



## NET SITE HABITAT DESCRIPTION

Project #: 340.02 Date: 15 July 2011 Biologists: F. Pasquel, S. Rouns  
Project Name: Tetrastich Republic Site Name/#: Site 24  
State: OH County: Seneca USGS Quad: Fireside  
Camera #: FBK004 Picture #s: 3018 - 3023 GPS Unit #: E9528 Waypoint #: 34028  
Latitude: 41° 09' 56.5" N Longitude: 82° 56' 51.9" W  
Distance to closest water source (meters): 400m Type of water source: ditch  
Water source name: unamed ditch / ephemeral stream

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS):

Bank Height: N/A meters Channel Width: N/A meters Stream Width: N/A meters  
Substratum: N/A Bedrock    Boulder    Cobble    Gravel    Sand    Silt/Clay  
Still Water Present (Y/N): N/A Average Water Depth: N/A m or cm Clarity (H,M,L): N/A

### VEGETATION:

Dominant Canopy Species (> 40 cm/16" dbh) Subdominant Canopy Species (< 40 cm/16" dbh)  
Quercus palustris Carya amara  
Quercus alba Acer rubrum  
Fraxinus pennsylvanica Acer saccharum

Estimated dbh range: Lg: 90cm Sm: 40cm Estimated dbh range: Lg: 30cm Sm: 15cm

Relative abundance of dominant vs. subdominant (ratio): 1:10

Estimated canopy closure:    Closed    Moderate    Open  
Roost tree potential consists of:    Large Trees    Snags    Both    Neither  
Roost tree potential for the area is:    High    Moderate    Low

Roost potential comments: birds very small

Subcanopy clutter:    Closed    Moderate    Open  
Subcanopy comprised largely of:    Lower Branches of Canopy Trees    Saplings    Shrubs

Common Subcanopy Species: Carpinus caroliniana  
Cornus sp.

Habitat Description: Mature mesic woodlot with few shrubs and open  
subcanopy near agricultural 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/Forest Edge    Emergent Wetland    Deepwater Lake/Pond  
   Young Lowland Forest    Old Field    Forested Swamp    Other   

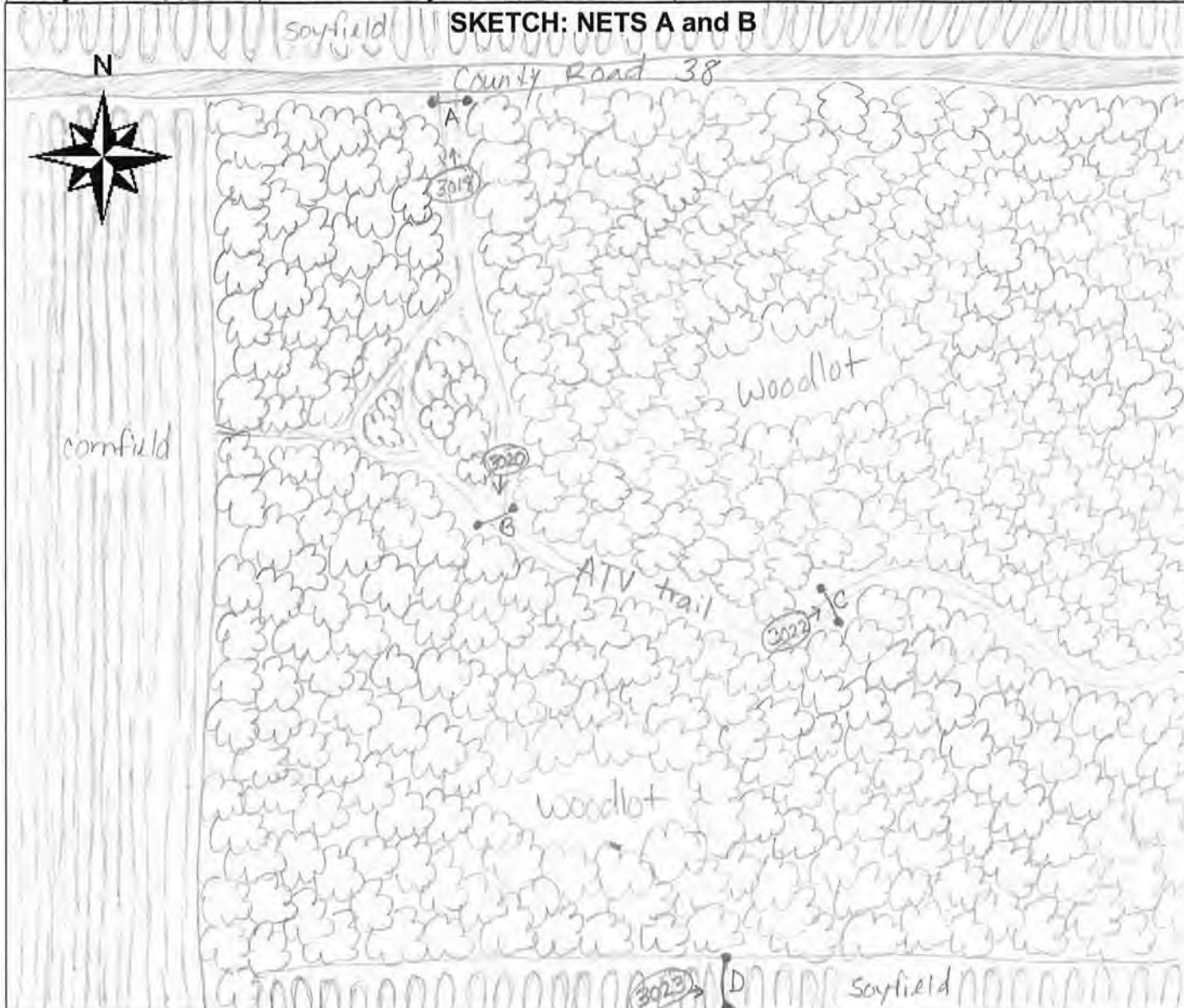
Herbaceous Cover:    Sparse    Moderate    Dense




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# NET SITE HABITAT DESCRIPTION (continued)

Project #: 340.02	State/County: OH/Seneca	Site Name/#: Site 24	Initials: SR
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LEGEND	COMMENTS
<p>Nets: ● — ●</p> <p>Photo Angle: </p>	<p>N/A</p> <p> </p> <p> </p> <p> </p> <p> </p>



# BAT CAPTURE DATA

Project #: 340.02 Date: 15 July 2011  
 Project Name: Tetratech Republic  
 Biologists: E. Casper, S. Owens Site name/ #: Site 24  
 State: Ohio County: Seneca  
 GPS Unit #: E9528 Camera #: EB Kodak

## WEATHER DATA

Time (xxxx h)	Temp (°C)	Wind Speed (estimated - see chart)*	% Cloud Cover (estimated)	Comments
2100	24.5	1-3	0%	—
2130	22.9	1-3	0%	—
2200	22.4	1-3	0%	—
2230	21.6	0	0%	—
2300	21.4	0	0%	—
2330	21.4	0	0%	—
0000	21.2	0	0%	—
0030	20.9	0	0%	—
0100	21.0	0	0%	—
0130	20.8	0	0%	—
0200	20.6	0	0%	—

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Length (m)	Height (m)	Time Up (xxxx h)	Time Down (xxxx h)	Picture #	Waypoint #
Net	B	41° 10' 6.81" N	82° 56' 50.4" W	6.2	6.2	2045	0145	3018	039
Net	B	41° 10' 4.6" N	82° 56' 49.8" W	6.2	6.2	2050	0150	3020	040
Net	C	41° 10' 4.1" N	82° 56' 47.6" W	9	9.2	2055	0155	3022	041
Net	D	41° 10' 1.9" N	82° 56' 48.8" W	18	9.2	2100	0200	3023	042

Net Placement/Site Description: Nets & P. 40 over ATV trail in woodlot, Net D out into soyfield

Capt #	Net/Trap	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	B	<i>Myotis septentrionalis</i>	2145	Ad	M	↑	6.0	36	E	0	2973 - 2978	
2	C	<i>Eptesicus fuscus</i>	2200	Ad	F	PL	18.2	46	E	0	N/A	
3	C	<i>E. fuscus</i>	2206	Ad	F	PL	19.0	49	F	1	2980-2981, few spots	
4	D	<i>E. fuscus</i>	2210	Jv	M	↑	9.9	40	M	0	N/A	
5	D	<i>E. fuscus</i>	2210	Jv	M	↑	11.9	45	M	1	spotting	
6	D	<i>E. fuscus</i>	2210	Jv	M	↑	11.2	43	M	0	N/A	
7	D	<i>E. fuscus</i>	2210	Ad	F	PL	18.0	48	M	0	2982	
8	D	<i>E. fuscus</i>	2210	Ad	M	↓	17.3	43	M	0	N/A	
9	C	<i>M. septentrionalis</i>	2250	Ad	F	PL	17.0	36	M	0	N/A	

\* Reproductive Condition: Female = NR PG L PL; Male = ↑ ↓ \* Refer to table on the back





# BAT CAPTURE DATA (continued)

Project #: 340.02

Date: 15 July 2011

Project Name: Tatrotech Republic

Site Name: Site 24

Initials: EG, SR

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # / Guano/Hair Sample	Comments
10	D	Eptesicus fuscus	2250	Ad	F	PL			F			Escaped hand
11	D	E. fuscus	2250	Jv	F	NR	13.8	45	M	1		Spotting
12	D	E. fuscus	2255	Jv	F	NR	11.0	44	M	1		Spotting
13	B	Myotis sp. (intermedia)	2300	Ad	F	PL	7.1	30	M	0		N/A
14	B	E. fuscus	2300	Ad	F	PL	23.2	45	F	0		N/A
15	C	E. fuscus	2325	Ad	M	PL	17.2	44	M	0		N/A
16	C	E. fuscus	2335	Ad	F	PL	20.2	45	F	0		One small hole
17	D	E. fuscus	2330	Jv	F	NR	14.9	46	M	1		Parasites (mites) on wings
18	C	E. fuscus	2335	Ad	F	L	22.0	47	F	1		Wing scars on face
19	C	E. fuscus	0000	Ad	M	PL	16.0	45	F	0		N/A
20	C	E. fuscus	0000	Ad	F	PL	19.5	47	M	1		Spotting
21	C	E. fuscus	0005	Jv	M	PL	14.5	46	M	0		Parasites (mites) on wings
22	D	E. fuscus	0035	Ad	F	PL	21.1	49	F	0		N/A
23	D	E. fuscus	0035	Ad	F	PL	20.3	48	M	0		Parasites on wings
24	D	E. fuscus	0035	Jv	F	NR	14.9	49	M	0		N/A
25	C	E. fuscus	0110	Ad	F	PL	19.3	49	M	0		N/A
26	C	E. fuscus	0110	Ad	F	PL			F	0		Escaped Net
27	C	E. fuscus	0135	Ad	F	PL	24.2	46	F	0		N/A

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind left on face, leaves rustle, ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion, wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper, small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway, crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion, telephone wires whistle, umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion, inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees, generally impedes progress

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.



# BAT CAPTURE DATA

Project #: 340.02 Date: 19 July 2011  
 Project Name: Tetrotech Republic  
 Biologists: E. Bassinger, S. L. Capitan Site name#: S4024  
 State: Ohio County: Seneca  
 GPS Unit #: E9528 Camera #: EB Kodak

## WEATHER DATA

Time (xxxx h)	Temp (°C)	Wind Speed (estimated - see chart)*	% Cloud Cover (estimated)	Comments
2100	24.5	1-3	0%	
2130	23.7	4-7	0%	
2200	23.7	4-7	10%	
2230	23.8	4-7	20%	
2300	24.0	4-7	100%	
2330	24.2	8-10	100%	
0000	24.4	4-7	100%	
0030	24.6	8-10	100%	
0100	24.9	4-10	75%	
0130	24.8	4-7	75%	
0200	24.8	4-7	50%	

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Length (m)	Height (m)	Time Up (xxxx h)	Time Down (xxxx h)	Picture #	Waypoint #
Net	A	41° 10' 12.8" N	82° 56' 50.4" W	6	6.2	2045	0145	3018	039
Net	B	41° 10' 4.6" N	82° 56' 49.8" W	6	6.2	2050	0150	3020	040
Net	C	41° 10' 4.1" N	82° 56' 47.5" W	9	9.2	2055	0155	3022	041
Net	D	41° 10' 1.9" N	82° 56' 48.8" W	18	9.2	2100	0200	3023	042

Net Placement/Site Description: Nets A, B, & C across ATV trail in woodlot. Net D out in sandfield from woodlot

Capt #	Net/Trap	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # Guano/Hair Sample	Comments
1	B	<i>Myotis septentrionalis</i>	2140	Ad	F	PL	6.2	35	M	0	N/A	
2	B	<i>M. septentrionalis</i>	2140	Jv	M	↑	6.2	35	M	0	N/A	
3	C	<i>E. fuscus</i>	2150	Jv	F	NR	15.8	48	M	1	few spots	172.780
4	C	<i>E. fuscus</i>	2220	Ad	F	PL	17.4	47	F	0	N/A	
5	C	<i>E. fuscus</i>	2225	Ad	M	↓					Recapture	
6	C	<i>E. fuscus</i>	2225	Ad	F	PL	16.3	45	M	0	N/A	
7	C	<i>E. fuscus</i>	2225	Jv	M	↑	15.8	46	M	0	N/A	
8	C	<i>E. fuscus</i>	2234	Jv	M	↑	14.5	46	M	0	N/A	
9	C	<i>E. fuscus</i>	2237	Ad	F	PL	19.7	47	F	0	N/A	

\* Reproductive Condition: Female = NR PG L PL, Male = ↑ ↓ \* Refer to table on the back



# BAT CAPTURE DATA (continued)

Project #: 3610002

Date: 18 July 2011

Project Name: Tetratich Republic

Site Name#: City 24

Initials: E.B.S.C.S.R.

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
10	B	E. fuscus	2239	Jv	M	↑	12.5	43	F	0	N/A	
11	D	E. fuscus	2245	Jv	F	NR	13.3	45	E	0	N/A	
12	A	E. fuscus	2320	Jv	F	NR	13.6	46	M	0	N/A	
13	A	E. fuscus	2325	Ad	M	↑	13.5	45	E	0	N/A	
14	A	E. fuscus	2325	Jv	M	↑	13.9	43	M	0	N/A	
15	A	E. fuscus	2325	Ad	F	PL	14.8	44	F	1	Spotting membrane	
16	A	E. fuscus	2325	Jv	M	↑	15.1	45	F	0	N/A	
17	A	E. fuscus	2325	Ad	F	PL	15.1	41	M	0	3076-27	
18	A	E. fuscus	2352	Jv	M	↑	16.3	46	M	0	N/A	
19	B	Myotis septentrionalis	2355	Ad	F	PL	7.0	35	M	0	Colony on roosting	
20	B	E. fuscus	2402	Jv	M	↑	14.6	45	M	0	N/A	
21	B	E. fuscus	0000	Ad	F	PL	19.9	44	F	0	Hair 3012-20-20-20	
22	C	E. fuscus	0000	Ad	F	PL	22.2	48	F	0	N/A	
23	C	E. fuscus	0000	Ad	M	↓	5.8	45	M	0	N/A	
24	C	E. fuscus	0005	Jv	F	NR	13.7	44	F	0	N/A	
25	C	E. fuscus	0005	Jv	F	NR	22.5	54	M	0	3012-3031	

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face, leaves rustle, ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion, wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper, small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway, crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion, telephone wires whistle, umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion, inconvenience in walking against wind
39-45	Fresh Gale	Breaks twigs off trees, generally impedes progress

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes
1	Light damage. Less than 50% of light membrane is depigmented (spotting) which is often visible only with transillumination
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding pleuropatagium and/or chiroptagium are evident





## NET SITE HABITAT DESCRIPTION

Project #: 340 Date: 10-3-11 Biologists: D. Casinger

Project Name: Republic Site Name/#: 26

State: OH County: Seneca USGS Quad: Fireside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
<u>A</u>	<u>N</u>	<u>41° 10' 32.1"N</u>	<u>82° 55' 54.5"W</u>	<u>857</u>	
<u>B</u>	<u>N</u>	<u>41° 10' 31.3"N</u>	<u>82° 55' 54.7"W</u>	<u>858</u>	
<u>C</u>	<u>N</u>	<u>41° 10' 29.6"N</u>	<u>82° 55' 52.1"W</u>	<u>859</u>	
<u>D</u>	<u>N</u>	<u>41° 10' "N</u>	<u>82° 55' 53.1"W</u>	<u>860</u>	

Distance to closest water source (meters): 50 Type of water source: stream

Water source name: \_\_\_\_\_

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS): N/A

Bank Height: \_\_\_\_\_ meters Channel Width: \_\_\_\_\_ meters Stream Width: \_\_\_\_\_ meters

Substratum: \_\_\_\_\_ Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Silt/Clay

Still Water Present (Y/N): \_\_\_\_\_ Average Water Depth: \_\_\_\_\_ m or cm Clarity (H,M,L): \_\_\_\_\_

### VEGETATION:

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

Quercus alba  
Acer rubrum

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

Acer rubrum  
Acer saccharum  
Fraxinus pennsylvanica

Estimated dbh range: Lg: 65 Sm: 40

Estimated dbh range: Lg: 39 Sm: 10

Relative abundance of dominant vs. subdominant (ratio): 1:35

Estimated canopy closure: ✓ Closed \_\_\_\_\_ Moderate \_\_\_\_\_ Open \_\_\_\_\_

Roost tree potential consists of: ✓ Large Trees \_\_\_\_\_ ✓ Snags \_\_\_\_\_ Neither \_\_\_\_\_

Roost tree potential for the area is: \_\_\_\_\_ High \_\_\_\_\_ Moderate \_\_\_\_\_ ✓ Low

Roost potential comments: Tight bark

Subcanopy clutter: \_\_\_\_\_ Closed \_\_\_\_\_ ✓ Moderate \_\_\_\_\_ Open \_\_\_\_\_

Subcanopy comprised largely of: ✓ Lower Branches of Canopy Trees \_\_\_\_\_ ✓ Saplings \_\_\_\_\_ Shrubs \_\_\_\_\_

Common Subcanopy Species: \_\_\_\_\_

Habitat Description: Large Woodlot surrounded by crop land

AnaBat Habitat: N/A

Check all that apply:

✓ Mature Upland Forest \_\_\_\_\_ Recently Logged Forest ✓ Crop/Pasture Land \_\_\_\_\_ Other \_\_\_\_\_  
\_\_\_\_ Young Upland Forest ✓ Forest Edge ✓ Stream/River \_\_\_\_\_  
✓ Mature Lowland Forest ✓ Woodlot \_\_\_\_\_ Vernal Pool \_\_\_\_\_  
\_\_\_\_ Young Lowland Forest \_\_\_\_\_ Old Field \_\_\_\_\_ Deepwater Lake/Pond \_\_\_\_\_

Herbaceous Cover: \_\_\_\_\_ Sparse \_\_\_\_\_ Moderate \_\_\_\_\_ Dense



# NET SITE HABITAT DESCRIPTION (continued)

Project #: 340.02	State/County: OH/Seneca	Site Name/#: 26	Initials:
<b>SKETCH: NETS A and B and AnaBat (if used)</b>			
<p>The sketch is a hand-drawn map of a field. A horizontal road labeled 'TR 136' runs across the middle. A vertical creek labeled 'Cr 27' runs along the left side. A 'Wood lot' is located in the center-right, with four points marked: A (top right of wood lot), B (middle right), C (bottom right), and D (bottom left). 'ATV Trails' are indicated by lines leading to points A, B, and C. The word 'Crops' is written in three locations: top left, middle left, and bottom center. A north arrow is in the top left corner. Two small boxes with 'H' and 'B' are near the road on the left.</p>			
<b>LEGEND</b>		<b>COMMENTS</b>	
Nets: ● — ●		<hr/> <hr/> <hr/> <hr/> <hr/>	





## BAT CAPTURE DATA

Project #: 340.01 Date: 15 Jul 2011  
 Project Name: Republic  
 State: OH County: Seneca  
 Biologists: J. Baizer & M. Flynn  
 Site name#: 210  
 GPS Unit #: 8145670 Camera #: 051671

### MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2150	23.6	1-3		60%	
2130	23	0		60%	
2200					
2230					
2300					
2330					
0000	21.7	0		40%	
0030					
0100					
0130		0			
0200				100%	

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	net	41° 10' 32.4" N	82° 55' 54.5" W	9	9	2030	153	857
B	net	41° 10' 31.3" N	82° 55' 54.9" W	6	6	2035	200	858
C	net	41° 10' 29.6" N	82° 55' 52.1" W	9	6	2040	205	859
D	net	41° 10'	82° 55' 53.7" W	6	6	2045	210	860

### Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # / Guano/Hair Sample	Comments
1	B	Eptesicus fuscus	2130	Ad	F	PL	17	45	E	0	825	
2	C	Myotis septentrionalis	2130	Ad	F	PL	6.75	37	E	0	*826, 829	
3	A	E. fuscus	2200	Ad	F	PL	21	50	F	0		
4	A	E. fuscus	2230	Jv	F	NK	14.25	44	M	0		
5	A	E. fuscus	2230	Jv	M	↑	10.75	46	M	0		
6	B	E. fuscus	2230	Ad	F	PL	24.5	48	F	0		
7	D	E. fuscus	2230	Ad	F	PL	24.75	47	M	0		
8	C	E. fuscus	2230	Jv	M	↑	19	45	M	0		
9	C	E. fuscus	2230	Ad	F	PL	19	47	M	0		
10	C	E. fuscus	2230	Ad	M	↓	17.5	46	M	0	*	

\* M = Monofiliament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap; A = Anabat

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = T/L



# BAT CAPTURE DATA (continued)

Project #: 340.01 Date: 15 Jul 2011

Project Name: Republic Site Name#: 26

Initials:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments	Picture # /Guano/Hair Sample
11	C	E. fuscus	2230	Ad	F	PL	18.5	44	M	0		
12	C	E. fuscus	2230	JV	M	↑	15.75	44	M	0		
13	C	E. fuscus	2230	Ad	M	↓	18.5	44	F	0	*	
14	C	E. fuscus	2230	Ad	F	PL	17.5	44	M	0		
15	C	E. fuscus	2230	Ad	M	↓	16.25	47	M	0	*	
16	C	E. fuscus	2230	Ad	M	↓	18	44	F	0	*	
17	C	E. fuscus	2230	Ad	F	PL	18	48	E	0		
18	D	E. fuscus	2300	JV	F	NR	14	47	M	0		
19	A	E. fuscus	2300	JV	F	NR	12.75	43	M	0		
20	B	E. fuscus	2300	Ad	F	PL	24	48	F	0		
21	C	E. fuscus	2300	Ad	F	PL	18.75	45	F	0	*	
22	C	E. fuscus	2300	Ad	M	↓	17	45	F	0		
23	C	E. fuscus	2300	Ad	F	PL	20.0	44	F	0		
24	C	E. fuscus	2300	Ad	F	PL	21	44	F	0		
25	C	E. fuscus	2300	Ad	F	PL	22	45	F	0		
26	D	E. fuscus	2300	Ad	M	↑	18.25	43	F	0	*	
27	D	E. fuscus	2300	Ad	F	PL	24.25	47	F	0	172.740	
28	B	E. fuscus	2345	Ad	M	↓	17.25	44	F	0	*	
29	B	E. fuscus	2345	Ad	M	↑	16.5	46	F	0		

## Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

## 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 16	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

## Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.



# BAT CAPTURE DATA (continued)

Project #: 346.01 Date: 15 JUL 2011

Project Name: REPUBLIC Site Name#: 2L

Initials:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments
30	C	E. fuscus	0615	Ad	F	PL	28	44	F	0	
31	B	E. fuscus	0615	Jv	M	↑	2025	47	F	0	
32	B	E. fuscus	0615	Ad	F	PL	22	47	F	0	
33	D	M. septentrionalis	0600	Ad	F	L	6	34	M	0	
34	D	M. septentrionalis	0600	Jv	F	NA	5.25	36	E	0	
35	D	M. septentrionalis	0600	Ad	F	PL	6.75	34	M	0	
36	D	E. fuscus	0600	Ad	F	PL	20.25	45	F	0	
37	D	E. fuscus	0600	Ad	F	PL	17.5	45	F	0	
38	D	E. fuscus	0600	Jv	M	↑	15	47	M	0	
39	B	E. fuscus	0630	Ad	F	PL	21.5	47	F	0	
40	B	E. fuscus	0630	Ad	F	PL	21.25	49	F	0	
41	B	E. fuscus	0600	Ad	F	PL	24	45	M	0	
42	D	E. fuscus	0600	Ad	F	PL	-	-	F	-	escape
43	C	E. fuscus	0600	Ad	F	PL	21.75	51	F	0	
44	C	M. septentrionalis	0600	Jv	F	NR	6	35	E	0	
45	C	E. fuscus	0600	Ad	F	PL	2.5	47	M	0	

## Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

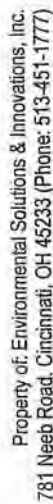
## 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

## Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spitching), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spitching). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.





### WEATHER DATA

Date: 18 July 2011

Project Name: Republic

County: Seneca

**Biologists:** Jacke Basiger, Megan Flynn, Alexi Banitt

Site name/#: 20

Camera #: 60257

\_\_\_\_\_ New moon  
 \_\_\_\_\_ Waxing gibbous  
 \_\_\_\_\_ Last quarter

☒ First quarter  
☐ Waning gibbous

## WEATHER DATA

[illegible]

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	Net	41° 10' 32.1" N	82° 55' 54.5" W	9	9	2100	0155	857 ✓
B	Net	41° 10' 31.5" N	82° 55' 54.9" W	6	9	2045	200	858 ✓
C	Net	41° 10' 31.6" N	82° 55' 57" W	9	6	2050	205	859 ✓

## Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments Picture # /Guano/Hair Sample
1	C	<i>Icthyophaga borealis</i>	2130	Jv	F	NR	8.25	38	E	0	BUS
2	A	<i>Eptesicus fuscus</i>	2200	Ad	F	PL	21.0	45	M	0	
3	A	<i>Eptesicus fuscus</i>	2200	Ad	M	J	17.5	40	M	0	
4	A	<i>Eptesicus fuscus</i>	2200	Ad	F	PL	18.5	40	M	1	
5	C	<i>Eptesicus fuscus</i>	2240	Jv	F	NR	15.5	44	M	0	
6	C	<i>Eptesicus fuscus</i>	2230	Jv	M	J	12.0	45	M	0	
7	B	<i>Eptesicus fuscus</i>	2227	Jv	F	NR	15.0	46	M	0	
8	A	<i>Eptesicus fuscus</i>	2235	Ad	F	PL	22.0	49	F	0	
9	A	<i>Icthyophaga borealis</i>	2225	Jv	F	N	10.0	42	M	0	
10	D	<i>Eptesicus fuscus</i>	2230	Ad	M	J	19.5	45	F	0	

<sup>1</sup> M = Monofilament. ON = Old Nylon. NN = New Nylon. HT = Harp Trap. A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓

ants

Page 1 of 1

0





## BAT CAPTURE DATA (continued)

Project #:

Date:

Project Name:

Site Name/ID:

Initials:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
11	A	Eptesicus fuscus	2225	JV	F	NR	18.0	44	F	0		
12	D	Myotis septentrionalis	2230	JV	M	NR	5.0	32	M	0		
13	A	Eptesicus fuscus	2307	Ad	M	↑	16.0	41	M	0		
14	D	Eptesicus fuscus	2310	JV	F	NR	20.0	49	F	0		
15	C	Eptesicus fuscus	2310	Ad	F	PL	20.5	47	F	0		
16	C	Eptesicus fuscus	2310	Ad	M	↓	18.0	48	F	0		
17	C	Eptesicus fuscus	2310	Ad	F	PL	20.5	47	F	0		
18	C	Eptesicus fuscus	2348	Ad	F	PL	27.5	49	F	0		
19	C	Eptesicus fuscus	2349	JV	M	↑	16.5	47	F	0		
20	C	Eptesicus fuscus	2350	JV	M	↑	13.0	44	F	0		
21	A	Eptesicus fuscus	2425	JV	M	↑	15.0	44	F	0		
22	A	Eptesicus fuscus	2425	JV	M	↑	15.0	49	F	0		
23	A	Eptesicus fuscus	2425	JV	F	NR	15.0	47	F	0		
24	B	Eptesicus fuscus	2430	Ad	F	PL	21.5	47	F	0		
25	C	Eptesicus fuscus	2435	JV	M	NR	15.5	44	M	0		

### Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
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13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

### 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

### Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 on diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.





## NET SITE HABITAT DESCRIPTION

Project #: 340-02 Date: 16 July 2011 Biologists: V. Brack, J. Reeves  
Project Name: Tetratech Republic Site Name/#: Site 27  
State: OH County: Seneca USGS Quad: Fireside  
Camera #: 6-1 Picture #s: 0190-0218 GPS Unit #: G7406 Waypoint #: 340  
Latitude: 41° 09' 27.1" N Longitude: 82° 59' 20.5" W  
Distance to closest water source (meters): 5m Type of water source: pond  
Water source name: unmarked private pond

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS):

Bank Height: N/A meters Channel Width: N/A meters Stream Width: N/A meters  
Substratum: N/A Bedrock      Boulder      Cobble      Gravel      Sand      Silt/Clay  
Still Water Present (Y/N): N/A Average Water Depth: N/A m or cm Clarity (H,M,L): N/A

### VEGETATION:

Dominant Canopy Species (> 40 cm/16" dbh)	Subdominant Canopy Species (< 40 cm/16" dbh)
<u>Quercus bicolor</u>	<u>Fraxinus pennsylvanica</u>
<u>Fraxinus pennsylvanica</u>	<u>Quercus prinus</u>
<u>Quercus palustris</u>	<u>Acer spicatum</u>

Estimated dbh range: Lg: 120cm Sm: 40cm Estimated dbh range: Lg: 31cm Sm: 18cm

Relative abundance of dominant vs. subdominant (ratio): 1:25

Estimated canopy closure: ☒ Closed ☐ Moderate ☐ Open  
Roost tree potential consists of: ☐ Large Trees ☐ Snags ☒ Both ☐ Neither  
Roost tree potential for the area is: ☐ High ☒ Moderate ☐ Low  
Roost potential comments: high side of moderate, leaning toward high  
Subcanopy clutter: ☐ Closed ☐ Moderate ☐ Open  
Subcanopy comprised largely of: ☐ Lower Branches of Canopy Trees ☐ Saplings ☐ Shrubs

Common Subcanopy Species: Acer spicatum Fraxinus pennsylvanica

Habitat Description: Mature woodland with 2 ponds & rubber incense, agriculture nearby

### Check all that apply:

<input type="checkbox"/> Mature Upland Forest	<input type="checkbox"/> Recently Logged Forest	<input checked="" type="checkbox"/> Crop/Pasture Land	<input type="checkbox"/> Shrub/scrub Swamp
<input type="checkbox"/> Young Upland Forest	<input type="checkbox"/> Pine Plantation	<input type="checkbox"/> Stream/River	<input type="checkbox"/> Vernal Pool
<input type="checkbox"/> Mature Lowland Forest	<input checked="" type="checkbox"/> Woodlot/Forest Edge	<input type="checkbox"/> Emergent Wetland	<input checked="" type="checkbox"/> Deepwater Lake/Pond
<input type="checkbox"/> Young Lowland Forest	<input type="checkbox"/> Old Field	<input type="checkbox"/> Forested Swamp	<input checked="" type="checkbox"/> Other <u>grassland</u>

Herbaceous Cover: ☐ Sparse ☐ Moderate ☒ Dense



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

## NET SITE HABITAT DESCRIPTION (continued)

Project #: 340.02	State/County: Seneca / OH	Site Name/ #: Site 27	Initials: SR
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### SKETCH: NETS A and B



#### LEGEND

Nets: ● — ●

Fence: + + + +

Cabin: ☐

#### COMMENTS






# BAT CAPTURE DATA

Project #: 340-02 Date: 16 July 2011  
 Project Name: Tetratech Republic  
 Biologists: VBrack, S. Lewis Site name#: 5-10-27  
 State: Ohio County: Summit  
 GPS Unit #: G74016 Camera #: C16209

## WEATHER DATA

Time (xxxx h)	Temp (°C)	Wind Speed (estimated - see chart)*	% Cloud Cover (estimated)	Comments
2100	23.9	0	0%	
2130	22.9	0	0%	
2200	22.7	0	0%	
2230	21.7	0	0%	
2300		1-3	0%	
2330	22.5	1-3	0%	
0000	21.8	1-3	0%	
0030	21.6	1-3	0%	
0100	21.4	1-3	0%	
0130	21.2	1-3	0%	
0200	21.4	1-3	0%	

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Length (m)	Height (m)	Time Up (xxxx h)	Time Down (xxxx h)	Picture #	Waypoint #
Net	A	41° 29' 20.1" N	82° 59' 20.5" W	6	6.2	2045	0145	0190	021
Net	B	41° 30' 20.0" N	82° 59' 22.2" W	6	6.2	2050	0150	0191	022
Net	C	41° 09' 30.1" N	82° 59' 22.1" W	9	6.2	2055	0155	0203	023
Net	D	41° 30' 22.0" N	82° 59' 22.0" W	12	9.2	2100	0200	0218	024

Net Placement/Site Description: Notes A, B, C, D across road with closed canopy in wooded lot. Net D across road with closed canopy in wooded lot.

Capt #	Net/Trap	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	D	<i>Losiaurus borealis</i>	2120	Jv	F	NR	10.0	41	E	0	109-0209	
2	D	<i>Li. borealis</i>	2120	Jv	F	NR	8.7	40	E	0	N/A	
3	D	<i>Eptesicus fuscus</i>	2150	Ad	F	PL	18.1	40	F	1	0210-0211	
4	D	<i>E. fuscus</i>	2150	Ad	F	PL	16.8	43	E	2	0212 (hatched sacs)	
5	D	<i>E. fuscus</i>	2210	Ad	M	1/2	15.5	44	M	1	Sticking all over	
6	D	<i>E. fuscus</i>	2210								Expanded Net	
7	D	<i>E. fuscus</i>	2210								Expanded Net	
8	D	<i>E. fuscus</i>	2235	A	F	PL	19.9	45	F	1		
9	D	<i>E. fuscus</i>	2235	Ad	M	↓	17.8	46	F	0		

\* Reproductive Condition. Female = NR PG L PL: Male = ↑ ↓ \* Refer to table on the back



# BAT CAPTURE DATA (continued)

Project #: Texas Tech Republic Date: 16 July 11 Initials: VB/SR

Project Name: 340.02 Site Name: C6209

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
10		<i>E. fuscus</i>	2335	Jv	M	↑	15.0	46	M	0	—	—
11		<i>L. borealis</i>	2315	Ad	M	1/2 ↓	17.5	45	F	1	—	Escaped
12		<i>E. fuscus</i>	2320	Jv	F	↑	7.0	36	E	0	0213/0214	—
13		<i>M. septentrionalis</i>	2340	A	M	↑	7.2	36	F	0	—	—
14		<i>M. septentrionalis</i>	2350	Jv	M	↑	15.1	35	M	0	—	—
15		<i>E. fuscus</i>										

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle, ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Detriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding pleuropatagium and/or chiroptagium are evident.



# BAT CAPTURE DATA

Project #: 340.02 Date: 26 July 2011  
 Project Name: Tetra Tech / Republic  
 Biologists: D. Jettcott Site name/ID: Site 27  
 State: OH County: Seneca  
 GPS Unit #: 67806 Camera #: 6-1

## WEATHER DATA

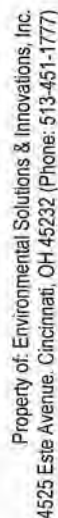
Time (xxxx h)	Temp (°C)	Wind Speed (estimated - see chart)*	% Cloud Cover (estimated)	Comments
2100	21.9	—	10%	—
2130	22.1	—	10%	—
2200	22.1	—	10%	—
2230	21.8	—	0	—
2300	21.4	—	0	—
2330	19.7	—	0	—
0000	19.3	—	0	—
0030	19.3	—	0	—
0100	19.3	—	0	—
0130	18.9	—	0	—
0200	18.7	—	0	—

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Length (m)	Height (m)	Time Up (xxxx h)	Time Down (xxxx h)	Picture #	Waypoint #
Net	A	41° 09' 27.1" N	82° 59' 20.5" W	6	6.2	2045	0200	100-0190	021
Net	B	41° 09' 27.6" N	82° 59' 22.2" W	6	6.2	2050	0205	0191	022
Net	C	41° 09' 30.1" N	82° 59' 22.1" W	9	6.2	2055	0210	100-0003	023
Net	D	41° 09' 28.0" N	82° 59' 27.1" W	12	9.2	2100	0215	2218	024

Net Placement/Site Description: Net 5 A, B on small corridor / road leading back to pond. Net C moved perpendicular to woodlot and pond. Net D across opening from food to pond.

Capt #	Net/ Trap	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # (Guano/Hair Sample)	Comments
1	D	Lasiurus borealis	2120	JV	M	↑	8.8	38.0	E	0	—	—
2	D	Eptesicus fuscus	2145	JV	F	NR	15.3	46.0	M	0	—	—
3	D	Lasiurus borealis	2145	—	—	—	—	—	—	—	—	Escaped Net
4	B	Eptesicus fuscus	2155	JV	F	NR	16.2	44.0	M	0	—	Escaped Net
5	D	Lasiurus borealis	2215	—	—	—	—	—	—	—	—	Escaped Net
6	D	Lasiurus borealis	2215	—	—	—	—	—	—	—	—	Escaped Net
7	D	Eptesicus fuscus	2215	JV	M	↑	16.9	44.0	M	0	—	—
8	D	Eptesicus fuscus	2215	JV	M	↑	12.9	45.0	M	0	—	—
9	D	Eptesicus fuscus	2215	JV	F	NR	16.0	47.0	M	0	—	—

<sup>1</sup> Reproductive Condition: Female = NR/PG/LPL; Male = ↑/↓ \* Refer to table on the back



Project #: 340.02 Date: 26 July 2011  
 Project Name: Testatech / Republic Site Name/ #: Site 27  
 Initials: DS

Initials:

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vane
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
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32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks wires off trees; generally injures trees and buildings

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	<b>Light damage.</b> Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	<b>Moderate damage.</b> Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	<b>Heavy damage.</b> Delaminated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or rhinopatagium are evident.





## NET SITE HABITAT DESCRIPTION

Project #: 340.01

Date: 26-Jul-11

Biologists: J. Basiger

Project Name: Republic

Site Name/#: 30

State: OH County: Seneca

USGS Quad: Fireside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
<u>A</u>	<u>N</u>	<u>41° 09' 12.1" N</u>	<u>82° 55' 33.6" W</u>	<u>910</u>	<u>30-A</u>
<u>B</u>	<u>N</u>	<u>41° 09' 11.6" N</u>	<u>82° 55' 34.6" W</u>	<u>909</u>	<u>30-B</u>
<u>C</u>	<u>N</u>	<u>41° 09' 10.6" N</u>	<u>82° 55' 34.0" W</u>	<u>908</u>	<u>30-C</u>
<u>D</u>	<u>N</u>	<u>41° 09' 09.2" N</u>	<u>82° 55' 33.3" W</u>	<u>906</u>	<u>30-D</u>

Distance to closest water source (meters): 300

Type of water source: stream

Water source name: UN

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS): N/A

Bank Height: \_\_\_\_\_ meters Channel Width: \_\_\_\_\_ meters Stream Width: \_\_\_\_\_ meters

Substratum: \_\_\_\_\_ Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Silt/Clay

Still Water Present (Y/N): \_\_\_\_\_ Average Water Depth: \_\_\_\_\_ m or cm Clarity (H,M,L): \_\_\_\_\_

### VEGETATION:

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

Quercus rubra

Acer rubrum

Carya ovata

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

Acer rubrum

Tilia americana

Quercus rubra

Estimated dbh range: Lg: \_\_\_\_\_ Sm: \_\_\_\_\_

Estimated dbh range: Lg: \_\_\_\_\_ Sm: \_\_\_\_\_

Relative abundance of dominant vs. subdominant (ratio): \_\_\_\_\_

Estimated canopy closure: ☒ Closed ☐ Moderate ☐ Open

Roost tree potential consists of: ☒ Large Trees ☐ Snags ☐ Neither

Roost tree potential for the area is: ☐ High ☒ Moderate ☐ Low

Roost potential comments: Large Carya ovata

Subcanopy clutter: ☐ Closed ☒ Moderate ☐ Open

Subcanopy comprised largely of: ☐ Lower Branches of Canopy Trees ☒ Saplings ☒ Shrubs

Common Subcanopy Species: Acer rubrum

Habitat Description: Large wood lots with crop fields on 3 sides

AnaBat Habitat: N/A

### Check all that apply:

☐ Mature Upland Forest

☐ Recently Logged Forest

☒ Crop/Pasture Land

☐ Other \_\_\_\_\_

☐ Young Upland Forest

☒ Forest Edge

☐ Stream/River

☐ Mature Lowland Forest

☐ Woodlot

☐ Vernal Pool

☒ Young Lowland Forest

☐ Old Field

☐ Deepwater Lake/Pond

Herbaceous Cover: ☐ Sparse ☒ Moderate

☐ Dense



## NET SITE HABITAT DESCRIPTION (continued)

Project #: 340.01	State/County: OH/Seneca	Site Name/#: 30	Initials:
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SKETCH: NETS A and B and AnaBat (if used)	
<b>LEGEND</b>	<b>COMMENTS</b>
Nets: ● — ●	



Project #: 340.01 Date: 22 July 11  
Project Name: Republic  
State: OH County: Seneca  
Biologists: J. Basiger  
Site name/#: 30  
GPS Unit #: 053 4 05470 Camera #: 00000000

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From ___ to ___	% Cloud Cover (estimated)	Comments
2100	24.5	1-3		40	
2130	24.3	1-3		50	
2200	24.1	1-3		50	
2230	24.1	1-3		50	
2300	24.0	1-3		50	
2330	24.0	1-3		70	
0000	24.0	1-3		100	
0030	23.9	1-3		100	
			Rain Out		

MOON PHASE\*

\_\_\_\_ New moon  
 \_\_\_\_ Waxing gibbous  
 \_\_\_\_ Last quarter  
 \_\_\_\_ Waxing crescent  
 \_\_\_\_ Full moon  
 \_\_\_\_ Waning crescent  
 \_\_\_\_ First quarter  
 \_\_\_\_ Waning gibbous

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	N	47° 09' 12.1" N	92° 55' 39.6" W	12	9	2045	0025	910
A	N	41° 09' 11.6" N	92° 55' 34.6" W	6	6	2050	0035	909
C	N	41° 09' 10.6" N	92° 55' 34.0" W	9	6	2055	0030	908
D	N	41° 09' 09.2" N	92° 55' 33.3" W	6	6	2100	0030	906

Net Placement/Site Description:

Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (FIM/E)	Wing Index* (0-3)	Comments Picture # Guano/Hair Sample
1	0	<i>Larus borealis</i>	2125	Jv	F	NA	12.0	40	E	0	
2	A	<i>Eptesicus fuscus</i>	2145	Jv	M	V	15.25	44	M	1	
3	A	<i>E. fuscus</i>	2145	Ad	M	↓	19.25	46	M	0	
4	A	<i>E. fuscus</i>	2145	Ad	F	PL	19	44	M	0	
5	A	<i>E. fuscus</i>	2145	Ad	F	PL	20.5	47	M	0	
6	A	<i>E. fuscus</i>	2230	Ad	F	PL	19.75	46	M	0	
7	A	<i>E. fuscus</i>	2230	Jv	M	↑	17	45	M	0	
8	A	<i>E. fuscus</i>	2230	Jv	M	↑	15.25	40	M	0	
9	D	<i>E. fuscus</i>	2240	Ad	F	PL	18.25	47	M	0	
10	B	<i>E. fuscus</i>	2250	Ad	F	PL	20	46	M	0	

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap; A = Anabat

\* Refer to table on the back



# BAT CAPTURE DATA (continued)

Project #: 340.01

Date: 22 Jun 11

Project Name:

Site Name/ID: 30

Initials:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. 2	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments	Picture # /Guano/Hair Sample
11	D	E. fuscus	2230	Ad	F	PL	21.5	42	F	1		
12	D	E. fuscus	2230	Ad	F	PL	20.5	44	M	0		
13	D	E. fuscus	2230	JV	M	↑	11.25	42	M	0		
14	D	E. fuscus	2230	JV	F	NR	15.25	45	M	0		
15	A	E. fuscus	2300	Ad	M	↑	17.5	41	F	0		
16	A	E. fuscus	2300	JV	F	NR	13	40	M	0		
17	A	E. fuscus	2300	JV	F	NR	17.25	43	M	0		
18	A	E. fuscus	2300	JV	F	NR	24.75	53	E	0		
19	A	E. fuscus	2300	Ad	F	PL	24.5	50	F	0		
20	D	E. fuscus	2300	Ad	I	PL	18	46	M	0		
21	D	E. fuscus	2300	JV	F	NR	18.5	49	F	0		
22	A	E. fuscus	2300	Ad	F	PL	21.5	49	F	0		
23	A	E. fuscus	2300	Ad	M	↓	-	47	M	0		
24	A	E. fuscus	2300	Ad	M	↓	-	47	M	0		
25	A	E. fuscus	2300	JV	F	NR	-	47	F	0		
26	A	E. fuscus	2300	JV	F	NR	7.5	45	M	0		
27	A	E. fuscus	2300	JV	F	NR	15	43	M	0		
28	A	E. fuscus	2300	Ad	M	↓	18.5	42	M	0		
29	A	E. fuscus	2300	JV	F	NR	16.5	44	M	0		

## Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

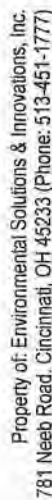
## 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 16	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

## Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopagium and/or chiroptagium are evident.





Project #: 340.01 Date: 22 Jul 2011

Date: 22 Jul 2011

Project Name: Rowle Site Name#: \_\_\_\_\_

Site Name/#: 30

**Initials:** \_\_\_\_\_

Project Name:	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
	30	E. fuscus	2340	JV	M	✓	1825	48	M	0		
	31	E. fuscus	2346	JV	F	NR	1925	47	F	0		
	32	M. septentrionalis	0600	JV	F	NR	7	36	E	0		
	33	M. septentrionalis	0615	Ad	F	PL	7.5	36	M	0		
	34	E. fuscus	0615	JV	F	NR	6.5	42	M	0		
	35	E. fuscus	0615	Ad	F	PL	2325	47	M	0		
	36	M. septentrionalis	0615	JV	M	✓	525	33	E	0		

## 2010 Lunar Phases

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
	Fresh Gale	Breaks twigs off trees; generally immediate progress

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 15	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

### Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Foam skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Detached wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding pleopodalgium and/or chiropteralgium are evident.



## BAT CAPTURE DATA

Project #: 346.01 Date: 24 Jul 11  
Project Name: Republia  
State: OH County: Seneca  
Biologists: J. Basore, M. Flynn  
Site name#: 30  
GPS Unit #: 381465670 Camera #: cam 671

### MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

### WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
0100	25.1	0	-	40%	
0200	24.3	0	-	40%	
0300	23.8	0	-	40%	
0400	23.1	0	-	40%	
0500	22.9	0	-		
0600	22.7	0	-		
0700	22.4	0	-		
0800	22.2	0	-		
0900	22.1	0	-	100%	
1000	22.2	0	-	100%	
1100	22.2	0	-		
1200	22.2	0	-		
1300	22.2	0	-		
1400	22.2	0	-		
1500	22.2	0	-		
1600	22.2	0	-		
1700	22.2	0	-		
1800	22.2	0	-		
1900	22.2	0	-		
2000	22.2	0	-		
2100	22.2	0	-		
2200	22.2	0	-		
2300	22.2	0	-		
2400	22.2	0	-		
2500	22.2	0	-		
2600	22.2	0	-		
2700	22.2	0	-		
2800	22.2	0	-		
2900	22.2	0	-		
3000	22.2	0	-		
3100	22.2	0	-		
3200	22.2	0	-		
3300	22.2	0	-		
3400	22.2	0	-		
3500	22.2	0	-		
3600	22.2	0	-		
3700	22.2	0	-		
3800	22.2	0	-		
3900	22.2	0	-		
4000	22.2	0	-		
4100	22.2	0	-		
4200	22.2	0	-		
4300	22.2	0	-		
4400	22.2	0	-		
4500	22.2	0	-		
4600	22.2	0	-		
4700	22.2	0	-		
4800	22.2	0	-		
4900	22.2	0	-		
5000	22.2	0	-		
5100	22.2	0	-		
5200	22.2	0	-		
5300	22.2	0	-		
5400	22.2	0	-		
5500	22.2	0	-		
5600	22.2	0	-		
5700	22.2	0	-		
5800	22.2	0	-		
5900	22.2	0	-		
6000	22.2	0	-		
6100	22.2	0	-		
6200	22.2	0	-		
6300	22.2	0	-		
6400	22.2	0	-		
6500	22.2	0	-		
6600	22.2	0	-		
6700	22.2	0	-		
6800	22.2	0	-		
6900	22.2	0	-		
7000	22.2	0	-		
7100	22.2	0	-		
7200	22.2	0	-		
7300	22.2	0	-		
7400	22.2	0	-		
7500	22.2	0	-		
7600	22.2	0	-		
7700	22.2	0	-		
7800	22.2	0	-		
7900	22.2	0	-		
8000	22.2	0	-		
8100	22.2	0	-		
8200	22.2	0	-		
8300	22.2	0	-		
8400	22.2	0	-		
8500	22.2	0	-		
8600	22.2	0	-		
8700	22.2	0	-		
8800	22.2	0	-		
8900	22.2	0	-		
9000	22.2	0	-		
9100	22.2	0	-		
9200	22.2	0	-		
9300	22.2	0	-		
9400	22.2	0	-		
9500	22.2	0	-		
9600	22.2	0	-		
9700	22.2	0	-		
9800	22.2	0	-		
9900	22.2	0	-		
10000	22.2	0	-		

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
1	Ad	41° 09' 18.1" N	42° 55' 33.6" W	12	4	2040	0200	910
2	Ad	41° 09' 11.6" N	42° 55' 34.6" W	6	6	2045	0205	909
3	Ad	41° 09' 10.6" N	42° 55' 34.0" W	9	6	2050	0210	908
4	Ad	41° 09' 09.2" N	42° 55' 33.3" W	16	1	2055	0215	906

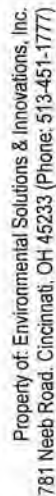
### Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	A	<i>Logan's Vesperugo</i>	2200	JV	F	NA	11.25	31	E	0		
2	A	<i>Eptesicus fuscus</i>	2200	JV	F	NA	15.75	49	M	0	172.500	6/11/3/4/1/3/10/1/6
3	A	<i>E. fuscus</i>	2230	Ad	F	PL	20	47	F	0		
4	A	<i>E. fuscus</i>	2200	JV	M	↑	17.25	45	M	0		
5	A	<i>E. fuscus</i>	2200	Ad	M	↑	17	45	F	0		
6	A	<i>L. borealis</i>	2200	Ad	M	V	14	49	F	0		
7	A	<i>L. cinereus</i>	2200	JV	F	NA	24	53	F	0		
8	D	<i>E. fuscus</i>	2245	Jv	F	NA	15.25	47	M	0		
9	A	<i>E. fuscus</i>	2245	Jv	M	↑	16.25	45	M	0		
10	D	<i>M. fuscus</i>	2300	JV	F	NA	6	37	M	0		

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓



## Project #:

Date: \_\_\_\_\_

Project Name:

Site Name/#:

**Initials:**

Beaufort Wind Scale2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 20	Jun 4
May 13	Jun 18	Jun 25	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 23	Sep 1
Aug 9	Sep 15	Sep 24	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 12	Nov 22	Nov 29

Score	Description
0	<b>No damage.</b> Fewer than 5 small scar spots are present on the membranes.
1	<b>Light damage.</b> Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	<b>Moderate damage.</b> Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	<b>Heavy damage.</b> Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or renealing plagiopatagium and/or other structures are evident.



## BAT CAPTURE DATA

Project #: 340.01 Date: 26 Jul 11  
Project Name: Republic  
State: OH County: Seneca  
Biologists: Dr. Basiger, J. Kleinhans  
Site name#: 30  
GPS Unit #: ES465670 Camera #: cam 671

### MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2120	23.3	—	—	50	
2130	22.5	—	—	50	
2200	21.7	—	—	0	
2230	21.1	—	—	0	
2300	20.5	—	—	0	
2330	19.9	—	—	50	
0000	19.9	—	—	25	
0030	19.8	—	—	0	
0100	19.5	—	—	0	
0130	19.4	—	—	0	
0200	19.1	—	—	0	

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A		41° 09' 12.1" N	82° 55' 33.6" W	12	9	2040	0150	910
B		41° 09' 11.6" N	82° 55' 34.6" W	6	6	2045	0155	909
C		41° 09' 10.6" N	82° 55' 34.0" W	9	6	2050	0200	908
D		41° 09' 09.2" N	82° 55' 33.3" W	6	6	2055	0205	906

### Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments
1	A	<i>Eptesicus fuscus</i>	2030	AP	M	+	15.25	45	E	0	
2	A	<i>E. fuscus</i>	2030	JV	F	NA	14.75	46	M	0	
3	A	<i>E. fuscus</i>	2200	AD	M	+	14.50	47	E	0	
4	A	<i>E. fuscus</i>	2200	AP	F	PL	19.50	50	M	0	
5	A	<i>E. fuscus</i>	2202	AD	F	PL	16.00	43	E	0	
6	A	<i>E. fuscus</i>	2203	AD	F	PL	20.00	49	E	1	
7	A	<i>E. fuscus</i>	2203	JV	F	NA	17.75	47	E	0	
8	D	<i>E. fuscus</i>	2230	AD	M	+	16.50	45	M	0	
9	A		2230	AD	M	+	16.50	44	F	0	
10	A		2230	AD	M	+	17.00	44	F	0	

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/LPL; Male = 7/4





# BAT CAPTURE DATA (continued)

Project #: 340.01 Date: 26 Jun 11

Project Name: \_\_\_\_\_

Site Name#: 30

Initials: \_\_\_\_\_

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # / Guano/Hair Sample	Comments
11	A		2030	JV	M	A	13.00	45	M	0		
12	D		2020	AD	M	B	16.50	46	M	0		
13	F		2020	JV	F	NA	16.50	46	M	0		
14	A		2305	AD	M	B	15.75	43	M	0		
15	A		2305	JV	F	NA	16.75	45	M	0		
16	A		2306	JV	M	A	12.75	41	M	0		
17	A		2310	AD	M	B	15.00	42	M	0		
18	D		2310	JV	F	NA	18.00	50	F	0		
19	D		2310	AD	F	PL	17.25	44	M	0		
20	A		2311	AD	M	B	15.80	47	M	0		
21	A		2330	AD	F	PL	21.00	49	M	0		
22	A		2330	AD	F	PL	16.25	45	M	0		
23	A		2330	JV	F	NA	13.00	46	M	0		
24	A		2330	AD	F	PL	20.00	45	M	0		
25	A		2330	JV	F	NA	14.25	44	M	0		
26	A	Lasipuas butleri	2330	JV	F	NA	9.00	40	E	0		
27	A		2330	AD	F	PL	21.50	48	F	0		
28	A		2330	AD	F	PL	18.00	45	M	0		
29	A		2330	AD	M	B	16.50	46	E	0		

## Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

## 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

## Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.



## BAT CAPTURE DATA (continued)

Project #: 340.01

Date: 26 Jul -11

Project Name:

Site Name#: 30

Initials:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
30	A		23.35	AD	F	NA	22.00	48	F	0		
31	A		23.36	Jv	M	+	15.00	44	F	0		
32	A		23.36	AD	M	+	17.00	47	F	0		
33	A		23.38	AD	M	+	17.00	48	M	0		
34	A		23.39	Jv	M	+	17.50	43	M	0		
35	A		23.40	Jv	F	NA	16.25	41	M	0		
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												

### Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavellets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

### 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 26	Jul 4
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

### Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiropatagium are evident.



## NET SITE HABITAT DESCRIPTION

Project #: 340.01 Date: 27 Jul 11 Biologists: J. Basiger  
Project Name: Republic Site Name/ #: 31  
State: OH County: Seneca USGS Quad: Fireside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
<u>A</u>	<u>N</u>	<u>41° 09' 13.8" N</u>	<u>82° 59' 23.8" W</u>	<u>905</u>	
<u>B</u>	<u>N</u>	<u>41° 09' 13.2" N</u>	<u>82° 59' 21.7" W</u>	<u>902</u>	
<u>C</u>	<u>N</u>	<u>41° 09' 11.9" N</u>	<u>82° 59' 21.2" W</u>	<u>903</u>	
<u>D</u>	<u>N</u>	<u>41° 09' 12.8" N</u>	<u>82° 59' 19.6" W</u>	<u>904</u>	

Distance to closest water source (meters): 500 Type of water source: Pond  
Water source name: N/A

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS): N/A

Bank Height: \_\_\_\_\_ meters Channel Width: \_\_\_\_\_ meters Stream Width: \_\_\_\_\_ meters  
Substratum: \_\_\_\_\_ Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Silt/Clay  
Still Water Present (Y/N): \_\_\_\_\_ Average Water Depth: \_\_\_\_\_ m or cm Clarity (H,M,L): \_\_\_\_\_

### VEGETATION:

Dominant Canopy Species (> 40 cm/16" dbh) Subdominant Canopy Species (< 40 cm/16" dbh)  
Carya ovata Carya ovata  
Acer rubrum Acer rubrum

Estimated dbh range: Lg: 60 Sm: 40 Estimated dbh range: Lg: 39 Sm: 10

Relative abundance of dominant vs. subdominant (ratio): \_\_\_\_\_

Estimated canopy closure: ☒ Closed \_\_\_\_\_ Moderate \_\_\_\_\_ Open  
Roost tree potential consists of: ☒ Large Trees \_\_\_\_\_ Snags \_\_\_\_\_ Neither  
Roost tree potential for the area is: \_\_\_\_\_ High ☒ Moderate \_\_\_\_\_ Low

Roost potential comments: Large number of Carya ovata

Subcanopy clutter: ☒ Closed \_\_\_\_\_ Moderate \_\_\_\_\_ Open  
Subcanopy comprised largely of: ☒ Lower Branches of Canopy Trees ☒ Saplings \_\_\_\_\_ Shrubs

Common Subcanopy Species: Acer rubrum  
Fagus grandifolia

Habitat Description: Large woodlot with fields on 3 sides

AnaBat Habitat: N/A

### Check all that apply:

☐ Mature Upland Forest ☐ Recently Logged Forest ☒ Crop/Pasture Land \_\_\_\_\_ Other \_\_\_\_\_  
☐ Young Upland Forest ☒ Forest Edge \_\_\_\_\_ Stream/River \_\_\_\_\_  
☐ Mature Lowland Forest ☒ Woodlot \_\_\_\_\_ Vernal Pool \_\_\_\_\_  
☒ Young Lowland Forest ☐ Old Field \_\_\_\_\_ Deepwater Lake/Pond \_\_\_\_\_

Herbaceous Cover: \_\_\_\_\_ Sparse ☒ Moderate \_\_\_\_\_ Dense



# NET SITE HABITAT DESCRIPTION (continued)

Project #: 310.01	State/County: OH/Seneca	Site Name/#: 31	Initials:
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SKETCH: NETS A and B and AnaBat (if used)

Legend:

Nets: ● — ●

House = House

Comments:






## BAT CAPTURE DATA

Project #: 340.01 Date: 25 July 11  
Project Name: Republic  
State: OH County: Seneca  
Biologists: J. Basiger  
Site name/ID: 31  
GPS Unit #: 751 465670 Camera #: 060671

### MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	N	41° 09' 13.8" N	82° 59' 23.6" W	6	6	2045	0150	905 ✓
B	N	41° 09' 13.2" N	82° 59' 21.7" W	9	9	2050	0155	902 ✓
C	N	41° 09' 11.4" N	82° 59' 21.2" W	6	6	2055	0205	903 ✓
D	N	41° 09' 12.6" N	82° 59' 19.6" W	9	6	2100	0210	904 ✓

### Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	C	<i>Eptesicus fuscus</i>	2130	Ad	F	PL	16.25	44	F	0		
2	B	<i>E. fuscus</i>	2210	Jv	F	NA	16.5	47	M	0		
3	A	<i>E. fuscus</i>	2215	Jv	M	↑	15.5	46	M	0		
4	A	<i>E. fuscus</i>	2215	Jv	M	↑	14.25	45	M	0		
5	B	<i>E. fuscus</i>	2310	Ad	M	V	17.5	41	M	0		
6	C	<i>E. fuscus</i>	0050	Ad	M	↑	16.25	45	M	0		
7	C	<i>E. fuscus</i>	0130	Jv	M	↑	15.00	48	M	0		
8	B	<i>Lasiurus borealis</i>	0130	Jv	F	N/A	10	44	M	0		

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap; A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓



**MOON PHASE\***

_____	New moon
_____	Waxing gibbous
_____	Last quarter
_____	Waxing crescent
_____	Full moon
_____	Waning crescent

First quarter  
Waning gibbous

## WEATHER DATA

WEATHER DATA					
Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From      to	% Cloud Cover (estimated)	Comments
2100	26.1	—	—	100	
2130	25.9	—	—	100	
2200	25.8	—	—	100	
2230	25.5	—	—	100	
2300	25.1	—	—	100	
2330	24.8	1-3	NW-SE	100	
0000	24.1	1-3	W-E	100	
0030	24.4	1-3	W-E	100	
0100	25.2	1-3	NW-SE	100	
0130	25.7	1-3	NW-SE	100	
0200	25.6	4-7	W-E	100	

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	N	41° 09' 13.4" N	89° 59' 30.6" W	6	6	2040	0145	903 ✓
B	N	41° 09' 13.2" N	89° 59' 31.7" W	9	9	2045	0150	902 ✓
C	N	41° 09' 11.4" N	89° 59' 31.2" W	9	6	2050	0155	903 ✓
P		41° 09' 12.4" N	89° 59' 19.6" W	6	6	2055	0155	904 ✓

Net Placement/Site Description:

[illegible]

<sup>i</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap; A = Anabat

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓

\* Refer to table on the back



## NET SITE HABITAT DESCRIPTION

Project #: 340

Date: 28 July 2011

Biologists: E. Basiger & A. Klemm

Project Name: Republic Wind

Site Name/ #: 32

State: OH County: Sandusky

USGS Quad: Fireside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
A	NW	41° 13' 02.3" N	82° 54' 29.7" W	3096	340A32
B	NW	41° 13' 04.5" N	82° 54' 29.8" W	3120	340B32
C	NW	41° 13' 05.9" N	82° 54' 29.4" W	3099	340C32
D	NW	41° 13' 05.1" N	82° 54' 27.7" W	3098	340D32

Distance to closest water source (meters): 300

Type of water source: stream

Water source name: \_\_\_\_\_

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS): N/A

Bank Height: \_\_\_\_\_ meters Channel Width: \_\_\_\_\_ meters Stream Width: \_\_\_\_\_ meters

Substratum: \_\_\_\_\_ Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Silt/Clay

Still Water Present (Y/N): \_\_\_\_\_ Average Water Depth: \_\_\_\_\_ m or cm Clarity (H,M,L): \_\_\_\_\_

### VEGETATION:

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

Quercus alba  
Quercus rubra

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

Prunus serotina

Estimated dbh range: Lg: 25 Sm: 50

Estimated dbh range: Lg: 40 Sm: 10

Relative abundance of dominant vs. subdominant (ratio): 1/1

Estimated canopy closure: ☒ Closed \_\_\_\_\_ Moderate \_\_\_\_\_ Open

Roost tree potential consists of: ☒ Large Trees ☒ Snags \_\_\_\_\_ Neither

Roost tree potential for the area is: \_\_\_\_\_ High \_\_\_\_\_ Moderate ☒ Low

Roost potential comments: Tight bark

Subcanopy clutter: \_\_\_\_\_ Closed ☒ Moderate \_\_\_\_\_ Open

Subcanopy comprised largely of: \_\_\_\_\_ Lower Branches of Canopy Trees ☒ Saplings \_\_\_\_\_ Shrubs

Common Subcanopy Species: Ulmus americana  
Prunus serotina

Habitat Description: Woodlot

AnaBat Habitat: N/A

### Check all that apply:

- ☒ Mature Upland Forest    ☐ Recently Logged Forest    ☒ Crop/Pasture Land    ☐ Other \_\_\_\_\_  
☐ Young Upland Forest    ☒ Forest Edge    \_\_\_\_\_ Stream/River    \_\_\_\_\_  
☐ Mature Lowland Forest    ☒ Woodlot    \_\_\_\_\_ Vernal Pool    \_\_\_\_\_  
☐ Young Lowland Forest    ☐ Old Field    \_\_\_\_\_ Deepwater Lake/Pond    \_\_\_\_\_

Herbaceous Cover: \_\_\_\_\_ Sparse ☒ Moderate \_\_\_\_\_ Dense



### NET SITE HABITAT DESCRIPTION (continued)

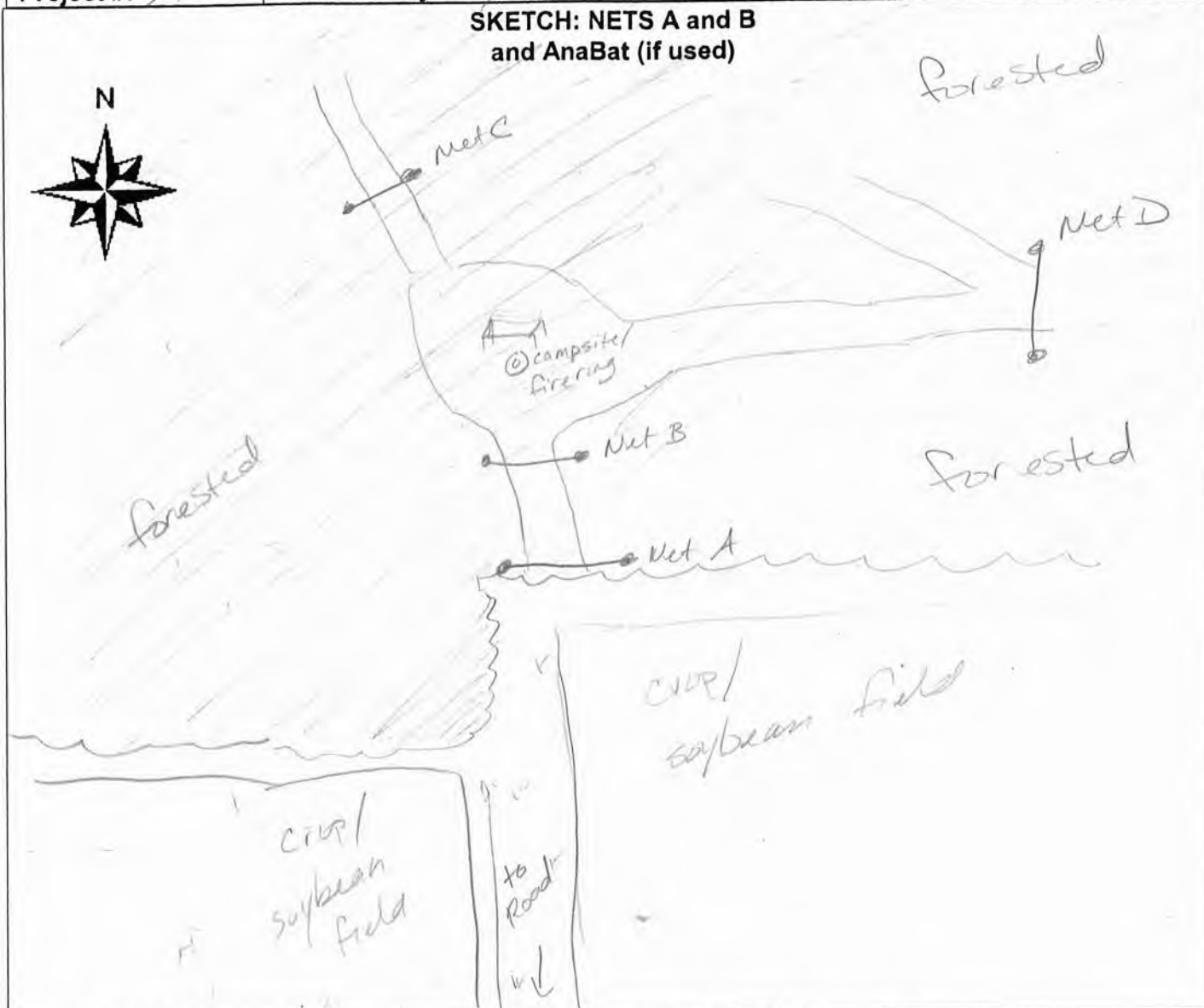
Project #: 340

State/County: OH/Seneca

Site Name/#: 32

Initials: SCB

#### SKETCH: NETS A and B and AnaBat (if used)



#### LEGEND

#### COMMENTS

Nets: ● — ●

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## BAT CAPTURE DATA

Project #: 340 Date: 28 July 2011  
Project Name: Republic Wind  
State: OH County: Saraco  
Biologists: E. Basore, A. Kleinhenz  
Site name #: 32  
GPS Unit #: 7 Camera #: 500

### MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

### WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2130	24.8	1-3	SW - NE		100% 100% A
2200	25.0	1-3	SW - NE		
2230	25.4	1-3	SW - NE		
2300	25.4	1-3	N - E		
2330	25.3	1-3	SW - NE		
2400	25.1	1-3	SW - NE		
2430	25.1	1-3	SW - NE		
2500	25.0	1-3	SW - NE		
2530	25.0	1-3	SW - NE		
2600	24.8	1-3	SW - NE		

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	NU	41° 13' 02.3" N	82° 54' 29.7" W	12	7	2030	6145	3096
B	NU	41° 13' 04.5" N	82° 54' 29.8" W	9	6	2035	6152	3100
C	NU	41° 13' 05.9" N	82° 54' 29.4" W	14	6	2040	6155	3099
D	NU	41° 13' 05.1" N	82° 54' 29.7" W	9	6	2045	6200	3098

### Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	A	Loxia borealis	2123	Jv	M	NR	8.5	47mm	F	0	3101-3104	
2	A	Eptesicus fuscus	2130	Jv	F	NR	10.0	48mm	E	1	3105 & 1106	
3	A	Eptesicus fuscus	2242	Jv	F	NR	21.5	49mm	F	1		
4	A	Eptesicus fuscus	2244	Jv	M	NR	14.0	45mm	M	0		
5	A	Eptesicus fuscus	2244	Jv	F	NR	10.0	47mm	F	0		
6	A	Eptesicus fuscus	2244	Jv	M	NR	15.5	48mm	M	1		
7	A	Eptesicus fuscus	2338	Jv	M	NR	15.5	49mm	M	1		
8	A	Eptesicus fuscus	2341	Jv	F	NR	11.0	40mm	M	3		
9	A	Eptesicus fuscus	2344	Jv	M	NR	15.5	46mm	F	0		
10	A	Eptesicus fuscus	2416	Jv	F	NR	15.5	49mm	F	0		

\* M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

<sup>2</sup> Reproductive Condition: Female = NR/PGL/PL; Male = 7/4



# BAT CAPTURE DATA (continued)

Project #:

Date:

Project Name:

Site Name/ID:

Initials:

Capt #	Net #	Species	Time	Age (AdJuv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Comments
11	A	Lasius Borealis	2416	Jv	F	NR	11.0g	39mm	M	0	
12	C	Myotis Septentrionalis	2416	Ad	F	PL	7.0g	36mm	E	0	3122-3125
13	C	Myotis Septentrionalis	2423	Jv	M	NR	5.5g	35mm	M	0	
14	A	Eptesicus Fuscus	2454	Jv	F	NR	16.0g	45mm	M	0	
15	B	Eptesicus Fuscus	2457	Jv	M	NR	16.5g	46mm	M	0	
16	B	Eptesicus Fuscus	2458	Jv	M	NR	15.5g	45mm	M	0	
17	D	Eptesicus Fuscus	0001	Jv	M	NR	15.5g	45mm	M	0	
18	D	Eptesicus Fuscus	0004	Ad	F	PL	20.0g	49mm	F	0	
19	D	Eptesicus Fuscus	0008	Jv	M	NR	16.0g	45mm	M	0	
20	D	Eptesicus Fuscus	0009	Jv	M	NR	17.0g	47mm	F	0	
21	C	Eptesicus Fuscus	0025	Jv	F	NR	18.5g	47mm	F	0	
22	D	Eptesicus Fuscus	0027	Jv	M	NR	14.0g	46mm	M	0	
23	D	Lasius Borealis	0057	Jv	F	NR	14.5g	44mm	M	0	
24	A	Lasius Borealis	0115	Jv	F	NR	50.0g	41mm	E	0	
25	A	Eptesicus Fuscus	0118	Jv	M	NR	15.0g	46mm	M	0	

## Beaufort Wind Scale

Wind Speed (mph)	Description	Visible Condition
0	Calm	Smoke rises vertically
1-3	Light Air	Direction of wind shown by smoke but not by wind vanes
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary wind vane moved by wind
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved
19-24	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets on inland water
25-31	Strong Breeze	Large branches in motion; telephone wires whistle; umbrellas used with difficulty
32-38	Moderate Gale	Whole trees in motion; inconvenience in walking against wind
39-46	Fresh Gale	Breaks twigs off trees; generally impedes progress

## 2010 Lunar Phases

New Moon	First Quarter	Full Moon	Last Quarter
Feb 13	Mar 23	Mar 29	Apr 6
Mar 15	Apr 21	Apr 28	May 5
Apr 14	May 20	May 27	Jun 4
May 13	Jun 18	Jun 25	Jul 2
Jun 12	Jul 18	Jul 25	Aug 2
Jul 11	Aug 16	Aug 24	Sep 1
Aug 9	Sep 15	Sep 23	Sep 30
Sep 8	Oct 14	Oct 22	Oct 30
Oct 7	Nov 13	Nov 21	Nov 28

## Wing Index Key

Score	Description
0	No damage. Fewer than 5 small scar spots are present on the membranes.
1	Light damage. Less than 50% of flight membrane is depigmented (spotting), which is often visible only with transillumination.
2	Moderate damage. Greater than 50% of wing membrane covered with scar tissue (spotting). Scarring is visible without transillumination. Membrane exhibits some necrotic tissue and possibly few small holes (<0.5 cm diameter). Forearm skin may be flaking and discolored along the majority of the forearm.
3	Heavy damage. Deteriorated wing membrane and necrotic tissue. Isolated holes >0.5 cm are present in membranes. Necrotic or receding plagiopatagium and/or chiroptagium are evident.



# BAT CAPTURE DATA

Project #: 340.01 Date: 7/30/11  
 Project Name: \_\_\_\_\_  
 State: OH County: Seneca  
 Biologists: A. Knierim  
 Site name/ID: 32  
 GPS Unit #: 7 Camera #: Eric

## MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2130	23.3	1-3		30%	
2200	22.6	0		30	
2230	22.7	0		20	
2300	22.0	0		20	
2330	21.7	0		20	
0000	21.2	0		15	
0300	21.5	0		15	
1000	21.3	0		0	
1300	21.2	0		0	
2000	21.0	0		0	

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	net	41° 13' 02.3" N	82° 54' 29.7" W	12	9	2110	215	3096
B	net	41° 13' 01.5" N	82° 54' 29.8" W	9	6	2107	211	3100
C	net	41° 13' 05.9" N	82° 54' 29.4" W	6	6	2100	200	3099
D	net	41° 13' 05.1" N	82° 54' 29.7" W	9	6	2105	207	3098

## Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
	B	<i>L. borealis</i>	2120		M		9.6	40	E	0		Escaped
1	B	<i>L. borealis</i>	2120	Jv	F	MR	16.2	46	E	0		
2	D	<i>E. fuscus</i>	2130	A	M		10.5	41	E	0		
3	B	<i>L. borealis</i>	2138	Jv	F	NR	17.7	46	E	0		
4	B	<i>E. fuscus</i>	2155	A	M	↓	20.7	46	M	0		
5	B	<i>E. fuscus</i>	2207	A	F	PL	20.6	48	M	0		
6	A	<i>E. fuscus</i>	2210	A	F	DL	19.9	46	M	0		
7	A	<i>L. borealis</i>	2210	Jv	F	NR	17.4	41	M	0		
8	A	<i>E. fuscus</i>	2210	A	F	DL	17.4	46	M	0		
9	C	<i>E. fuscus</i>	2215	A	F	PL						

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/LPL; Male = ↑↓





Project #: 340

Date: 7/30/11

Project Name:

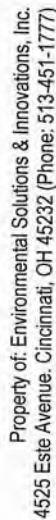
Site Name#:

32

Initials: ABK

Capt.#	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro.	Wt (g)	RFA (mm)	Belly (F/M/E)	Guanol Hair Sample	Comments/Picture #
10	C	E. fuscus	2215	Ju	M	NR	14.5	45	M		
11	B	L. borealis	2235	A	M	↓	10.6	42	M		
12	A	E. fuscus	2235	Ju	M	NR	15.4	44	F		
13	A	E. fuscus	2235	A	F	PL	19.0	45	M		
14	A	E. fuscus	2235	Ju	F	NR	16.5	45	F		trans
15	A	E. fuscus	2235	A	F	PL	21.3	47	F		
16	A	E. fuscus	2235	Ju	M	NR	15.2	45	F		
17	A	E. fuscus	2235	Ju	F	NR	16.9	45	F		
18	B	E. fuscus	2310	Ju	F	NR	16.3	46	M		
19	B	E. fuscus	2310	Ju	F	NR	15.8	46	F		
20	B	E. fuscus	2310	A	F	PL	19.3	45	F		
21	A	E. fuscus	2315	Ju	F	NR	17.3	46	E		
22	A	E. fuscus	2315	A	M	↓	16.3	45	F		
23	D	L. borealis	2317	Ju	M	NR	8.8	41	M		
24	D	E. fuscus	2345	A	M	↓	17.4	44	F		
25	A	E. fuscus	2355	Ju	M	NR	16.1	46	F		
26	C	E. fuscus	0005	A	M	↑	17.0	46	E		
27	C	E. fuscus	0005	Ju	M	NR	14.5	47	F		
28	A	E. fuscus	0110	Ju	M	NR	14.3	46	E		
29	A	E. fuscus	0110	Ju	F	NR	16.3	45	F		
30	A	E. fuscus	0120	Ju	M	NR	15.1	45	E		
31	A	E. fuscus	0120	Ju	M	NR	17.2	47	F		
32	A	L. borealis	035	Ju	F	NR	16.1	40	F		
33	A	E. fuscus	0140	Ju	C	↓	15.4	44	M		
34	A	E. fuscus	0140	Ju	M	NR	17.4	44	F		
35	B	L. borealis	0140	Ju	F	NR	11.4	39	F		
36	D	L. borealis	40	Ju	F	NR	16.9	39	F		
37	A	L. borealis	1000	Ju	F	NR	11.1	41	M		
38	C	M. seg	1115	Ju	F	NR	8	34	M		



[illegible]





## NET SITE HABITAT DESCRIPTION

Project #: 340

Date: 22 July 2011

Biologists: E. Banger; S. Caplan

Project Name: Republic - Wind

Site Name/ #: 33

State: OH

County: Seneca

USGS Quad: Firside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
<u>11</u>	<u>NN</u>	<u>41° 10' 41.2"N</u>	<u>82° 57' 19.2"W</u>	<u>3096</u>	<u>51</u>
<u>12</u>	<u>NN</u>	<u>41° 10' 40.3"N</u>	<u>82° 57' 18.6"W</u>	<u>3100</u>	<u>52</u>
<u>13</u>	<u>NN</u>	<u>41° 10' 40.7"N</u>	<u>82° 57' 18.0"W</u>	<u>3099</u>	<u>53</u>
<u>14</u>	<u>NN</u>	<u>41° 10' 38.2"N</u>	<u>82° 57' 17.1"W</u>	<u>3098</u>	<u>51</u>

Distance to closest water source (meters): 0

Type of water source: ephemeral stream

Water source name: N/A

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS): 0

Bank Height: 1/2 meters Channel Width: 1 meters Stream Width: 1/2 meters

Substratum: Bedrock Boulder ☒ Cobble ☒ Gravel ☒ Sand Silt/Clay

Still Water Present (Y/N): Y Average Water Depth: 10 m or cm Clarity (H,M,L): L

### VEGETATION:

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

Acer saccharum

Quercus alba

Juglans nigra

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

Acer saccharum Carya subcordata

Prunus serotina

Tilia americana

Estimated dbh range: Lg: 150 Sm: 40

Estimated dbh range: Lg: 39 Sm: 10

Relative abundance of dominant vs. subdominant (ratio): 1:75

Estimated canopy closure:

☒ Closed

Moderate

Open

Roost tree potential consists of:

☒ Large Trees

☒ Snags

Neither

Roost tree potential for the area is:

High

☒ Moderate

Low

Roost potential comments: lots of large Acer and Quercus trees with dead limbs

Subcanopy clutter:

Closed

☒ Moderate

Open

Subcanopy comprised largely of:

Lower Branches of  
Canopy Trees

☒ Saplings

Shrubs

Common Subcanopy Species:

Asimina triloba

Acer saccharum

Ostrya virginiana

Habitat Description: mature Upland Forest with Dominant Acer

AnaBat Habitat: N/A

Check all that apply:

☒ Mature Upland Forest

Recently Logged Forest

Crop/Pasture Land

Other

Young Upland Forest

Forest Edge

Stream/River

Mature Lowland Forest

Woodlot

☒ Vernal Pool

Young Lowland Forest

Old Field

Deepwater Lake/Pond

Herbaceous Cover: Sparse

☒ Moderate

Dense



### NET SITE HABITAT DESCRIPTION (continued)

Project #: 340	State/County: OH/Seneca	Site Name/#: 33	Initials: ELB
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**SKETCH: NETS A and B  
and AnaBat (if used)**

LEGEND	COMMENTS
Nets: ● — ●	





# BAT CAPTURE DATA

Project #: 346 Date: 22 July 2011  
 Project Name: Republic - Wind  
 State: OH County: Seneca  
 Biologists: E. Bosniar, S. Caplain  
 Site name #: 33  
 GPS Unit #: 9508 Camera #: Evo

## MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2100	24.5	1-3	E → W	40%	rained earlier
2130	24.3	1-3	E → W	50%	
2200	24.1	1-3	E → W	50%	
2230	24.1	1-3	E → W	50%	
2300	24.2	1-3	E → W	50%	Thunder in distance
2330	24.0	1-3	E → W	70%	
0000	24.0	1-3	E → W	100%	Rain
0030	23.9	1-3	E → W	100%	
0100					
0130					
0200					

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	12N	41° 10' 41.2" N	82° 59' 19.2" W	9	7	2030	2600	3096
B	12N	41° 10' 40.3" N	82° 59' 15.6" W	4	6	2035	2040	3100
C	12N	41° 10' 40.9" N	82° 59' 13.0" W	9	6	2040	2045	3079
D	12N	41° 10' 39.2" N	82° 59' 17.1" W	6	6	2045	2050	3098

## Net Placement/Site Description:

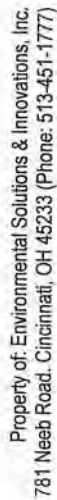
*Notes: placed over back through wind net*

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # /Guano/Hair Sample	Comments
1	D	Myotis subultrinalis	2120	Ad	M	↓	5.9	33	E	0	3080-3082	
2	A	Lasiurus cinereus	2120	Ad	F	NR	20.8	51	E	0	3083-3084	
3	A	Eptesicus fuscus	2300	Ad	M	↓	17.1	45	E	0	3085-3087	
4	A	Eptesicus fuscus	2300	Ad	F	PL	20.2	44	M	0		
5	A	Eptesicus fuscus	2300	Jv	M	↑	15.1	45	E	0		
6	A	Lasiurus borealis	2330	Jv	F	NR	9.3	38	E	0	3085-3086	
7	A	Eptesicus fuscus	2300	Ad	M	↓	15.5	44	M	1		
8	A	Eptesicus fuscus	2330	Ad	M	↓	16.2	45	M	0		
9	A	Eptesicus fuscus	2330									

<sup>1</sup> M = Monofiliament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/LPL; Male = ↑/↓



## WEATHER DATA

## MOON PHASE\*

\_\_\_\_ New moon  
 \_\_\_\_ Waxing gibbous  
 \_\_\_\_ Last quarter  
 \_\_\_\_ Waxing crescent  
 \_\_\_\_ Full moon  
 \_\_\_\_ Waning crescent  
 \_\_\_\_ First quarter  
 \_\_\_\_ Waning gibbous

Net Placement/Site Description:

[illegible]

M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap; A = Anabat

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓

\* Refer to table on the back



# BAT CAPTURE DATA

Project #: 340 Date: 24 July 2011  
 Project Name: Republic-Wind  
 State: 04 County: Sonoma  
 Biologists: E. Burger, S. Caplan  
 Site name/ID: 33  
 GPS Unit #: 9508 Camera #: Erin

## MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2100	25.9	1-3	E-W	100%	—
2130	24.9	1-3	E-W	100%	—
2200	24.3	1-3	SE-NW	75%	—
2230	24.0	1-3	W-E	25%	—
2300	23.8	1-3	W-E	10%	—
2330	23.7	1-3	"	30%	—
0000	21.6	1-3	"	50%	—
0030	21.4	1-3	"	75%	—
0100	23.1	1-3	"	80	—
0130	23.1	1-3	"	30%	—

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	100	41° 12' 41.3" N	82° 57' 19.3" W	7	7	2030	0140	30910
B	100	41° 12' 41.3" N	82° 59' 15.6" W	6	6	2035	0146	3100
C	100	41° 12' 41.3" N	82° 59' 13.0" W	9	6	2040	0150	3099
D	100	41° 12' 41.3" N	82° 59' 17.1" W	6	6	2045	0157	3098

## Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Jv)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # / Guano/Hair Sample
1	A	Eplosirus fuscus	2100	Ad	F	PL	18.1	47	E	0	
2	B	Eplosirus fuscus	2110	Ad	F	PL	19.5	46	M	0	
3	C	Eplosirus fuscus	2200	Ad	F	PL	20.1	46	F	0	
4	D	Eplosirus fuscus	2230	Jv	M	NR	22.0	45	M	0	
5	E	Eplosirus fuscus	2300	Jv	M	NR	19.5	44	F	0	
6	F	Eplosirus fuscus	2330	Ad	M	↓	18.0	45	F	0	
7	G	Eplosirus fuscus	2305	Jv	F	NR	18.0	44	M	0	

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/LPL; Male = ↑/↓



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**MOON PHASE\***

___ New moon	___ Waning crescent	___ First quarter
___ Waxing gibbous	___ Full moon	___ Waning gibbous
___ Last quarter	___ Waxing crescent	

\_\_\_ Waning gibbous  
 \_\_\_ First quarter  
 \_\_\_ Waning crescent  
 \_\_\_ Full moon  
 \_\_\_ Waxing crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From _____ to _____	% Cloud Cover (estimated)	Comments
0100	24.3°C	1-3	N-E	2%	—
0200	23.9°C	1-3	N-E	2%	—
0300	23.6°C	1-3	N-E	1%	—
0400	22.9°C	1-3	N-E	1%	—
0500	21.8°C	1-3	N-E	0%	—
0600	21.5°C	1-3	N-E	1%	—
0700	21.8°C	1-3	N-E	1%	—
0800	21.4°C	1-3	N-E	1%	—
0900	20.8°C	1-3	N-E	0%	—
1000	20.5°C	1-3	N-E	0%	—
1100	20.0°C	1-3	N-E	0%	—

Net/Trap/Anabat #	Net/Trap Type¹	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	NN	41° 10' 41.5" N	82° 59' 17.2" W	9	9	2036 0155		3096
B	NN	41° 10' 41.3" N	82° 59' 15.8" W	5	6	2035 0150		3100
C	NN	41° 10' 40.9" N	82° 59' 13.0" W	9	6	2040 0155		3099
D	NN	41° 10' 39.2" N	82° 59' 17.1" W	5	6	2045 0200		3098

Net Placement/Site Description:

Net Placement/Site Description:

[illegible]

<sup>1</sup> M = Monofilament; ON = Old Nylon; NN = New Nylon; HT = Harp Trap; A = Anabat

\* Refer to table on the back





## NET SITE HABITAT DESCRIPTION

Project #: 340 Date: 25 July 2011 Biologists: E. Baizer

Project Name: Republic-Wind Site Name/ #: 34

State: OH County: Semeca USGS Quad: Fireside

Net/Trap/ or AnaBat	Net/Trap/ AnaBat Serial #	Latitude	Longitude	Picture #	Waypoint #
A	Net	41° 09' 38.8"N	82° 57' 42.9"W	975	55
B	Net	41° 09' 40.1"N	82° 57' 43.3"W	974	56
C	Net	41° 09' 40.2"N	82° 57' 38.1"W	976	57
D	Net	41° 09' 38.7"N	82° 57' 36.7"W	977	58

Distance to closest water source (meters): 150 Type of water source: Pond

Water source name: \_\_\_\_\_

### ESTIMATED WATER SOURCE CHARACTERISTICS (IF UNDER NETS):

Bank Height: \_\_\_\_\_ meters Channel Width: \_\_\_\_\_ meters Stream Width: \_\_\_\_\_ meters

Substratum: \_\_\_\_\_ Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Silt/Clay

Still Water Present (Y/N): \_\_\_\_\_ Average Water Depth: \_\_\_\_\_ m or cm Clarity (H,M,L): \_\_\_\_\_

### VEGETATION:

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

Quercus alba  
Quercus rubra  
Carya ovata

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

Carya ovata  
Tilia americana  
Ulmus americana

Estimated dbh range: Lg: 70 Sm: 40

Estimated dbh range: Lg: 40 Sm: 10

Relative abundance of dominant vs. subdominant (ratio): 1:50

Estimated canopy closure: ☒ Closed ☐ Moderate ☐ Open

Roost tree potential consists of: ☒ Large Trees ☒ Snags ☐ Neither

Roost tree potential for the area is: ☐ High ☒ Moderate ☐ Low

Roost potential comments: dead trees and few large snags

Subcanopy clutter: ☐ Closed ☒ Moderate ☐ Open

Subcanopy comprised largely of: ☐ Lower Branches of Canopy Trees ☒ Saplings ☐ Shrubs

Common Subcanopy Species: Ulmus americana Acer saccharum  
Acer rubrum

Habitat Description: Older woodlot surrounded by farm fields

AnaBat Habitat: \_\_\_\_\_

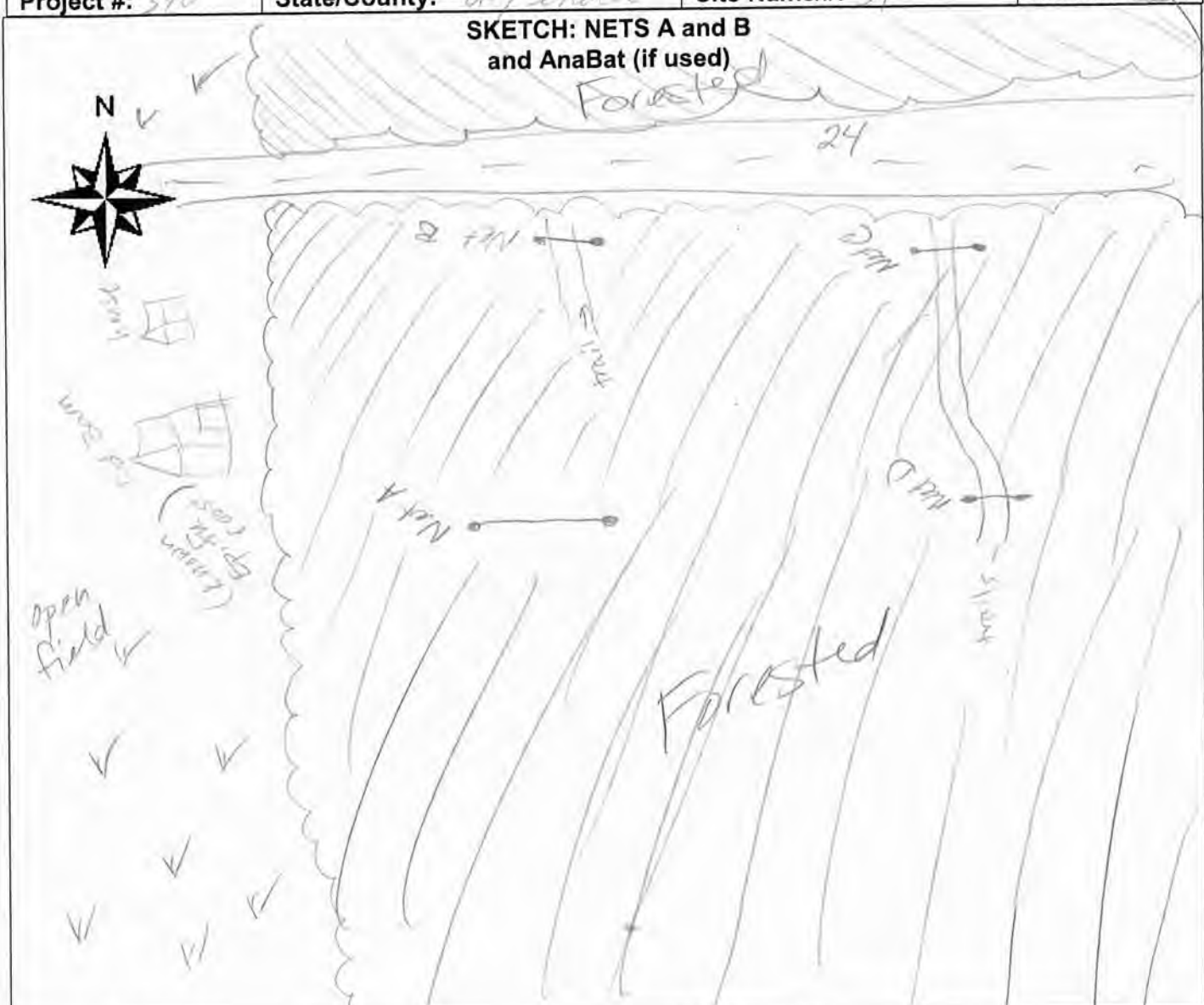
### Check all that apply:

☒ Mature Upland Forest ☐ Recently Logged Forest ☐ Crop/Pasture Land ☐ Other \_\_\_\_\_  
☒ Young Upland Forest ☐ Forest Edge ☐ Stream/River \_\_\_\_\_  
☐ Mature Lowland Forest ☐ Woodlot ☐ Vernal Pool \_\_\_\_\_  
☐ Young Lowland Forest ☐ Old Field ☐ Deepwater Lake/Pond \_\_\_\_\_

Herbaceous Cover: ☐ Sparse ☒ Moderate ☐ Dense



### NET SITE HABITAT DESCRIPTION (continued)

Project #: 340	State/County: OH/Seneca	Site Name/ #: 34	Initials: SJK
<p>SKETCH: NETS A and B and AnaBat (if used)</p> 			
<b>LEGEND</b>  Nets: ● — ●	<b>COMMENTS</b>  <hr/> <hr/> <hr/> <hr/> <hr/>		



# BAT CAPTURE DATA

Project #: 340 Date: 25 July 2011  
 Project Name: Republic - Wind  
 State: GA County: Seneca  
 Biologists: E. Boeger  
 Site name/ID: 340  
 GPS Unit #: 9528 Camera #: Can671

## MOON PHASE\*

☐ New moon ☐ Waxing crescent ☐ First quarter  
☐ Waxing gibbous ☐ Full moon ☐ Waning gibbous  
☐ Last quarter ☐ Waning crescent

## WEATHER DATA

Time (0000 h)	Temp (°C)	Wind Speed (estimated - see chart)*	Wind Direction: From to	% Cloud Cover (estimated)	Comments
2130	26.0	1-3	W-E	25%	
2200	23.9	1-3	W-E	10%	
2230	23.4	1-3	S-N	10%	
2300	23.1	1-3	S-N	0%	
2330	22.8	1-3	SW-NE	0%	
0000	22.6	1-3	SW-NE	0%	
0030	22.4	1-3	SW-NE	0%	
0100	22.0	1-3	SW-NE	0%	
0130	21.8	1-3	SW-NE	0%	
0200	21.2	1-3	SW-NE	0%	

Net/Trap/Anabat #	Net/Trap Type <sup>1</sup>	Latitude	Longitude	Length (m)	Height (m)	Time Up (0000 h)	Time Down (0000 h)	Picture #
A	NN	41° 09' 38.4" N	82° 57' 42.9" W	12	9	2030	2145	975
B	NN	41° 09' 40.1" N	82° 57' 43.3" W	9	6	2035	2150	974
C	NN	41° 09' 40.2" N	82° 57' 38.1" W	9	6	2040	2200	976
D	NN	41° 09' 39.7" N	82° 57' 36.7" W	6	6	2055	2210	977

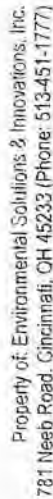
## Net Placement/Site Description:

Capt #	Net #	Species	Time	Age (Ad/Ju)	Sex (M/F)	Repro. <sup>2</sup>	Wt (g)	RFA (mm)	Belly (F/M/E)	Wing Index* (0-3)	Picture # / Guano/Hair Sample	Comments
1		Lasiurus borealis	2115	Ju.	M	NR	2.0	39	E	0	3090	
2		Lasiurus borealis	2120	Ad	F	PL	15.0	41	M	0		
3		Lasiurus borealis	2120	Ad	M	↓	17.0	46	M	0	3092	
4		Myotis septentrionalis	2145	Ad	M	↓	7.0	37	M	0	3093-3095	
5		M. septentrionalis	2205	Ad	—	—	6.0	—	M	0	escaped	
6		M. septentrionalis	2240	Ad	M	↑	7.0	36	M	0		
7		M. septentrionalis	2300	Ad	F	PL	6.5	37	M	0		
8		E. fuscus	2302	Ju	M	NR	12.0	43	M	0		

<sup>1</sup> M = Monofilament, ON = Old Nylon, NN = New Nylon, HT = Harp Trap, A = Anabat

\* Refer to table on the back

<sup>2</sup> Reproductive Condition: Female = NR/PG/L/PL; Male = ↑/↓



## WEATHER DATA

GPS Unit #: 9528 Camera #: Can671

MOON PHASE\*

\_\_\_ New moon  
 \_\_\_ Waxing gibbous  
 \_\_\_ Last quarter  
 \_\_\_ Waning crescent  
 \_\_\_ Full moon  
 \_\_\_ Waxing crescent  
 \_\_\_ First quarter  
 \_\_\_ Waning gibbous

Net Placement/Site Description:[illegible]

U = Monofilament ON = Old Nylon NN = New Nylon HT = Hard Trap A = Anahat

\* Refer to table on the back





## BAT TRANSMITTER DATA

Project #: 340.02 Date: 24 July 2011 Biologists: D. Jeffcott, S. Reeves  
Project Name: Tetrach Republic Site Name/#: Site 16  
State: OH County: Seneca Camera #: C4834  
Picture #: 3788-99, 3803-07  
Bat Species: Myotis sodalis Capture Time: 2120

Age Ad or Jv	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
<u>Ad</u>	<u>F</u>	<u>PL</u>	<u>7.0</u>	<u>37.0</u>

Transmitter weight = 0.2 grams Frequency number: 172.219  
Transmitter + bat total weight = 7.4 grams Band/color number: Silver/ODNR/12063

### FINAL CHECK:

- 1) Transmitter attachment (Y/N): Y
- 2) Signal receiving (frequency): 172.2181
- 3) Band attachment (Y/N): Y
- 4) Condition of animal: Excellent
- 5) Description of release: onto snag; crawled up quickly

RELEASE TIME: 2220 TOTAL HOLD TIME: 60 minutes

RELEASE LOCATION: Site 16, capture location

### COMMENTS:

released onto snag after failed take-off  
0126 - transmitter reading to west  
0200 - transmitter gave no reading  
0305 - transmitter reading to NNE



## ROOST TREE DATA

Project #: 340.02 Date: 25 July 2011 Biologists: P. Jeffcott, S. Captain  
Project Name: Tetatech / Republic State: OH County: Seneca  
GPS Unit #: A5 Waypoint: 216-1 Camera #: 4834 Picture #: 104-3933, 3934  
Latitude: 41° 13' 07.5"N Longitude: 82° 56' 38.0"W  
Bat Species: Myotis sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL  
Capture Date: 24 July 2011 Capture Site: Site 16  
Frequency: 172.2181 Roost Name/#: I bat #1

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 25 cm  
Estimated height from ground to roost: 10 (meters) Tree height 22 (meters)  
Exfoliating bark (%): 30% Distance from capture site: 1 km 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh) Subdominant Canopy Species (< 40 cm/16" dbh)  
Carya ovata Carya ovata

Estimated dbh range (cm): Lg: \_\_\_\_\_ Sm: 40 cm Estimated dbh range (cm): Lg: 39 cm Sm: 5 cm

Estimated canopy closure at roost: 40 %

Slope: ☐ Steep ☐ Moderate ☐ Slight ☒ None Slope aspect: \_\_\_\_\_

Subcanopy Clutter: ☐ Closed ☐ Moderate ☒ Open

Distance to nearest water source: 1 km m or (km) (circle one) Distance to nearest flight corridor: 40 meters

Habitat Description: Woodlot with some large trees mainly shagbark hickory, fragmented areas of open

Check all that apply: subcanopy, with very dense vegetation

☐ 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/Forest Edge ☐ Emergent Wetland ☐ Deepwater Lake/Pond  
☒ Young Lowland Forest ☐ Old Field ☐ Forested Swamp ☐ Other \_\_\_\_\_

Comments: Evidence of logging, landowner allows some wood to be taken off property



## ROOST TREE DATA (continued)

Page 2 of 2

State/County: OH / Seneca

Project Name/ #: Tetratich

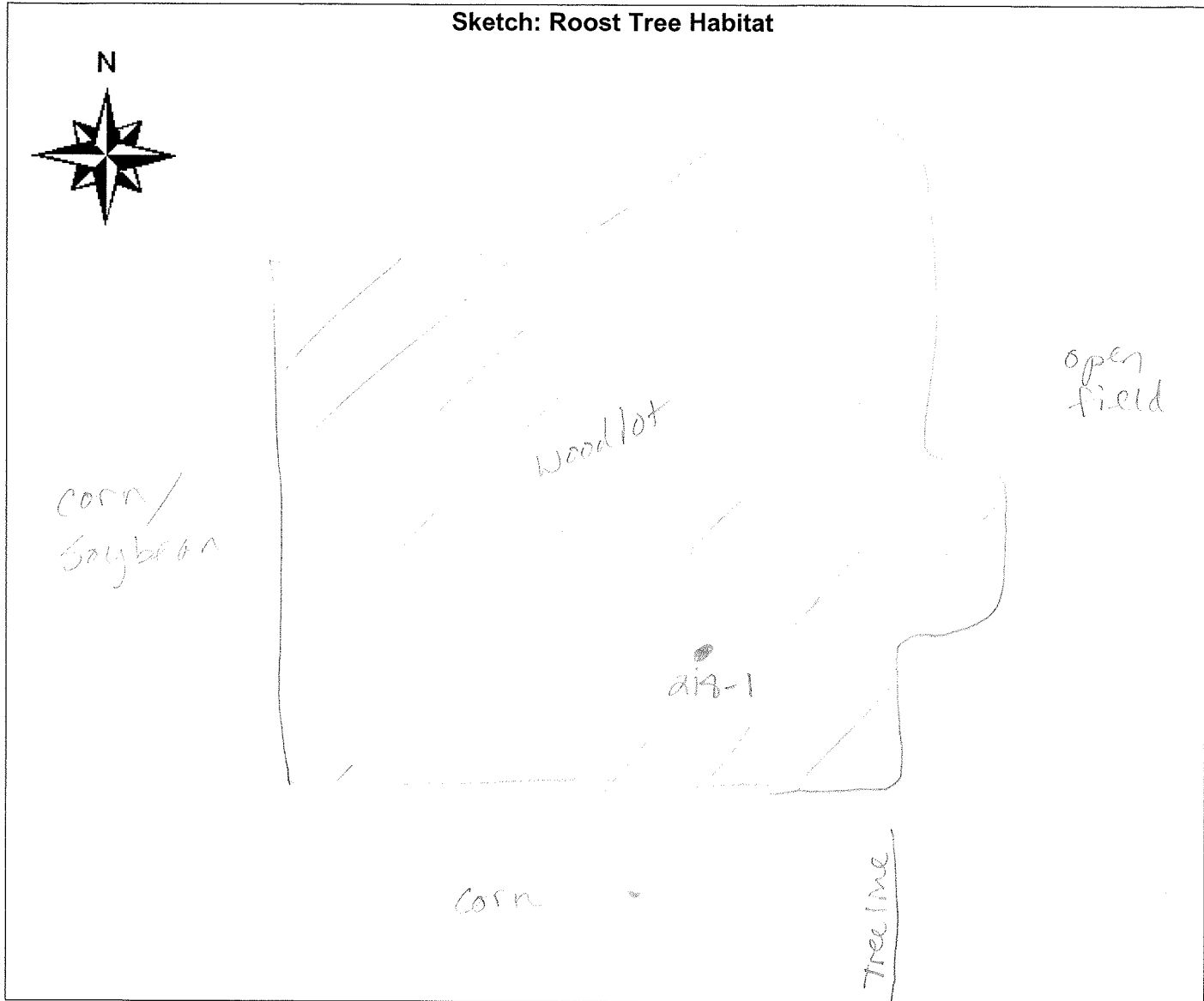
Date: 25-Jul-11

Frequency: 172.218

Roost Name/ #: 218-1

Initials: SC

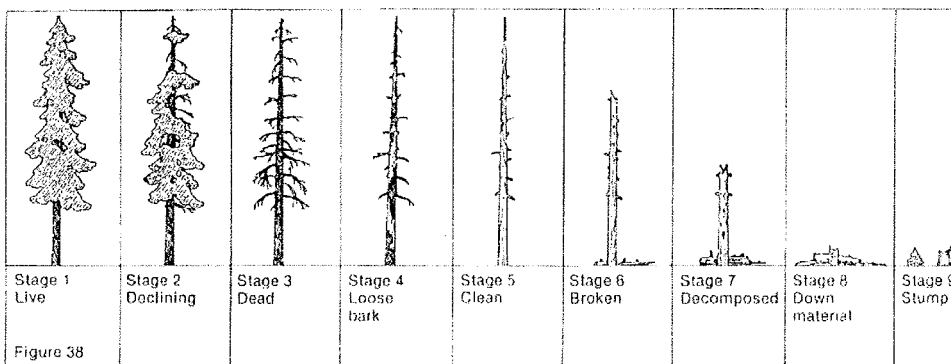
### Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_

### Sketch: Roost Tree

#### Stages of Decay:





## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 26-Jul-11 Biologists: M. Farmer

Project Name: Republic State: OH County: Seneca

GPS Unit #: \_\_\_\_\_ Waypoint: OH-1

Latitude: 41 ° 11 ' 07.5 "N Longitude: 82 ° 56 ' 35.0 "W

Roost Name/#: 1

Radio-tagged bat present in tree: Yes \_\_\_\_\_ No X

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

Bat species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 170.218

**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: \_\_\_\_\_ Total Bats: 4

Emergence Time	Number of Bats	Emergence Aspect
<u>2112</u>	<u>2</u>	
<u>2116</u>	<u>1</u>	
<u>2118</u>	<u>1</u>	

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?

Could not determine point of exit. Bats  
foraged for approx 20 m vicinity of roost tree.





## ROOST TREE EMERGENCE DATA

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

Project Name: Republic State: OH County: Seneca

GPS Unit #: A5 Waypoint: \_\_\_\_\_

Latitude: 41 ° 13 ' 07.5 "N Longitude: 82 ° 56 ' 58.0 "W

Roost Name/#: 218-1

Radio-tagged bat present in tree: Yes \_\_\_\_\_ No X

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

Bat species: Myotis sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 172.218

**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: 21:00 Departure time: 21:45 Total Bats: 4

Emergence Time	Number of Bats	Emergence Aspect
9:10	3	circling around
9:12	—	roost tree
9:14	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?

3 bats emerged simultaneously btwn 9:10-9:12. All bats circled  
roost tree for 10-15 mins before dispersing.



## ROOST TREE EMERGENCE DATA

Project #: 346.01 Date: 29 Jul 11 Biologists: R. Flynn

Project Name: Republic State: OH County: Seneca

GPS Unit #: 350 465671 Waypoint: \_\_\_\_\_

Latitude: 41° 13' 07.5" N Longitude: 82° 56' 36.0" W

Roost Name/#: # 218-1

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: \_\_\_\_\_

Capture date: 29 Jul 11 Capture site: 16 Frequency: 172.218

**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: 20:50 Departure time: 21:35 Total Bats: 1

Emergence Time	Number of Bats	Emergence Aspect
<u>21:11</u>	<u>1</u>	<u>circling</u>

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?

1 bat emerged, circled roost tree for approximately 10 mins before  
dispensing.



## ROOST TREE DATA

Project #: 540 Date: 26-Jul-11 Biologists: S. Captain  
Project Name: Tetatech State: OH County: Seneca  
GPS Unit #: A5 Waypoint: 218-2 Camera #: 4834 Picture #: 104-3831, 104-3832  
Latitude: 41° 13' 06.1"N Longitude: 82° 56' 44.6"W  
Bat Species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL  
Capture Date: 24-Jul-11 Capture Site: 16  
Frequency: 172.218 Roost Name/#: 218-2

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 30 cm  
Estimated height from ground to roost: 30 (meters) Tree height 40 (meters)  
Exfoliating bark (%): 40 Distance from capture site: 1 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

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

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

Carya ovata Quercus rubra  
Populus deltoides  
Acer saccharum

Estimated dbh range (cm): Lg: \_\_\_\_\_ Sm: \_\_\_\_\_

Estimated dbh range (cm): Lg: 30 Sm: 10

Estimated canopy closure at roost: 5 %

Slope: ☐ Steep ☐ Moderate ☐ Slight ☒ None Slope aspect: \_\_\_\_\_

Subcanopy Clutter: ☐ Closed ☒ Moderate ☐ Open

Distance to nearest water source: 400 m or km (circle one) Distance to nearest flight corridor: 50 meters

Habitat Description: \_\_\_\_\_

#### Check all that apply:

<input type="checkbox"/> Mature Upland Forest	<input type="checkbox"/> Recently Logged Forest	<input checked="" type="checkbox"/> Crop/Pasture Land	<input type="checkbox"/> Shrub/scrub Swamp
<input type="checkbox"/> Young Upland Forest	<input type="checkbox"/> Pine Plantation	<input type="checkbox"/> Stream/River	<input type="checkbox"/> Vernal Pool
<input type="checkbox"/> Mature Lowland Forest	<input checked="" type="checkbox"/> Woodlot/Forest Edge	<input type="checkbox"/> Emergent Wetland	<input type="checkbox"/> Deepwater Lake/Pond
<input type="checkbox"/> Young Lowland Forest	<input type="checkbox"/> Old Field	<input type="checkbox"/> Forested Swamp	<input type="checkbox"/> Other _____

Comments: \_\_\_\_\_



## ROOST TREE DATA (continued)

Page \_\_\_\_ of \_\_\_\_

State/County: OH / Seneca

Project Name/ #: Tetrattech

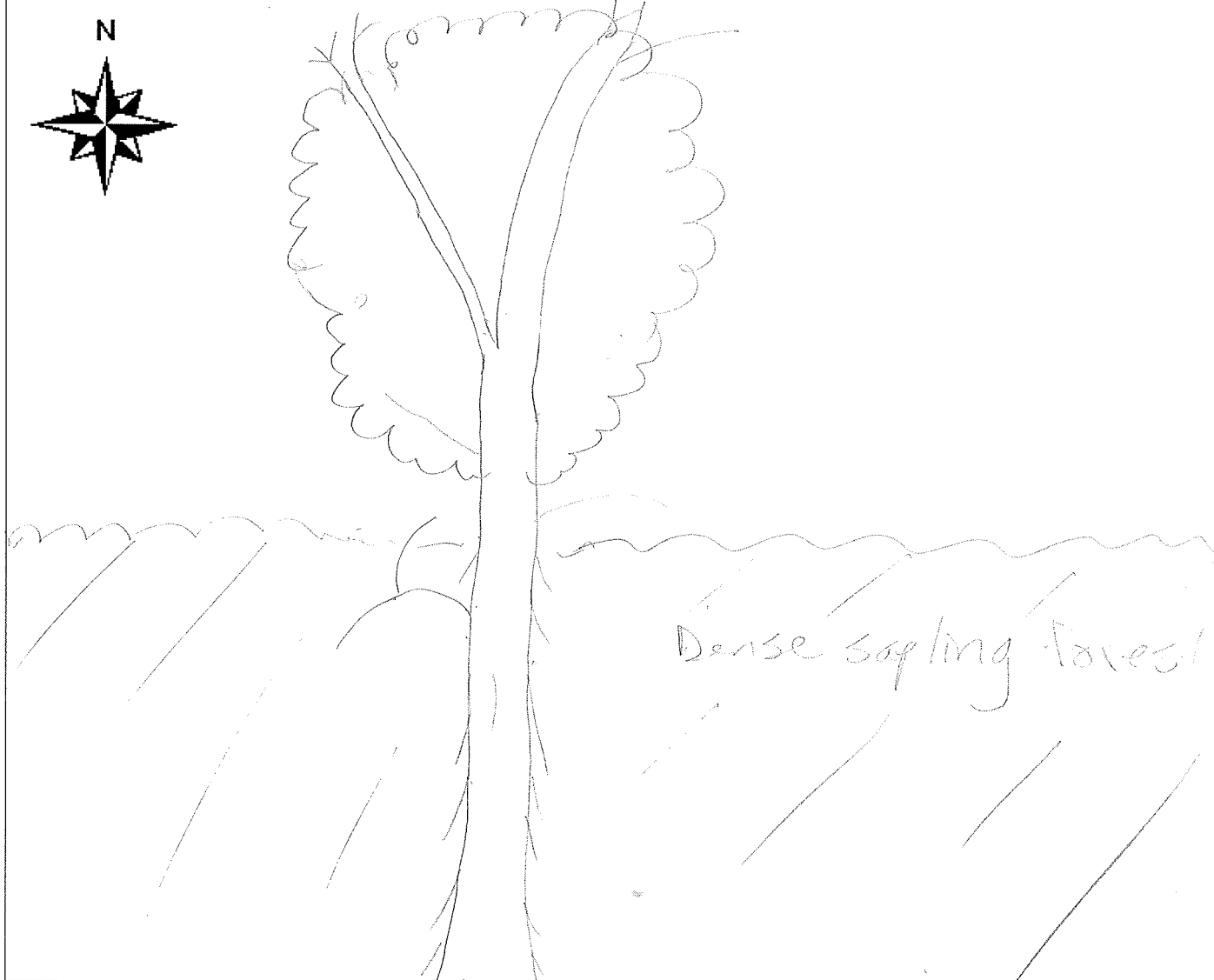
Date: 26-Jul-11

Frequency: 172.218

Roost Name/ #: 218-2

Initials: SC

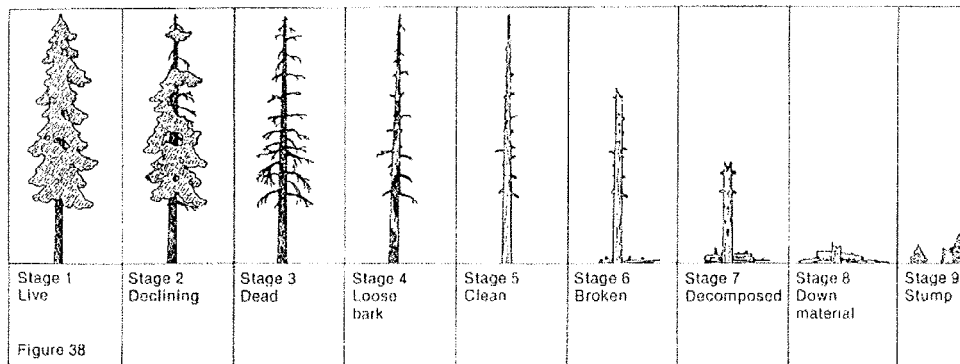
### Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_  
\_\_\_\_\_

### Sketch: Roost Tree

#### Stages of Decay:







## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 26-Jul-11 Biologists: S. Captain

Project Name: Tetratich State: OH County: Seneca

GPS Unit #: A5 Waypoint: 218-2

Latitude: 41 ° 13 ' 06.1 "N Longitude: 82 ° 56 ' 44.6 "W

Roost Name/#: 218-2

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 172.218

**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: 2125 Total Bats: 0

Emergence Time	Number of Bats	Emergence Aspect
<u>2056</u>	<u>0</u>	

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

Couldn't see well to the E/NE so she could have exited from there.



## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 27 Jul 2011 Biologists: M Farmer

Project Name: Republic State: OH County: Seneca

GPS Unit #: \_\_\_\_\_ Waypoint: \_\_\_\_\_

Latitude: 41° 13' 06.1" N Longitude: 82° 56' 33.5" W

Roost Name/#: 2

Radio-tagged bat present in tree: Yes \_\_\_\_\_ No X

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

Bat species: \_\_\_\_\_ Sex(M/F): \_\_\_\_\_ Age(Ad/Jv): \_\_\_\_\_ Repro.: \_\_\_\_\_

Capture date: \_\_\_\_\_ Capture site: \_\_\_\_\_ Frequency: \_\_\_\_\_

**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: 2140 Total Bats: 0

Emergence Time	Number of Bats	Emergence Aspect

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?

Bats were seen foraging the area, did not see individuals dropping from roost tree.





## ROOST TREE DATA

Project #: 340 Date: 27-Jul-11 Biologists: S. Caplan, M. Farmer  
Project Name: Tetrahelich State: OH County: Seneca  
GPS Unit #: A7 Waypoint: 218-3 Camera #: 4634 Picture #: 104-3835, 3836  
Latitude: 41° 13' 12.0"N Longitude: 82° 56' 33.5"W  
Bat Species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL  
Capture Date: 24-Jul-11 Capture Site: 16  
Frequency: 172.218 Roost Name/#: 218-3

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 25 cm  
Estimated height from ground to roost: 20 (meters) Tree height 40 (meters)  
Exfoliating bark (%): 30 Distance from capture site: 1 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Carya ovata  
Acer saccharum  
\_\_\_\_\_  
\_\_\_\_\_

Estimated dbh range (cm): Lg: \_\_\_\_\_ Sm: \_\_\_\_\_

Estimated dbh range (cm): Lg: 25 Sm: 10

Estimated canopy closure at roost: \_\_\_\_\_ %

Slope: ☐ Steep ☐ Moderate ☐ Slight ☒ None Slope aspect: \_\_\_\_\_

Subcanopy Clutter: ☐ Closed ☒ Moderate ☐ Open

Distance to nearest water source: 750 m or km (circle one) Distance to nearest flight corridor: \_\_\_\_\_ meters

Habitat Description: Mainly Carya ovata, few large trees, very dense vegetation

#### Check all that apply:

<input type="checkbox"/> Mature Upland Forest	<input type="checkbox"/> Recently Logged Forest	<input type="checkbox"/> Crop/Pasture Land	<input type="checkbox"/> Shrub/scrub Swamp
<input type="checkbox"/> Young Upland Forest	<input type="checkbox"/> Pine Plantation	<input type="checkbox"/> Stream/River	<input type="checkbox"/> Vernal Pool
<input type="checkbox"/> Mature Lowland Forest	<input checked="" type="checkbox"/> Woodlot/Forest Edge	<input type="checkbox"/> Emergent Wetland	<input type="checkbox"/> Deepwater Lake/Pond
<input type="checkbox"/> Young Lowland Forest	<input type="checkbox"/> Old Field	<input type="checkbox"/> Forested Swamp	<input type="checkbox"/> Other _____

Comments:





## ROOST TREE DATA (continued)

Page 2 of 2

State/County: OH / Seneca

Project Name/ #: 340

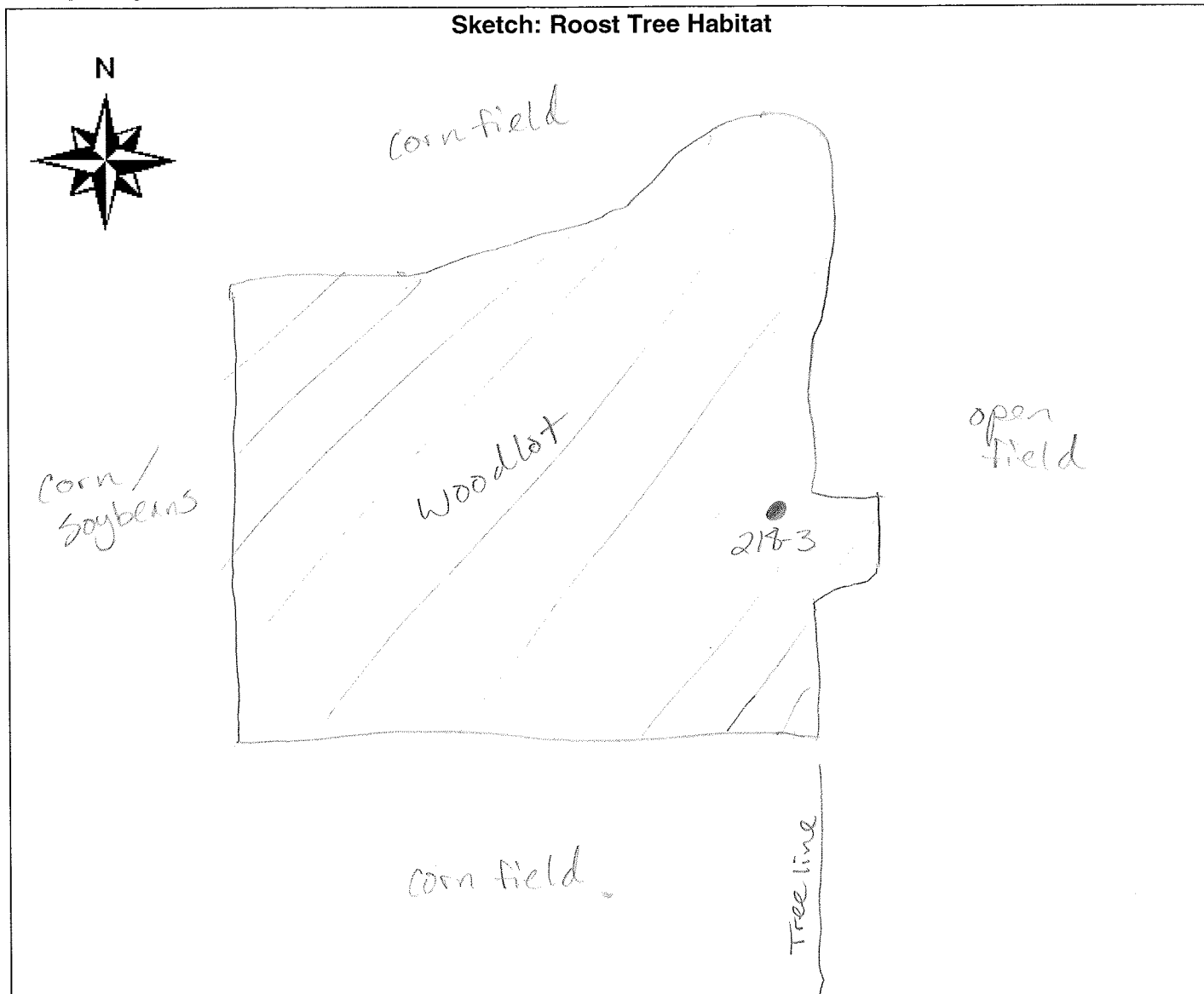
Date: 27-Jul-11

Frequency: 170, 218

Roost Name/ #: 218-3

Initials: SC

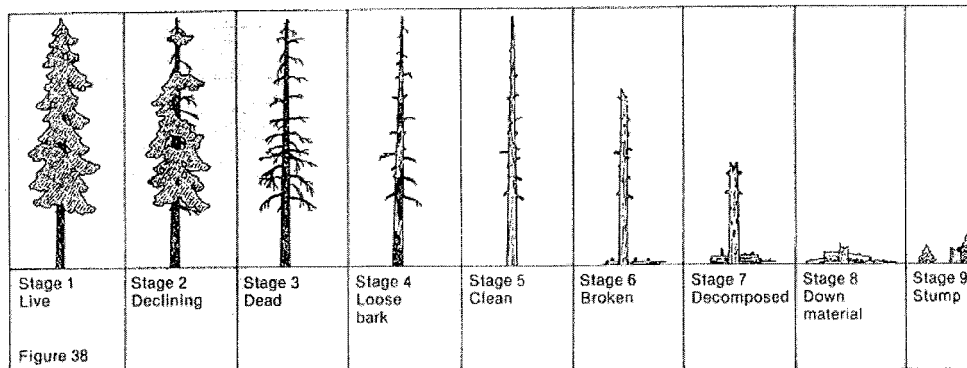
### Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_

### Sketch: Roost Tree

#### Stages of Decay:



## ROOST TREE EMERGENCE DATA

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

Project Name: Tetratex State: OH County: Seneca

GPS Unit #: A7      Waypoint: 2143

**Latitude:** 41 ° 13 ' 12.0 "N **Longitude:** 82 ° 56 ' 33.5 "W

Roost Name/#: 210-3

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 29-Jul-11 Capture site: 16 Frequency: 170.218

**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: 2145      Total Bats: 0

[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?

Bat not seen



## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 29 Jul 2011 Biologists: M Forman

Project Name: Republic State: OH County: Seneca

GPS Unit #: A5 Waypoint: \_\_\_\_\_

Latitude: 41° 13' 12.0" N Longitude: 82° 56' 33.6" W

Roost Name/#: R3

Radio-tagged bat present in tree: Yes \_\_\_\_\_ No X

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

Bat species: Lasiurus borealis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24 Jul 11 Capture site: 16 Frequency: 172.218

**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: 2010 Departure time: 2130 Total Bats: 2

Emergence Time	Number of Bats	Emergence Aspect
<u>2110</u>	<u>1</u>	
<u>2114</u>	<u>1</u>	

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?

Bats emerged from roost and flew  
100 ft.



## ROOST TREE EMERGENCE DATA

Project #: 350 Date: 30-Jul-11 Biologists: Doornik

Project Name: 7641001 State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-3

UTM Zone: 18Q Easting: 412 131 00 Northing: 70541336

Roost Name/#: 218-3

Transmitted bat present in tree: Yes      No   

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

Bat species: M. s. l. s. Sex(M/F): F Age(Ad/Jv): 1 Repro.: 1

Capture date: 24-Jul-11 Capture site: 16 Frequency: 42.218

**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 (i.e., do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2054 Departure time: 2118

Emergence Time	Number of Bats	Emergence Aspect
2054	1	
2056	0	
2058	1	
2100	2	
2102	1	
2104	0	
2106	0	
2108	0	
2110	0	
2112	1	
2114	1	
2116	0	
2118	0	





## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 30-Jul-11 Biologists: Doonan

Project Name: 1644444 State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-3

UTM Zone: 18Q Easting: 412 121 00 Northing: 4256420

Roost Name/#: 218-3

Transmitted bat present in tree: Yes      No     

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

Bat species: M. s. l. s. Sex(M/F): F Age(Ad/Jv): 1 Repro.: 2

Capture date: 24-Jul-11 Capture site: 164 Frequency: 112.218

**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 (i.e., do not stand directly beneath the roost and do not make unnecessary noise and/or conversation, and minimize use of lights).

Arrival time: 2054 Departure time: 2118

Emergence Time	Number of Bats	Emergence Aspect
2054	1	
2056	0	
2058	1	
2100	2	
2102	1	
2104	0	
2106	0	
2108	0	
2110	0	
2112	1	
2114	1	
2116	0	
2118	0	



## ROOST TREE DATA

Project #: 340 Date: 26-Jul-11 Biologists: S. Caplain & M. Farmer  
Project Name: Tetatech State: OH County: Seneca  
GPS Unit #: A7 Waypoint: 218-4 Camera #: 4834 Picture #: 104-3837, 3838  
Latitude: 41° 13' 08.6"N Longitude: 82° 56' 37.7"W  
Bat Species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL  
Capture Date: 24-Jul-11 Capture Site: 16  
Frequency: 172.218 Roost Name/#: 218-4

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 30 cm  
Estimated height from ground to roost: 20 (meters) Tree height 40 (meters)  
Exfoliating bark (%): 30 Distance from capture site: 1 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

Dominant Canopy Species (> 40 cm/16" dbh) \_\_\_\_\_  
Subdominant Canopy Species (< 40 cm/16" dbh) Carya ovata

Estimated dbh range (cm): Lg: \_\_\_\_\_ Sm: \_\_\_\_\_ Estimated dbh range (cm): Lg: 30 Sm: 10  
Estimated canopy closure at roost: \_\_\_\_\_ %  
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: 2 meters

Habitat Description: \_\_\_\_\_

### Check all that apply:

<input type="checkbox"/> Mature Upland Forest	<input type="checkbox"/> Recently Logged Forest	<input checked="" type="checkbox"/> Crop/Pasture Land	<input type="checkbox"/> Shrub/scrub Swamp
<input type="checkbox"/> Young Upland Forest	<input type="checkbox"/> Pine Plantation	<input type="checkbox"/> Stream/River	<input type="checkbox"/> Vernal Pool
<input type="checkbox"/> Mature Lowland Forest	<input checked="" type="checkbox"/> Woodlot/Forest Edge	<input type="checkbox"/> Emergent Wetland	<input type="checkbox"/> Deepwater Lake/Pond
<input type="checkbox"/> Young Lowland Forest	<input type="checkbox"/> Old Field	<input type="checkbox"/> Forested Swamp	<input type="checkbox"/> Other _____

Comments: \_\_\_\_\_



## ROOST TREE DATA (continued)

Page \_\_\_\_ of \_\_\_\_

State/County: OH / Seneca

Project Name/#: 340

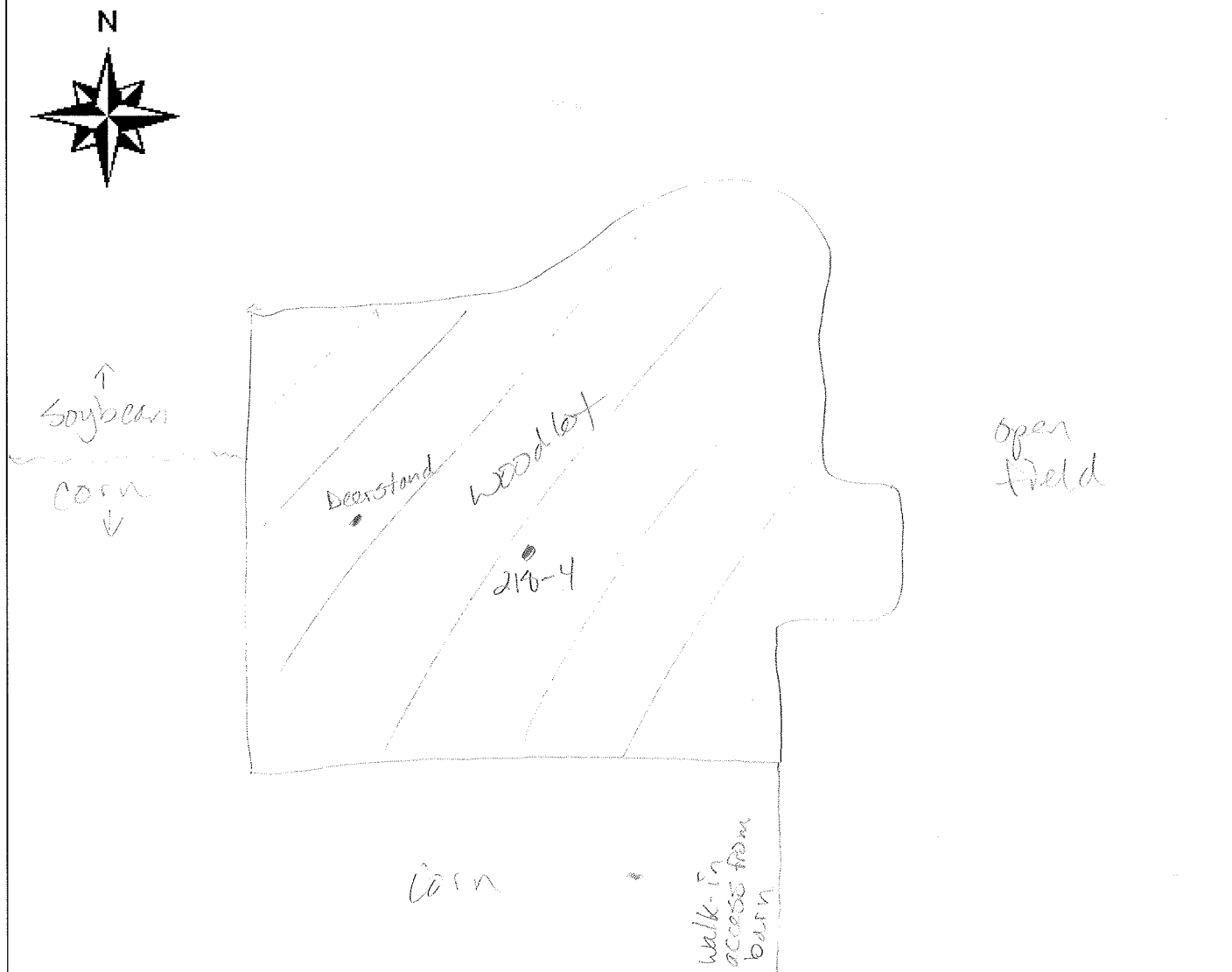
Date: 24 Jul 11

Frequency: 172.218

Roost Name/#: 210-4

Initials: JS

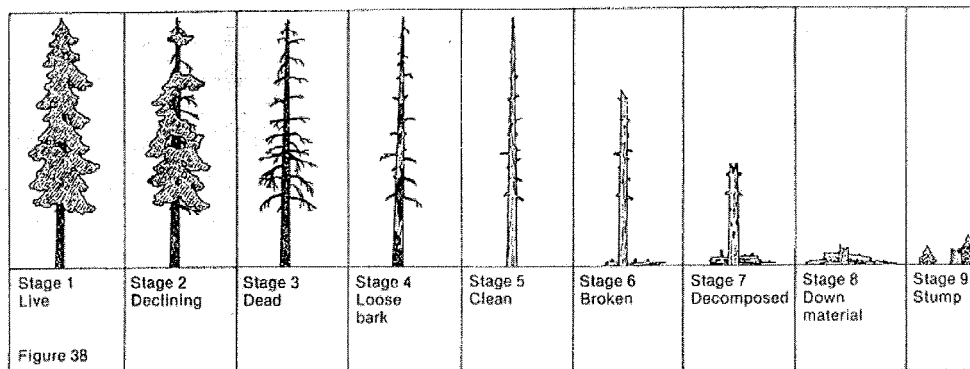
### Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_

### Sketch: Roost Tree

#### Stages of Decay:





## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 28 Jul-11 Biologists: M. F. Miller

Project Name: Republic State: OH County: Seneca

GPS Unit #: A5 Waypoint: \_\_\_\_\_

Latitude: 41° 13' 08.6" N Longitude: 82° 56' 37.7" W

Roost Name/#: 4

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: Myotis grisescens Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: \_\_\_\_\_ Capture site: \_\_\_\_\_ Frequency: 2/8

**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: 2115 Departure time: 2145 Total Bats: 4

Emergence Time	Number of Bats	Emergence Aspect
<u>2212</u>	<u>2</u>	
<u>2215</u>	<u>1</u>	
<u>2218</u>	<u>1</u>	

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?

Bats loitered and perched for some time  
near and around the roost.





## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 29-Jul-11 Biologists: M. Flynn

Project Name: Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-4

Latitude: 41° 13' 09.6" N Longitude: 82° 56' 33.7" W

Roost Name/#: 218-4

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 172.218

**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: 2125 Total Bats: 1

Emergence Time	Number of Bats	Emergence Aspect
<u>2110</u>	<u>1</u>	

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 #: 340 Date: 30-July-2011 Biologists: M. Farmer

Project Name: Republic State: OH County: Seneca

GPS Unit #: A5 Waypoint: 214-4

Latitude: 41° 13' 08.6" N Longitude: 82° 56' 33.7" W

Roost Name/#: 4

Radio-tagged bat present in tree: Yes \_\_\_ No X

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

Bat species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 172.218

**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: 2140 Total Bats: 0

Emergence Time	Number of Bats	Emergence Aspect
<u>0</u>		

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?

No bats leaving roost, although previously (previous night)  
several bats foraged circling the roost area for approx. 15  
minutes



## ROOST TREE DATA

Project #: 340 Date: 29-Jul-11 Biologists: S. Captain & M. Farmer

Project Name: Tetratich Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-5 Camera #: 4834 Picture #: 104-3842, 3844

Latitude: 41° 12' 38.6"N Longitude: 82° 57' 03.8"W

Bat Species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture Date: 24-Jul-11 Capture Site: 16

Frequency: 172, 218 Roost Name/#: 218-5

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 40 cm

Estimated height from ground to roost: 35 (meters) Tree height 40 (meters)

Exfoliating bark (%): 40 Distance from capture site: 100 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

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

Carya ovata

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

Carya ovata

Acer saccharum

Populus deltoides

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

Estimated dbh range (cm): Lg: 35 Sm: 10

Estimated canopy closure at roost: 25 %

Slope: ☐ Steep ☐ Moderate ☐ Slight ☒ None Slope aspect: \_\_\_\_\_

Subcanopy Clutter: ☐ Closed ☒ Moderate ☐ Open

Distance to nearest water source: 25 m or km (circle one) Distance to nearest flight corridor: 2 meters

Habitat Description: Deciduous woodlot between two houses. Near edge of lawn w/ a pond.

### 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/Forest Edge ☐ Emergent Wetland ☐ Deepwater Lake/Pond  
☐ Young Lowland Forest ☐ Old Field ☐ Forested Swamp ☒ Other decorative pond w/ fountain

Comments:



## ROOST TREE DATA (continued)

Page 2 of 2

State/County: OH / Seneca

Project Name/#: Totat-tech

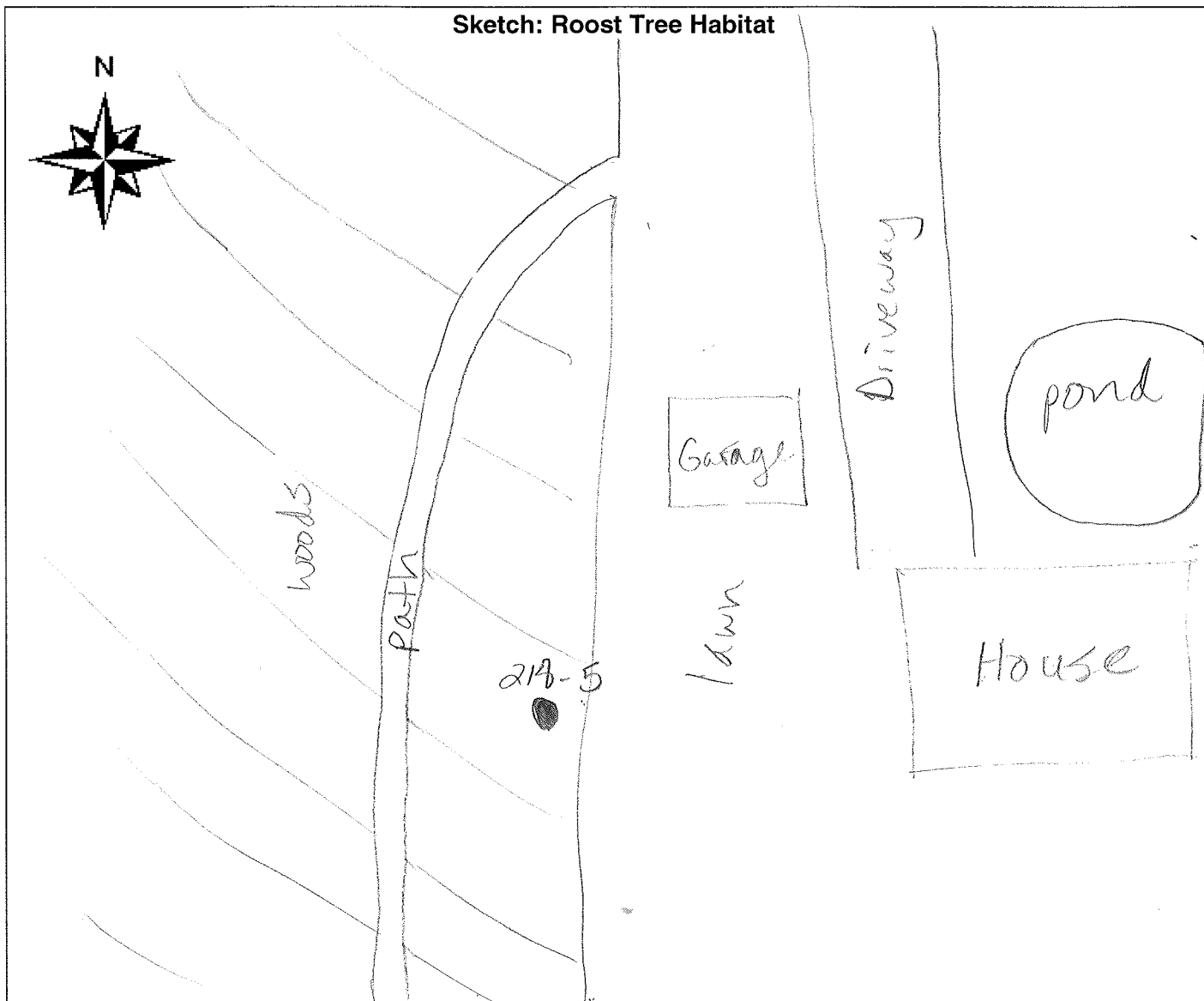
Date: 29-Jul-11

Frequency: 172, 214

Roost Name/#: 218-5

Initials: SC

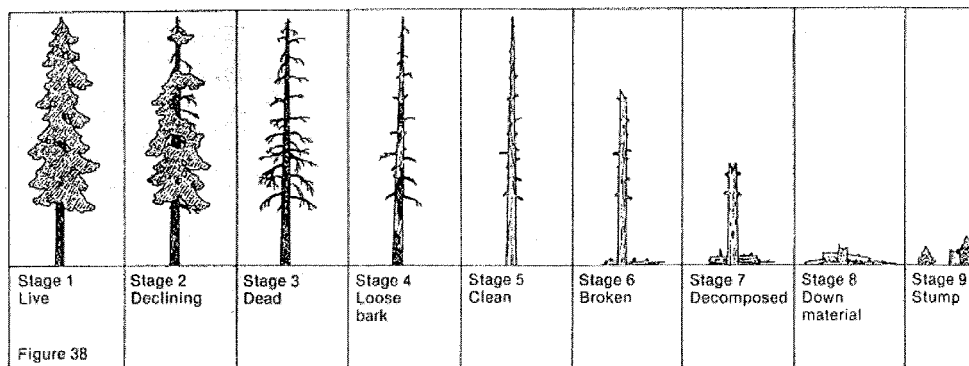
Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_

Sketch: Roost Tree

Stages of Decay:







## ROOST TREE EMERGENCE DATA

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

Project Name: Tetatech Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-5

Latitude: 41° 12' 38.6" N Longitude: 82° 57' 53.8" W

Roost Name/#: 218-5

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 21-Jul-11 Capture site: 16 Frequency: 172.218

**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: 1

Emergence Time	Number of Bats	Emergence Aspect
<u>2053</u>	<u>1</u>	<u>NW</u>

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

Did not see exact spot on tree where she emerged.



## ROOST TREE DATA

Project #: 340 Date: 30-Jul-11 Biologists: S. Captain

Project Name: Tetatech Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-6 Camera #: 4834 Picture #: 104-3846, 3847

Latitude: 41° 13' 17.9"N Longitude: 82° 56' 33.6"W

Bat Species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture Date: 24-Jul-11 Capture Site: 16

Frequency: 172.218 Roost Name/#: 218-6

### ROOST TREE DATA

Roost tree species: Carya ovata dbh: 20 cm

Estimated height from ground to roost: 15 (meters) Tree height 30 (meters)

Exfoliating bark (%): 30 Distance from capture site: 1 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): \_\_\_\_\_

### DESCRIPTION OF SURROUNDING HABITAT

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

Quercus rubra

\_\_\_\_\_

\_\_\_\_\_

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

Carya ovata Prunus virginiana

Quercus alba

\_\_\_\_\_

Populus grandidentata

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

Estimated dbh range (cm): Lg: 35 Sm: 10

Estimated canopy closure at roost: 75 %

Slope: ☐ Steep ☐ Moderate ☐ Slight ☒ None Slope aspect: \_\_\_\_\_

Subcanopy Clutter: ☒ Closed ☐ Moderate ☐ Open

Distance to nearest water source: 200 m or km (circle one) Distance to nearest flight corridor: 1 meters

Habitat Description: Deciduous forest w/ a trav-trail, slightly less disturbed than rest of woodlot

### 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/Forest Edge ☐ Emergent Wetland ☐ Deepwater Lake/Pond

☐ Young Lowland Forest ☒ Old Field ☐ Forested Swamp ☐ Other \_\_\_\_\_

Comments:



## ROOST TREE DATA (continued)

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State/County: OH / Seneca

Project Name/ #: Tetatech

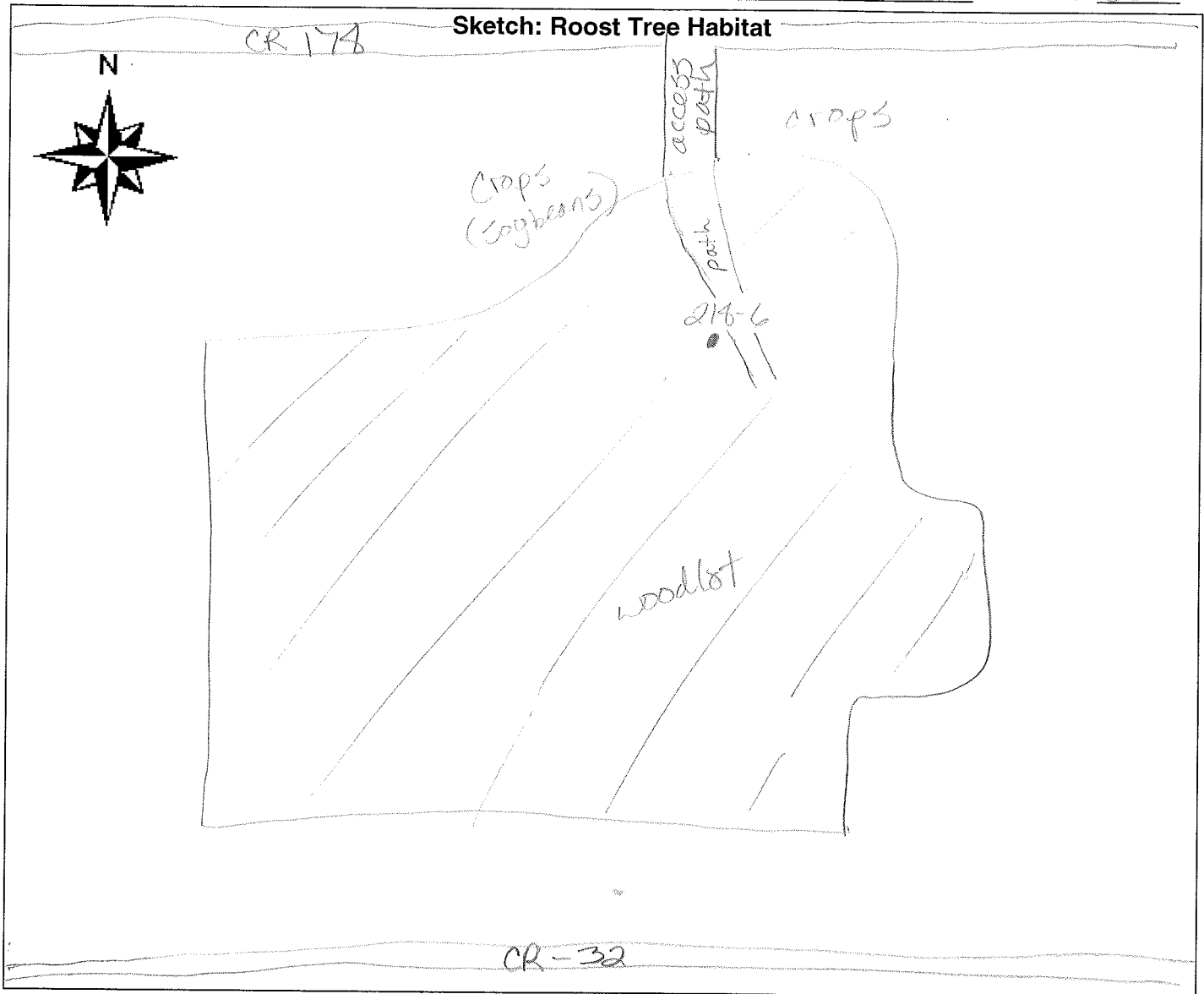
Date: 30 Jul-11

Frequency: 72.219

Roost Name/ #: 218-6

Initials: SC

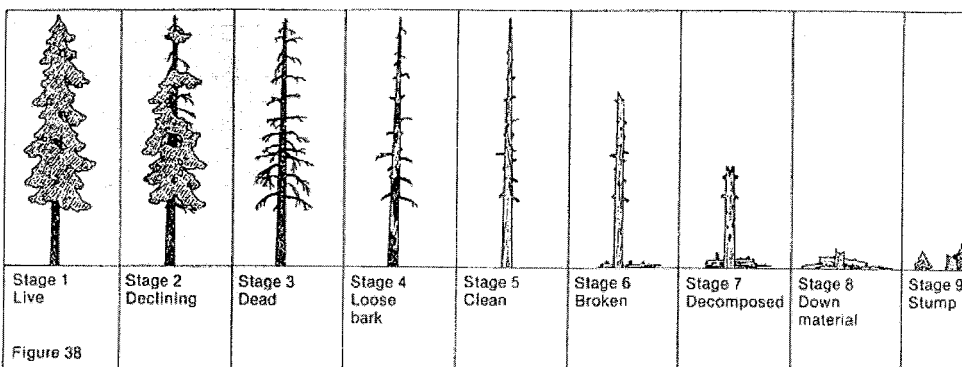
### Sketch: Roost Tree Habitat



Comments: \_\_\_\_\_

### Sketch: Roost Tree

#### Stages of Decay:





## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 30 Jul 11 Biologists: S. Captain

Project Name: Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 218-6

Latitude: 41° 13' 17.9" N Longitude: 82° 56' 33.6" W

Roost Name/#: 218-6

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: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24 Jul 11 Capture site: 16 Frequency: 172.218

**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: 2220 Total Bats: 3

Emergence Time	Number of Bats	Emergence Aspect
<u>2058</u>	<u>3</u>	<u>unknown</u>

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?

Bats circled tree overhead, not seen coming out of  
tree directly



## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 31-Jul-11 Biologists: M. Farmer

Project Name: Republic State: OH County: Seneca

GPS Unit #: A7 Waypoint: 2186

Latitude: 41° 13' 17.9" N Longitude: 82° 56' 33.6" W

Roost Name/#: 218-6

Radio-tagged bat present in tree: Yes \_\_\_\_ No X

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

Bat species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24-Jul-11 Capture site: 16 Frequency: 172, 218

**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: 2155 Total Bats: 0

Emergence Time	Number of Bats	Emergence Aspect

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?

Transmitter in roost tree, <sup>it is</sup> assumed transmitter dropped off the bat. No individuals seen foraging the canopy around the roost tree, bats were present in flyways at ground level, no bats seen leaving the roost tree.





## ROOST TREE EMERGENCE DATA

Project #: 340.0 Date: 2 Aug 11 Biologists: Laura Tyson

Project Name: Republic State: OH County: Seneca

GPS Unit #: \_\_\_\_\_ Waypoint: \_\_\_\_\_

Latitude: 41 ° 13 ' 17.9 "N Longitude: 82 ° 56 ' 33.6 "W

Roost Name/#: 218-6

Radio-tagged bat present in tree: Yes \_\_\_\_\_ No \_\_\_\_\_ UNK ✓

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

Bat species: M. sodalis Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

Capture date: 24 Jul 11 Capture site: 16 Frequency: 172.218

**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: 2130 Total Bats: 7

Emergence Time	Number of Bats	Emergence Aspect
<u>2104</u>	<u>1</u>	<u>E</u>
<u>2111</u>	<u>1</u>	<u>E</u>
<u>2113</u>	<u>1</u>	<u>E</u>
<u>2115</u>	<u>1</u>	
<u>2117</u>	<u>2</u>	<u>1 circle</u>
<u>2119</u>	<u>0</u>	
<u>2121</u>	<u>0</u>	
<u>2123</u>	<u>1</u>	
<u>2125</u>	<u>1</u>	<u>N</u>
<u>2127</u>		
<u>2129</u>		
<u>2131</u>		
<u>2133</u>		

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?

Bats flew at 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000





## FIXED TELEMETRY DATA

Project #: 340.01 Date: 25 Jul 11 Biologists: M Flynn

Project Name: Republic State: OH County: Seneca

USGS Quad: \_\_\_\_\_ GPS Unit #: 465570 Waypoint: 019

Bat Species: Myotis sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
Firehouse	41° 12' 46.0"	82° 58' 31.1"	172.218	9:30	—	no signal
				9:35	—	
				9:40	—	
				9:45	—	
				9:50	—	
				9:55	—	
				10:00	—	
				10:05	—	
				10:10	—	
				10:15	—	
				10:20	—	
				10:25	—	
				10:30	—	
				10:35	—	travel
				10:40	—	travel
				10:45	—	travel
SC	41 11 17.2	82 58 31.6	172.218	10:50	91°	new location
				10:55	112°	
				11:00	126°	
				11:05	—	no more!
				11:10	—	" "
				11:15	—	" "
				11:20	270°	
				11:25	25°	
				11:30	120°	
				11:35	—	no signal
				11:40	—	
				11:45	—	1040
				11:50	—	1040

### FIXED TELEMETRY DATA (continued)

Project #: 340,61 Date: 25Jun State: OH County: Seneca Initials: MAF

[illegible]







## FIXED TELEMETRY DATA (continued)

Project #: 340 Date: 25 Jul State: OH County: Seneca Initials: MF

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
	41°13'36.9"	82°56'10.9"		2130		
				2135	79	
				2140	42	
				2145	91.5	
				2150	60.0	
				2155	26	
				2200	90.0	
				2205	81°	
				2210	45	
				2215	60	
				2220	62	
				2225	30	
				2230	61	
				2235	40	
				2240		
				2245	44°	
				2250	25°	
				2255	52	
				2300	62	
				2305	66	
				2310	80	
			*	2315	270	
				2320	240.5°	
				2325	233	
				2330		
				2335	249	
				2340	222	
				2345	220	
				2350	260	
				2355	252	
				0000	238	(Rain signal)
				0005	305	(Very faint)
				0010	279	signal
				0015	161.5°	
				0020		2.4 by arch overhead
				0025	Due South	
				0030	200°	
				0035		
				0040	274°	



## FIXED TELEMETRY DATA

Project #: 340.82 Date: 28 July 2011 Biologists: S Reeves  
Project Name: Tetrahedral Republic State: OH County: Seneca  
USGS Quad: FireSide GPS Unit #: E9528 Waypoint: 017  
Bat Species: Myotis sodalis

Transmitter Frequency: 172.2181

Comments: Interference - from machinery possibly at J Miller Barn

Station #	Latitude N	Longitude W	Frequency	Time (0000h)	Azimuth	Comments
J Miller Barn	41° 11' 55.0" N	82° 56' 53.9"	172.2181	2100	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	2140	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	2345	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	2350	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0000	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0005	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0010	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0015	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0020	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0025	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0030	—	No signal
J Miller Barn	41° 11' 55.0"	82° 56' 53.9"	172.2181	0035	—	No signal
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0055	350°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0100	24°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0105	352°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0110	—	No signal
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0115	—	No signal
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0120	318°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0125	343°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0130	359°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0135	340°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0140	0°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0145	—	No signal
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0150	3°	—
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0155	—	No signal
32/79	41° 12' 43.5"	82° 56' 14.2"	172.2181	0200	25°	—





## FIXED TELEMETRY DATA

Page 1 of 2

Project #: 340 Date: 26-Jul-11 Biologists: S. Captain

Project Name: Tetratech State: OH County: Seneca

USGS Quad: \_\_\_\_\_ GPS Unit #: A5 Waypoint: \_\_\_\_\_

Bat Species: M. sodalis

Transmitter Frequency: 172.218

Comments: 40 ft Emerson Creek bridge, near 1A

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
<u>503</u>	<u>41°13'15.1</u>	<u>82°55'04.4</u>	<u>218</u>	<u>2225</u>	<u>292</u>	
				<u>2230</u>	<u>—</u>	
				<u>2235</u>	<u>262</u>	
				<u>2240</u>	<u>338</u>	
				<u>2245</u>	<u>310</u>	
				<u>2250</u>	<u>—</u>	
				<u>2255</u>	<u>—</u>	
				<u>2300</u>	<u>319</u>	
				<u>2305</u>	<u>284</u>	
				<u>2310</u>	<u>265</u>	
				<u>2315</u>	<u>261</u>	
				<u>2320</u>	<u>266</u>	
				<u>2325</u>	<u>91</u>	<u>faint</u>
				<u>2330</u>	<u>299</u>	
				<u>2335</u>	<u>295</u>	
				<u>2340</u>	<u>261</u>	
				<u>2345</u>	<u>282</u>	<u>faint</u>
				<u>2350</u>	<u>—</u>	
				<u>2355</u>	<u>—</u>	
				<u>0000</u>	<u>320</u>	
				<u>0005</u>	<u>291</u>	
				<u>0010</u>	<u>279</u>	
				<u>0015</u>	<u>—</u>	
				<u>0020</u>	<u>271</u>	<u>faint</u>
				<u>0025</u>	<u>309</u>	
				<u>0030</u>	<u>300</u>	
				<u>0035</u>	<u>271</u>	
				<u>0040</u>	<u>280</u>	
				<u>0045</u>	<u>275</u>	



## FIXED TELEMETRY DATA

Page 1 of 2

Project #: 3410.02 Date: 26 July 2011 Biologists: S. Reeves  
Project Name: Tatech Republic State: OH County: Seneca  
USGS Quad: F10846 GPS Unit #: F10846 Waypoint: 32-79  
Bat Species: Myotis sodalis

Transmitter Frequency: 172.2181

Comments: N/A

Station #	Latitude N	Longitude W	Frequency	Time (0000h)	Azimuth	Comments
32-79	41° 12' 43.5"	82° 58' 14.2"	172.2181	2200	32.7°	Moving to New Location
				2205		Moving to New Location
				2210		
				2215		
				2220		
				2225		
				2230		
				2235		
				2240		
				2245		
				2250		
				2300		
				2305		
				2310		
				2315		
				2320		
				2325		
				2330		
				2335		
				2340		
				2345		
				2350		
				2355		
				0000		
				0005		
				0010		
				0015		
				0020		







## FIXED TELEMETRY DATA

Page \_\_\_ of \_\_\_

Project #: 340.01 Date: 26 Jul 2011 Biologists: J Basiger, M. Farmer  
Project Name: Tetratech State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: \_\_\_\_\_ Waypoint: 20  
Bat Species: Myotis sodalis (on GPS # 465670)  
Transmitter Frequency: 172.218  
Comments: \_\_\_\_\_

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			<u>172.218</u>	2205	243°	
				2210	199°	
				2215	224°	
				2220	225°	
				2225	211°	
				2230	250°	
				2235	220°	
				2240	235°	
				2245	235°	
				2250	235°	
				2255	180°	
				2300	122°	
				2305	—	
				2310	—	
				2315	—	
				2320	—	
				2325	89°	
				2330	131°	
				2335	—	
				2340	170°	
				2345	153°	
				2350	141°	
				2355	147°	
				0000	211°	
				0005	200°	
				0010	242°	
				0015	—	
				0020	140°	
				0025	158°	





## FIXED TELEMETRY DATA

Project #: 340 Date: 27 Jul Biologists: J Basiger, M Farmer  
Project Name: 761 atech State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: A7 Waypoint: \_\_\_\_\_  
Bat Species: M. sodalis

Transmitter Frequency: 172.218

Comments: 76 + 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 the others to see if she was moving at all. They said she was
				2350	210°	
				2355	180°	
				0000	160°	
				0005	210°	
				0010	180°	
				0015	160°	
				0020	180°	
				0025	208°	
				0030	200°	
				0035	160°	
				0040	197°	
				0045	—	
				0050	176°	
				0055	168°	
				0100	170°	
				0105	215°	
				0110	—	

[illegible]



## 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	<del>18</del>	missed due to visitor/land owner
				2315	359	
				2320	40	
				2325	354	
				2330	14	
				2335	19	
				2340	11	
				2345	2	
				2350	18	
				2355	18	
				2400	18	
				2405	28	
				2410	35	
				2415	30	
				2420	32	
				2425	46	
				2430	50	
				2435	55	
				2440	23	
				2445	55	



### FIXED TELEMETRY DATA (continued)

Project #: Republic Wine Date: 27 July 2011 State: OH County: Seneca Initials: ELB

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 before leaving bat at azimuth 8
				0115	34	
				0120	40	
				0125	45	
				0130	46	





## FIXED TELEMETRY DATA

Page \_\_\_ of \_\_\_

Project #: 345.01 Date: 27 Jul 11 Biologists: PI 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°	
				22:40	56°	
				22:50	56°	
				22:55	56°	
				23:05	45°	
				23:26	45°	
				23:25	80°	
				23:30	80°	
				23:33	66°	
				23:40	56°	
MMF2	41°13'17.7"	82°55'04.4"		0045	260°	
				0050	260°	
				0055	270°	
				0100	265°	
				0105	268°	
				0115	268°	
				0115	284°	
				0120	260°	
				0125	300°	
				0130	272°	
				0135	272°	
				02:05	260°	
				02:15	290°	
				02:20	252°	
				02:30	280°	



## FIXED TELEMETRY DATA

Page 1 of 2

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

Project Name: Tetratich State: OH County: Seneca

USGS Quad: \_\_\_\_\_ GPS Unit #: A7 Waypoint: \_\_\_\_\_

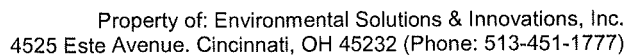
Bat Species: M. sodalis

Transmitter Frequency: 172.218

Comments: 7A near Emerson Creek bridge (SC4)

SC5: 172.218

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
SC4	41°14'02.8	82°57'23	218	2300	99	
				2305	—	
				2310	—	
				2315	—	
				2320	—	
				2325	—	
SC5	41°13'36.0	82°57'23.3	218	2340	139	
				2345	—	
				2350	120	Faint
				2355	116	
				0000	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	—	



### FIXED TELEMETRY DATA (continued)

Project #: 340 Date: 27-Jul-11 State: OH County: Seneca Initials: SC

[illegible]



## FIXED TELEMETRY DATA

Page \_\_\_ of \_\_\_

Project #: 340.01 Date: 28 Jul 11 Biologists: M. Flynn

Project Name: Republic 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	2230	20°	
				2235	36°	
				2240	350	
				2245	3480	
				2250	3460	
				2255	0°	
				2300	354°	
				2305	3550	
				2310	320°	
				2320	18°	
				2325	20°	
				2330	20°	
				2335	32°	
				2340	8°	
				2345	30°	
				2350	6°	
				2355	6°	
				0000	20°	
				0005	12°	
				0010	12°	
				0015	20°	
				0025	354°	
				0030	18°	
				0035	25°	
				0040	0°	
				0045	12°	
				0050	12°	
				0055	12°	
				0100	3480	





## FIXED TELEMETRY DATA

Project #: 340 Date: 26 Oct-11 Biologists: S. Captain  
Project Name: Tetradlech State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: A7 Waypoint: 506  
Bat Species: M. sodalis

Transmitter Frequency: 172.218

Comments: 178 d 78

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
506	41°13'36.9	82°57'20.7	218	2245	159	
				2250	151	
				2255	162	Faint
				2300	165	
				2305	150	
				2310	164	
				2315	133	
				2320	129	
				2322	138	
				30	---	
				35	-	
				2340	101	
				2345	---	
				2350	124	
				2355	---	
				0000	---	
				0005	131	
				0010	140	
				0015	126	
				0020	122	
				0025	137	
				0030	131	
				0035	131	
				0040	131	Faint
				0045	139	
				0050	125	
				0055	128	
				0100	132	
				0105	---	



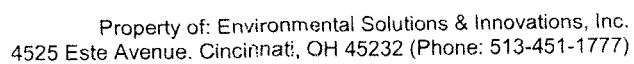




## FIXED TELEMETRY DATA

Project #: 340.01 Date: 28 Jul 11 Biologists: J. Basiger  
Project Name: Republic State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: ISI 119210 Waypoint: \_\_\_\_\_  
Bat Species: M. sodalis  
Transmitter Frequency: 218  
Comments: \_\_\_\_\_

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
	<u>41° 13' 19.2"</u>	<u>82° 55' 26.6"</u>	<u>218</u>	<u>2300</u>	<u>100°</u>	
			<u>218</u>	<u>2305</u>	<u>72°</u>	
			<u>218</u>	<u>2310</u>	<u>240</u>	
			<u>218</u>	<u>2315</u>	<u>240</u>	
			<u>218</u>	<u>2320</u>	<u>190</u>	
			<u>218</u>	<u>2325</u>	<u>410</u>	
			<u>218</u>	<u>2330</u>	<u>38°</u>	
			<u>218</u>	<u>2335</u>	<u>72°</u>	
			<u>218</u>	<u>2340</u>	<u>270</u>	
			<u>218</u>	<u>2345</u>	<u>72°</u>	
			<u>218</u>	<u>2350</u>	<u>590</u>	
			<u>218</u>	<u>2355</u>	<u>410</u>	
			<u>218</u>	<u>0000</u>	<u>390</u>	
			<u>218</u>	<u>0005</u>	<u>36°</u>	
			<u>218</u>	<u>0010</u>	<u>240</u>	
			<u>218</u>	<u>0015</u>	<u>17°</u>	
			<u>218</u>	<u>0020</u>	<u>70°</u>	
			<u>218</u>	<u>0025</u>	<u>78°</u>	
			<u>218</u>	<u>0030</u>	<u>430</u>	
			<u>218</u>	<u>0035</u>	<u>23°</u>	
			<u>218</u>	<u>0040</u>	<u>119°</u>	
			<u>218</u>	<u>0045</u>	<u>80°</u>	
			<u>218</u>	<u>0050</u>	<u>358°</u>	
			<u>218</u>	<u>0055</u>	<u>138°</u>	
			<u>218</u>	<u>0100</u>	<u>138°</u>	
			<u>218</u>	<u>0105</u>	<u>89°</u>	
			<u>218</u>	<u>0110</u>	<u>120°</u>	
			<u>218</u>	<u>0115</u>	<u>—</u>	<u>No Signal</u>
			<u>218</u>	<u>0120</u>	<u>—</u>	<u>No Signal</u>



### FIXED TELEMETRY DATA (continued)

[illegible]



## FIXED TELEMETRY DATA

Project #: 7110 Date: 28 Jul 2011 Biologists: M. Forman  
Project Name: Tetratich State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: AS Waypoint: 20  
Bat Species: M. Sodalis on GPS # 465670

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
			7.812	2240	260°	
				2245	229°	
				2250	210°	2250 LMW
				2255	210°	2255 LMW
				2250	210°	2300 LMW
				2255	225°	2305 LMW
				2220	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	210°	
				0015	213°	
				0020	210°	
				0025	—	
				0030	210°	
				0035	210°	
				0040	210°	
				0045	190°	
				0050	200°	
				0055	—	
				0100	209°	

### FIXED TELEMETRY DATA (continued)

Project #: \_\_\_\_\_ Date: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_ Initials: \_\_\_\_\_

[illegible]



## FIXED TELEMETRY DATA

Project #: 312.51 Date: 12/20/07 Biologists: M. Fum  
Project Name: Republie State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: \_\_\_\_\_ Waypoint: \_\_\_\_\_  
Bat Species: H. sodalis

Transmitter Frequency: 172.218

Comments:

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
1?	41°12'43.16"	82°56'29.85"	172.218	20:00	250°	
				20:05	340°	
				20:10	30°	
				20:15	40°	
				20:20	30°	
				20:25	250°	
				20:30	100°	
				20:35	100°	
				20:40	306°	
				20:45	100°	
				20:50	300°	
				20:55	200°	
				21:00	350°	
				00:05	200°	
				00:10	100°	
				00:15	80°	
				00:20	2°	
				00:25	350°	
				00:30	350°	
				00:35	20°	
				00:40	47°	
				00:45	28°	
				00:50	300°	
				00:55	400°	
				01:00	200°	
				01:05	20°	
				01:10	100°	



01:40	50°
01:45	20°
01:50	60°
02:00	20°
02:10	20°
02:20	20°
02:30	20°
02:40	40°
02:50	10°



## FIXED TELEMETRY DATA

Project #: 340 Date: 29-Jul-11 Biologists: S. Captain  
Project Name: Tetratich State: OH County: Seneca  
USGS Quad: \_\_\_\_\_ GPS Unit #: A7 Waypoint: \_\_\_\_\_  
Bat Species: M. sodalis

Transmitter Frequency: 172.219  
Comments: 18 at white barn, near 32

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
5C6				2245	—	
				2250	—	
				2255	—	
				2300	—	
5C7	41°12'51.0	82°55'36.3	216	2330	320	
				2335	314	
				2340	308	
				2345	307	
				2350	314	
				2355	320	
				0000	—	
				0005	—	
				0010	—	
				0015	301	
				0020	314	
				0025	—	
				0030	49	
				0035	18	
				0040	—	
				0045	50	
				0050	12	
				0055	32	
				0100	358	
				0105	348	
				0110	334	
				0115	335	
				0120	332	
				0125	324	
				0130	352	



**ESI**

### FIXED TELEMETRY DATA (continued)

[illegible]



## FIXED TELEMETRY DATA

Project #: 340.1 Date: 29 Jul Biologists: W. Farmer

Project Name: Tetrahatch State: OH County: Scheneca

USGS Quad:  GPS Unit #: AS Waypoint: 20

Bat Species: Myotis sodalis (on GPS# 465670)

Transmitter Frequency: 172.218

Comments: \_\_\_\_\_

Station #	Latitude	Longitude	Frequency	Time (0000h)	Azimuth	Comments
MFI				2205	180	
				2200	180	
				2305	180	
				2310	170	
				2315	150	
				2320	270	
				2325	242	
				2330	242	
				2335	228	
				2340	230	
				2345	238	
				2350	205	
				2355	208	
				0000	220	
				0005	225	
				0010	230	
				0015		
				0020		
				0025	90°	
				0030		
				0035	10°	
				0040	125	
				0045	110	
				0050	109	
				0055	125	
				0100	185	
				0105	141	
				0110	120	
				0115	120	





## BAT TRANSMITTER DATA

Project #: 340.02 Date: 27 July 2011 Biologists: Akaiowski, 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 Ju	Sex M or F	Reproductive Condition F=(NR/PG/L/PL; M=↑/↓	Wt (g)	RFA (mm)
Ju	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



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

## BAT TRANSMITTER DATA

Project #: 340 Date: 20 July 2011 Biologists: J. Basiger  
Project Name: Republic Site Name/#: 9  
State: OH County: Seneca Camera #: Cam 671  
Picture #: 879-881 Way pt. #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)
<u>Jv</u>	<u>F</u>	<u>NR</u>	<u>13.5</u>	<u>45</u>

Transmitter weight = 0.25 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





## 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

Ad

Sex  
M or F

F

Reproductive Condition  
F=(NR/PG/L/PL; M=↑/↓

PL

Wt  
(g)

18.5

RFA  
(mm)

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:



## BAT TRANSMITTER DATA

Project #: 340 Date: 24-Jul-11 Biologists: A. Kniewski  
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	16

Transmitter weight = 35 grams Frequency number: 172.580  
Transmitter + bat total weight = \_\_\_\_\_ grams Band/color number: n/a

### FINAL CHECK:

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

RELEASE TIME: 0100 TOTAL HOLD TIME: 30 minutes

RELEASE LOCATION: site 14

COMMENTS:



## BAT TRANSMITTER DATA

Project #: 340.02 Date: 22 July 2011 Biologists: D. Wofford, S. Reeves  
Project Name: Tetrotech 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)
<u>Ad</u>	<u>F</u>	<u>L</u>	<u>19.1</u>	<u>45.2</u>

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): 172.1172
- 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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## BAT TRANSMITTER DATA

Project #: 340 Date: 19-Jul-11 Biologists: E. Basiger  
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)
<u>Jv</u>	<u>F</u>	<u>NR</u>	<u>15.7</u>	<u>48</u>

Transmitter weight = .35 grams Frequency number: 172.780  
Transmitter + bat total weight = 16.15 grams Band/color number: n/a

### FINAL CHECK:

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

RELEASE TIME: 2200 TOTAL HOLD TIME: 30 minutes

RELEASE LOCATION: Site 24

### COMMENTS:

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## BAT TRANSMITTER DATA

Project #: 340.01 Date: 15 Jul 2011 Biologists: J. Basiger + 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)
<u>Ad</u>	<u>F</u>	<u>PL</u>	<u>24.25</u>	<u>47</u>

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 172.7398
- 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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## BAT TRANSMITTER DATA

Project #: 340.01 Date: 24 Jun 11 Biologists: J. Basiger  
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)
<u>Jv</u>	<u>F</u>	<u>NA</u>	<u>15.75</u>	<u>49</u>

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): 172.4997
- 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:



## BAT TRANSMITTER DATA

Project #: 340.01 Date: 7/30/11 Biologists: A. Kniewski  
Project Name: popo611c 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)
<u>Jv</u>	<u>F</u>	<u>NR</u>	<u>6.5</u>	<u>45</u>

Transmitter weight = 0.35 grams Frequency number: 172.950  
Transmitter + bat total weight = 16.7 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: AK
- 5) Description of release: \_\_\_\_\_

RELEASE TIME: 2350 TOTAL HOLD TIME: 75 minutes

RELEASE LOCATION: cap location

### COMMENTS:

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## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 27 July 2011 Biologists: E. Boesiger; A. Kleinhenz

Project Name: Republic - Wild State: OH County: Serena

GPS Unit #: E9528 Waypoint: 617

Latitude: 41° 11' 55.0"N Longitude: 82° 56' 53.9"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: 116 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	<u>0</u>	
2102	<u>0</u>	
2104	<u>0</u>	
2106	<u>2</u>	<u>W-NW</u>
2110	<u>0</u>	
2112	<u>7</u>	<u>N; S; W; E - All diff directions</u>
2114	<u>18</u>	<u>"</u>
2116	<u>19</u>	<u>"</u>
2118	<u>17</u>	<u>"</u>
2120	<u>27</u>	<u>"</u>
2122	<u>14</u>	<u>"</u>
2124	<u>9</u>	<u>N, E, S</u>
2126	<u>3</u>	<u>N, E</u>

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 emerged @ 2116



## ROOST TREE EMERGENCE DATA

Project #: 3400.01 Date: 12 Aug 11 Biologists: Laura Tyson

Project Name: Republic State: OH County: Sonoma

GPS Unit #: E-9526 Waypoint: 017

Latitude: 41° 11' 55.0" N Longitude: 82° 22' 53.1" W

Roost Name/#: 118-1

Radio-tagged bat present in tree: Yes ☐ No ☒ Ty not heard

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: 172.1172

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: 2125 Total Bats: 62

Emergence Time	Number of Bats	Emergence Aspect
2045	1	W side of
2047	3	bank + South
2049	18	side
2051	3	
2053	6	
2055	4	
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 transmitter bat(s) emerge? What direction did the transmitter bat fly?

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



## ROOST TREE DATA

Project #: 340 Date: 31 Jul 11 Biologists: J. Basiger  
Project Name: Republic State: OH County: Seneca  
GPS Unit #: ESR 7 Waypoint: N/A Camera #: 671 Picture #: 982-983  
Latitude: 41° 13' 39.0"N Longitude: 82° 57' 0.6"W  
Bat Species: E. Auscus Sex(M/F): F Age(Ad/Jv): Jv Repro.: NA  
Capture Date: 30 Jul 11 Capture Site: 12  
Frequency: 112.025 Roost Name/#: 205-1

### ROOST TREE DATA

Roost tree species: Bassn 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/Forest Edge ☐ Emergent Wetland ☐ Deepwater Lake/Pond  
☐ Young Lowland Forest ☐ Old Field ☐ Forested Swamp ☐ Other \_\_\_\_\_

Comments:



## ROOST TREE EMERGENCE DATA

Project #: 346.01 Date: 31 Jul 11 Biologists: Laura Tyson

Project Name: Republic State: OH County: Summa

GPS Unit #: \_\_\_\_\_ Waypoint: \_\_\_\_\_

Latitude: 41 ° 13 ' 39.0 "N Longitude: 82 ° 57 ' 00.8 "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.: PL

Capture date: 30 Sep 14 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: 36

Emergence Time	Number of Bats	Emergence Aspect
<u>2117</u>	<u>First emerge data</u>	<u>Peruse</u>
	<u>36 Total -</u>	
	<u>First day -</u>	
	<u>all tallied may</u>	
	<u>have missed some</u>	
<u>2125</u>	<u>Last bat emerged</u>	
<u>2135</u>	<u>Survey done</u>	
	<u>I didn't know what I was doing.</u>	
	<u>Way undercounted !!</u>	

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



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 3 Aug 11 Biologists: \_\_\_\_\_

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESI-7 Waypoint: N/A

Latitude: 41° 3' 16" N Longitude: 82° 5' 16" 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: C. v. b. f. Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

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: 2049 Departure time: 2100 Total Bats: 117

Emergence Time	Number of Bats	Emergence Aspect
2103	4	E
2107	14	E
2111	14	E
2114	22	E
2117	23	E
2118	16	E
2119	7	E
2119	12	E
2121	0	
2123	0	
2125	1	
2125	6	
2125	0	
2129 - 2235	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?

Transmitted bat emerged at 2125, flew E.  
Most of the bats emerged at 2125, 5-6, before they all or



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 6/20/11 Biologists: Courtney L. Brown

Project Name: Republic State: OH County: Seneca

GPS Unit #: E91-7 Waypoint: N/A

Latitude: 41° 13' 31.0" N Longitude: 82° 33' 11" W

Roost Name/#: 225

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): Ad Repro.: PC

Capture date: 30 July 2011 Capture site: 12 Frequency: 140.225

**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: 2044 Departure time: 2145 Total Bats: 173

Emergence Time	Number of Bats	Emergence Aspect
21:02	2	NE / N
21:04	3	
21:06	4	
21:08	18	
21:10	20	
21:12	31	
21:13	34	S, SE
21:15	13	
21:17	14	NE
21:19	22	
21:21	11	
21:23	4	
21:25	3	

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?

21:13 - 1 bat emerged, flew off to the SE

Project #: 340.01  
Frequency: 722.3

Project name: Republic  
Roost #: 225-1

[illegible]





## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 5/24/2011 Biologists: W. J. Miller

Project Name: Republic State: OH County: Seneca

GPS Unit #: 670 Waypoint: N/A

Latitude: 41° 13' 39.0" N Longitude: 82° 57' 00.8" W

Roost Name/#: ZZS-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: E. fuscus Sex(M/F): F Age(Ad/Jv): Ad Repro.: PC

Capture date: 30 July 2011 Capture site: 12 Frequency: 172.215

**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: 2130 Total Bats: 169

Emergence Time	Number of Bats	Emergence Aspect
2056	3	
2058	1	
2100	7	
2102	24	
2104	24	
2106	30	
2108	29	
2110	16	
2112	17	
2114	7	
2116	7	
2118	0	2118-8
2120	1	2122-0-2124-0

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?

2109 Tx bat emerged and flew NE  
majority flew out of E, total flew SE



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 1 Aug 11 Biologists: Laura Tyson

Project Name: Republic State: OH County: Summit

GPS Unit #: ES7-7 Waypoint: N7A

Latitude: 41 ° 13 ' 39.0 "N Longitude: 82 ° 57 ' 00.8 "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: Myotis grisescens Sex(M/F): F Age(Ad/Jv): Ad Repro.: PL

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: 121

Emergence Time	Number of Bats	Emergence Aspect
2102	1	NE
2104	7	NE
2106	13	
2108	11	
2110	12	
2112	7	
2114	21	
2116	18	
2118	14	
2120	12	
2122	2	
2124	2	
2126	1	2127-2131: Overcast

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

2109 Tx bat left,



## ROOST TREE DATA

Project #: 340 Date: 7/25/11 Biologists: A. Knierstein, M. Farmer  
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) Subdominant Canopy Species (< 40 cm/16" dbh)  
Not in forest. 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 farm - deserted minimal upkeep

### 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/Forest Edge ☐ Emergent Wetland ☐ Deepwater Lake/Pond  
☐ Young Lowland Forest ☒ Old Field ☐ Forested Swamp ☐ Other \_\_\_\_

Comments:



## ROOST TREE EMERGENCE DATA

Project #: 3460-1 Date: 17 Aug Biologists: Laura Tyson

Project Name: Bobolink State: OH County: Sandusky

GPS Unit #: 7 Waypoint: 3460 R14

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 101, 102, 103

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

Bat species: E. v. g. g. Sex(M/F): F Age(Ad/Jv): ADJ Repro.: NR

Capture date: 24 July 2011 Capture site: 14 Frequency: 50.580

**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: 2028 Departure time: 2106 Total Bats: 23

Emergence Time	Number of Bats	Emergence Aspect
2036	12	Mostly North
38	6	South
40	11 (6)	South
42	11 (6)	South
46	11 (3)	South
48		
50		
52	11 (2)	
54	0	
56	0	
58	0	
2100	0	
2102	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 simultaneously, flew off in the same direction, loitered, circle, disperse, etc. What time did the transmitted bat(s) emerge? What direction did the transmitted bat fly?



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 18 Aug 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 - Tx not heard

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

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

Capture date: 24 July 2011 Capture site: 14 Frequency: 112.580

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: 2032 Departure time: 2102 Total Bats: 23

Emergence Time	Number of Bats	Emergence Aspect
<u>2036</u>	<u>/// (3)</u>	<u>1 emerged then went back into barn.</u>
	<u>/// 3</u>	
	<u>/// 3</u>	
	<u>/// 1 6</u>	<u>S. side of barn</u>
	<u>/// 4</u>	<u>slit above door.</u>
<u>2048</u>	<u>/// 2</u>	
<u>50</u>	<u>0</u>	
<u>52</u>	<u>0</u>	
<u>54</u>	<u>0</u>	
<u>56</u>	<u>0</u>	
<u>58</u>	<u>0</u>	

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 circled a few times after emerging then flew North over top of barn.



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 22 Aug 11 Biologists: Laura Tyson

Project Name: Republic State: OH County: Franklin

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 Tx not heard

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: 172.580

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: 2011 Departure time: 2057 Total Bats: 23

Emergence Time	Number of Bats	Emergence Aspect
<u>2034</u>	<u>    </u> <u>4</u>	<u>flaw out of</u>
<u>36</u>	<u>    </u> <u>4</u>	<u>both side</u>
<u>38</u>	<u>    </u> <u>4</u>	<u>of bank</u>
<u>40</u>	<u>    </u> <u>4</u>	
<u>42</u>	<u>    </u> <u>5</u>	
<u>44</u>	<u>  </u> <u>2</u>	
<u>46</u>	<u>0</u>	
<u>48</u>	<u>0</u>	
<u>50</u>	<u>0</u>	
<u>52</u>	<u>0</u>	
<u>54</u>	<u>0</u>	

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 several times before flying off, unsure of direction,



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 24 Aug 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 - Tx not heard

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

Bat species: L. cinerea fusces Sex (M/F): F Age (Ad/Jv): SU Repro.: NR

Capture date: 29 Sep 2011 Capture site: 14 Frequency: 172.540

**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: 16

Emergence Time	Number of Bats	Emergence Aspect
2022	1	
	11	
2032	11	
2034	11	
36	11	
2040	0	
42	0	
44	0	
46	0	
48	0	
50	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?





## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 26 Aug 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 - Tx not heard

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: 24 Sep 2011 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: 22

Emergence Time	Number of Bats	Emergence Aspect
<u>2025</u>	<u>1</u>	<u>1 came out then back in</u>
<u>2027</u>	<u>1</u>	
<u>2029</u>	<u>1</u>	<u>Most emerged, circle</u>
<u>2032</u>	<u>1</u>	<u>in front of tree</u>
<u>2036</u>	<u>1</u>	<u>before leaving</u>
<u>2038</u>	<u>1</u>	
<u>2040</u>	<u>0</u>	
<u>2042</u>	<u>0</u>	
<u>2044</u>	<u>0</u>	
<u>2046</u>	<u>0</u>	
<u>2048</u>	<u>0</u>	

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?



## ROOST TREE DATA

Project #: 340.02 Date: 19 July 2011 Biologists: E. Basiger; M. Flynn; A. Garitt  
Project Name: Republic - Wind State: OH County: Seneca  
GPS Unit #: \_\_\_\_\_ Waypoint: 14 Camera #: \_\_\_\_\_ Picture #: 866-868  
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 <sup>brick</sup> 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; building surrounded by other buildings and fields

#### Check all that apply:

<input type="checkbox"/> Mature Upland Forest	<input type="checkbox"/> Recently Logged Forest	<input checked="" type="checkbox"/> Crop/Pasture Land	<input type="checkbox"/> Shrub/scrub Swamp
<input type="checkbox"/> Young Upland Forest	<input type="checkbox"/> Pine Plantation	<input type="checkbox"/> Stream/River	<input type="checkbox"/> Vernal Pool
<input type="checkbox"/> Mature Lowland Forest	<input type="checkbox"/> Woodlot/Forest Edge	<input type="checkbox"/> Emergent Wetland	<input type="checkbox"/> Deepwater Lake/Pond
<input type="checkbox"/> Young Lowland Forest	<input type="checkbox"/> Old Field	<input type="checkbox"/> Forested Swamp	<input checked="" type="checkbox"/> Other <u>small town building</u>

Comments:



## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 19 July 2011 Biologists: Alexa Gantz

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESI 465670 Waypoint: N/A

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

Roost Name/#: 172.780-1

Radio-tagged bat present in tree: <sup>Building</sup> 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: 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: 2130 Departure time: 2200 Total Bats: 73

Emergence Time	Number of Bats	Emergence Aspect
<u>2130</u>	<u>11</u>	
<u>2132</u>	<u>22</u>	
<u>2134</u>	<u>30</u>	
<u>2136</u>	<u>37</u>	
<u>2138</u>	<u>48</u>	
<u>2140</u>	<u>67</u>	
<u>2142</u>	<u>72</u>	
<u>2144</u>	<u>73</u>	

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?

Bats dispersed

transmitted bat left at 2140 hours heading South



## ROOST TREE EMERGENCE DATA

Project #: 340 Date: 20 July 2011 Biologists: Alexa Gaurin

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESI 4105670 Waypoint: NA

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

Roost Name/#: 740-1

Radio-tagged bat present in tree: <sup>Garage</sup> 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: 2100 Departure time: 2200 Total Bats: 93

Emergence Time	Number of Bats	Emergence Aspect
2110	2	
2112	2	
2114	1	
2116	2	
2118	2	
2120	3	
2122	11	
2124	13	
2126	27	
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 left - 2130, headed East

bats mostly dispersed in an Eastern direction





## ROOST TREE EMERGENCE DATA

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

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESI 465670 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. 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	111 (3)	east
9:16	111 1 (6)	
9:18	111 111 111 1 (6)	
9:20	111 111 111 111 111 111 (37)	
9:22	111 111 111 111 111 111 (35)	
9:24	111 111 111 111 111 111 (32)	
9:26	111 111 111 111 111 111 (21)	
9:28	111 111 111 111 (18)	
9:30	111 111 111 111 (18)	
9:32	11 (2)	
9:34	111 11 (7)	
9:36	111 (3)	
9:38	1111 (4)	

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 #: 340.01 Date: 24 Jul 11 Biologists: M. Flynn

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESI 465670 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. AUSCUS 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: 2200 Total Bats: 156

Emergence Time	Number of Bats	Emergence Aspect
2100	(8)	
2102	I (1)	
2104	-----	
2106	(3)	
2109	(4)	
2110	(11)	
2112	(11)	
2114	(23)	
2116	(16)	
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 transmitter bat(s) emerge? What direction did the transmitter bat fly?

Transmitter bat did not emerge. Emerging bats scattered  
and dispersed. Flight - mostly up



## ROOST TREE DATA

Project #: 340 Date: 25 Jul 11 Biologists: J. Basiga  
Project Name: Republic State: OH County: Seneca  
GPS Unit #: ES17 Waypoint: \_\_\_\_\_ Camera #: Cam 671 Picture #: 899-901  
Latitude: 41° 09' 40.3"N Longitude: 76° 57' 56.8"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 (circle one) km (circle one)  
Tree health: \_\_\_\_\_ Live \_\_\_\_\_ Dead \_\_\_\_\_ Partial  
Observed roost potential: \_\_\_\_\_ Exfoliating Bark \_\_\_\_\_ Cracks/crevasses \_\_\_\_\_ Hollow \_\_\_\_\_ Unknown  
Bat vocalizations: \_\_\_\_\_ Yes ✓ No  
Guano on ground/foilage: ✓ 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: 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/Forest Edge \_\_\_\_\_ Emergent Wetland \_\_\_\_\_ Deepwater Lake/Pond  
\_\_\_\_ Young Lowland Forest \_\_\_\_\_ Old Field \_\_\_\_\_ Forested Swamp \_\_\_\_\_ Other \_\_\_\_\_

Comments:





## ROOST TREE EMERGENCE DATA

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

Project Name: Republic State: OH County: Seneca

GPS Unit #: ESF 7 Waypoint: N/A

Latitude: 41° 09' 40.3" N Longitude: 82° 57' 51.8" 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	11	
2112	0	
2114	111	
2116	0	
2122	111	
2124	11	
2126	11	

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



## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 8 Aug Biologists: Laurel & Ben

Project Name: Republic State: OH County: Seneca

GPS Unit #: 7 Waypoint: N/A

Latitude: 41° 09' 38.3" N Longitude: 82° 57' 52.6" 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): SV Repro.: N/A

Capture date: 24 July 2009 Capture site: 30 Frequency: 172.300

**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: 2119 Total Bats: 14

Emergence Time	Number of Bats	Emergence Aspect
<u>2055</u>	<u>2</u>	<u>Southern</u>
<u>2057</u>	<u>3</u>	<u>East-south-east (N)</u>
<u>2059</u>	<u>4</u>	<u>on W side</u>
<u>2101</u>	<u>1</u>	
<u>2103</u>	<u>3</u>	
<u>2105</u>	<u>1</u>	
<u>2107</u>	<u>0</u>	
<u>2109</u>	<u>0</u>	
<u>2111</u>	<u>0</u>	
<u>2113</u>	<u>0</u>	
<u>2115</u>	<u>0</u>	

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?

All Bats emerged, headed East  
by 2100, but some were still in the roost



## ROOST TREE EMERGENCE DATA

Project #: 340201 Date: 9 Aug 11 Biologists: Lawrence Tyson

Project Name: Republic State: OH County: Seneca

GPS Unit #: 7 Waypoint: \_\_\_\_\_

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

Roost Name/ID: 500-1

Radio-tagged bat present in tree: Yes ☒ No ☐ Ty heard, still heard after US escape

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: 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: 2039 Departure time: 2128 Total Bats: 12

Emergence Time	Number of Bats	Emergence Aspect
<u>2051</u>	<u>1</u>	<u>W. facing</u>
<u>2053</u>	<u>0</u>	<u>Backward</u>
<u>2055</u>	<u>0</u>	
<u>2057</u>	<u>2</u>	
<u>2059</u>	<u>2</u>	
<u>2101</u>	<u>1</u>	
<u>2103</u>	<u>2</u>	
<u>2105</u>	<u>0</u>	
<u>21</u>	<u>1</u>	
<u>21</u>	<u>0</u>	
<u>11</u>	<u>1</u>	
<u>13</u>	<u>2</u>	
<u>15</u>	<u>0</u>	<u>215-2125: 10</u>

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?

All emerged flew East over corn field  
Ty never left





## ROOST TREE EMERGENCE DATA

Project #: 340.01 Date: 11 Aug 11 Biologists: Laura Tyson

Project Name: Republic 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 ☒ Tx 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: 24 July 11 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: 11

Emergence Time	Number of Bats	Emergence Aspect
<u>2050</u>	<u>1</u>	<u>W. facing door</u>
<u>2052</u>	<u>2</u>	<u>all from front</u>
<u>2054</u>	<u>3</u>	
<u>2056</u>	<u>2</u>	
<u>2058</u>	<u>2</u>	
<u>2100</u>	<u>1</u>	
<u>02</u>	<u>0</u>	
<u>04</u>	<u>0</u>	
<u>06</u>	<u>0</u>	
<u>08</u>	<u>0</u>	
<u>10</u>	<u>0</u>	
<u>12</u>	<u>0</u>	
<u>14</u>		

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 not heard today (batteries dead?), all bats flew out +  
headed straight east

**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 (*Lasirus borealis*)



Little brown bat (*Myotis lucifugus*)

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**2/2/2018 2:39:17 PM**

**in**

**Case No(s). 17-2295-EL-BGN**

Summary: Amended Application Exhibit Q - Part 2 of 3 electronically filed by Teresa Orahood  
on behalf of Sally W. Bloomfield