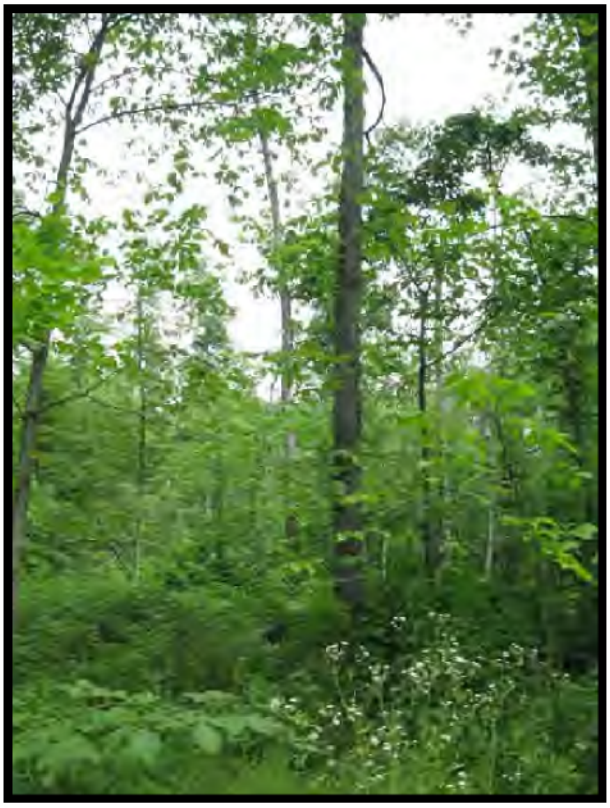
Indiana bat (*Myotis sodalis*)



Indiana bat roost 218-1

Indiana bat roost 218-2

Indiana bat roost 218-3



Indiana bat roost 218-4

Indiana bat roost 218-5

Indiana bat roost 218-6

Big brown bat roost 740-1

Big brown bat roost 780-1

Big brown bat roost 239-1

Big brown bat roost 118-1

Big brown bat roost 500-1

Big brown bat roost 285-1

Big brown bat roost 580-1

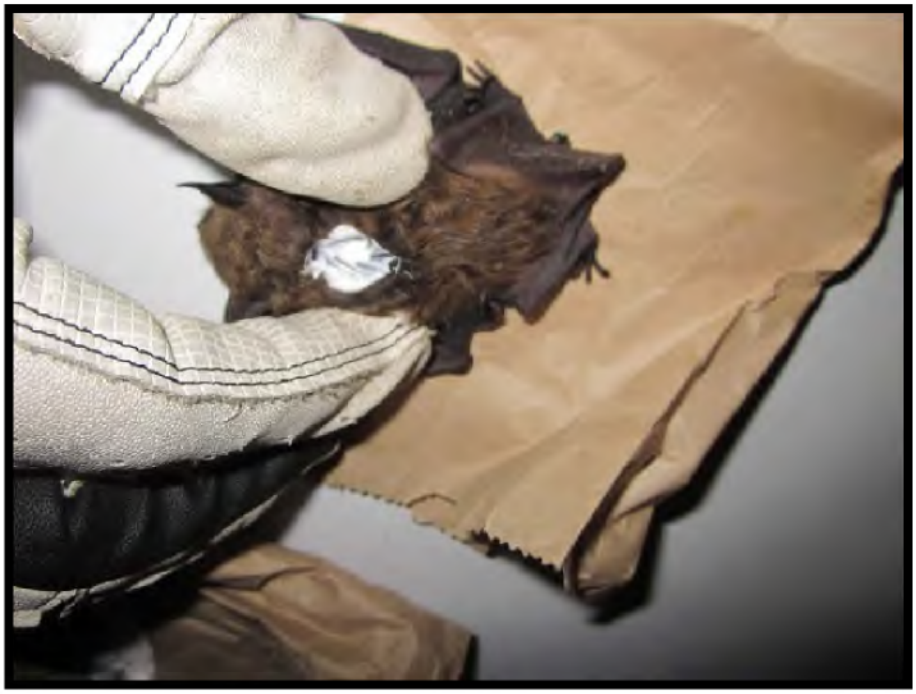
Bat 950

Bat 740

Bat 122

Bat 118

Bat 225



Bat 239

Bat 218

Summary: Application Exhibit Q Part 8 of 8 electronically filed by Teresa Orahood on behalf of Dylan F. Borchers