

# Mist Netting Data Form

Site No. 23 Project No./Name 412-01 / Apex Wind Emerson Creek Date 7-30-15  
 Site Location Township Rd 78 - Meacham prop - Interior wetlands & trails @ denoland  
 County Secece State OH Time Up 2051 Time Down 1955 S. Savory  
 Lat/Lon; UTM: N/E 41.24995 W/N -82.940202 Zone — Datum NAD83 Observers H. Braverman  
P. Scott



COPPERHEAD  
INSTRUMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2130	EPFU	A	M	NR	17.0	50.5	B	2.0	0	—	—	—
2	2130	EPFU	A	M	NR	16.5	47.5	C	3.0	0	—	—	—
3	2225	EPFU	A	M	NR	18.5	51.0	B	3.5	0	—	—	—
4													
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Acoustic Survey: Unit type — Unit # — Date — Start time — Stop time —  
 Date — Start time — Stop time —  
 Date — Start time — Stop time —  
 Coordinates —  
 Weatherproofing —  
 Comments: moved nets for prairie habitat

Moon Phase 99% Wax ☒ Wane ☐  
 Rise 0625 Set 2051  
 Sun —  
 Moon 2007 0533

Time	Temp (F)	Sky	Wind	No. Bats
2100	88°	0	1	2
2200	77°	0	0	1
2300	74°	0	0	0
0000	71°	0	1	0
0100	69°	0	0	0
2000				

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

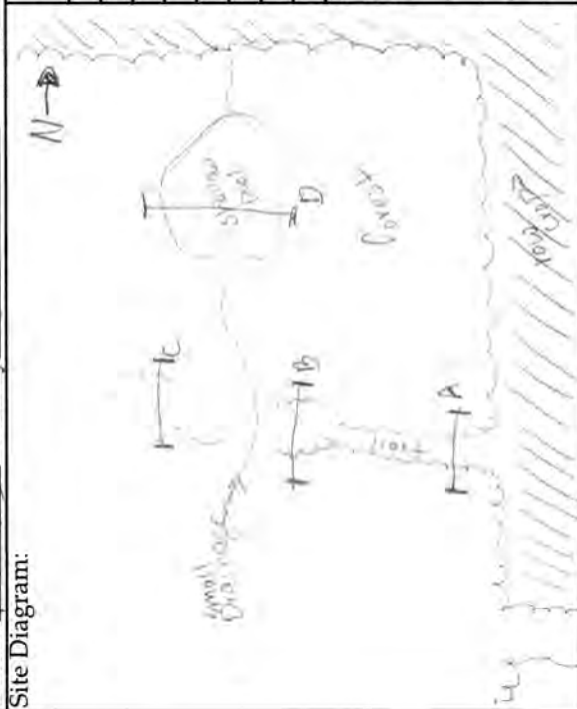
Please Return to:  
 P.O. Box 73, Paint Lick, KY, 40461.  
 (859) 925-9012  
 p. 2



## Mist Net Site Habitat Sheet

Site No. 23Project No./Name 412-01 Emerson CreekDate 7/25/2015Lat/Lon: UTM: N19E 412000 719000 W/N 73.91000Zone 18NObservers Rain Storm, Brandon SmithDatum: NAD83 County Seneca State NY Quad 18N

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	2011	6	7/15/2015
B	2011	6	7/15/2015
C	2011	6	7/15/2015
D	2011	12	7/15/2015
E			
F			

Dominant Vegetation						
1.	Pin Oak	4.10.15				
2.	Red Maple (Succ. 5.10.15)					
3.	American Elm	6.10.15				
Shrub						
Net Set by Habitat						
Habitat	A	B	C	D	E	F
River						
Stream						
Pond				X		
Corridor	X	X				
Cave						
Mine						
Forest						
Gap			X			
Other						





## Mist Netting Data Form

Sheet 1 of 2

Site No. 24 Project No./Name 412 / Emerson Creek Date 7/29/15  
 Site Location Logging road through woodlot; open water of emergent wetland  
 County Genesee State OH Time Up 8:55 Time Down 1:55  
 Lat/Lon: UTM: N/E 41.17804 W/N -82.68361 Zone 18 Datum NAD83 Observers J. Stolar, M. Newton

COPPERHEAD  
CARPENTERS & JOINERS

Moon Phase	%	99.5	Wax / Wane
Sun	Rise	6:24 am	8:53 am
Moon	Set	8:07 pm	6:42 am

Time	Temp (F)	Sky	Wind	No. Bats
9:00	78.0	3	1	0
10:00	75.9	2	1	2
11:00	74.1	1	2	1
12:00	73.2	0	3	1
1:00	64.7	1	3	—

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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p. 1

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	10:30	EPFU	JV	M	NR	10.9	46mm	D	3	0	—	—	—
2	10:30	EPFU	JV	F	NR	12.25	46mm	D	5	0	—	—	—
3	11:10	EPFU	JV	M	NR	13.5	44mm	D	4	0	—	—	—
4	12:50	EPFU	JV	M	NR	15	48mm	D	1	0	—	—	—
5													
6													
7													
8													
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Species Abbreviations: Corynorhinus rafinesquii (COR); Corynorhinus t. virginianus (COV); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasiurus noctivagus (LANO); Myotis austroriparius (MYAU); Myotis grisescens (MYGR); Myotis leibii (MYLE); Myotis lucifugus (MYLU); Myotis septentrionalis (MYSE); Myotis sodalis (MYSO); Nycticeius humeralis (NYHU); Perimyotis subflavus (PESU); Tadarida brasiliensis (TABR)

Other Abbreviations: Male: M; Female: F; Pregnant: P; Lactating: L; Post Lactating: PL; Scrotal: S; Non Repro: NR

## Mist Netting Data Form

Site No. 24 Project No./Name 412 / Emerson Creek Date 7/31/15  
 Site Location Logging road through woodlot; open water of emergent wetland  
 County Seneca State OH Time Up 8:50 Time Down 1:50  
 Lat/Lon; UTM: N/E 41.7804 W/N 82.8886 Zone 18 Datum NAD83 Observers J. Storm, M. Newton



COPPERHEAD  
PRODUCTIONS

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	10:20	EPFU	A	M	ES	19	48mm	13	2.5	0	—	—	—
2													
3													
4													
5													
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Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Coordinates \_\_\_\_\_

Weatherproofing \_\_\_\_\_

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

Moon Phase % 99.6 Wax / Wane  
 Sun 6:25 am 8:51 pm  
 Moon 9:23 pm 9:10 am

Time	Temp (F)	Sky	Wind	No. Bats
9:00	—	0	2	0
10:00	68.0	0	2	1
11:00	67.4	1	2	0
12:00	67.2	1	2	0
1:00	63.4	0	2	0
2:00	62.6	0	2	1

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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Mist Net Site Habitat Sheet Site No. 24 Project No./Name 412, Emerson Creek Date 7/29/15

Lat/Lon: UTM: N/E 41.17804 W/N 82.88861 Zone 18T Quad OH State 18T

Datum: NAD83 County Genesee Observers J. Storm, M. Newton

Net Set by Habitat									
Habitat	A	B	C	D	E	F			
River									
Stream									
Pond									
Corridor	X	X	X						
Cave									
Mine									
Forest									
Gap									
Other				X		X			
Emerson Creek (waterway)									

C	5.2	10	7/29	
D	7.0	9	7/29	7/31
E	5.2	9	7/31	
F				

Site Photographs				
Camera: _____				
Photo Log: _____				
_____				
_____				
_____				
_____				
_____				

Forest

Corn

Emerson Creek

Soybean

# Indiana Bat Habitat Characterization (Choose appropriate score for each habitat characteristic)

- Roost habitat: 1. Poor: No or few snags >= 5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc)  
 2. Moderate: Snags with sloughing bark or other roost features present 5-15 inch DBH within 1000 feet of forested areas.  
 3. Optimal: Snags with sloughing bark or other roost features present >15 inch DBH within 1000 feet of forested areas.
- Water Resources: 1. Poor: bat drinking resources not present at the site.  
 2. Moderate: Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource.  
 3. Optimal: Streams or ponds (including road ruts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.
- Forest Structure: (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).  
 1. Poor: Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging  
 2. Moderate: some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare.  
 3. Optimal: Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.
- Land Cover: 1. Poor: Square kilometer surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees.  
 2. Marginal: Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas.  
 3. Optimal: Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

Total Habitat Score (Should be between 4 & 12)

Comments:

## Mist Netting Data Form

Sheet 1 of 1

Site No. 85 Project No./Name 412-01 / Emerson Creek Date 7/29/2015  
 Site Location Decker property off 9 Corners Rd. 30  
 County Sevier State MO Time Up 8:50 Time Down 2:00 Observers Brandon Smith, Cory Shaw  
 Lat/Lon: UTM: N/E 4121306 W/N 829883 Zone 18Q Datum NAD83



COPPERHEAD

Moon Phase <u>7/29/15</u>		Wax / Wane	
Time	Temp (F)	Sky	Wind
10:50	20.2	2	0
12:12	20.5	2	0
1:17	14.5	1	0
1:50	18.5	1	0
2:00	13.5	9	0

Time	Temp (F)	Sky	Wind	No. Bats
10:50	20.2	2	0	8
12:12	20.5	2	0	2
1:17	14.5	1	0	0
1:50	18.5	1	0	3
2:00	13.5	9	0	0

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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p. 1

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	9:40	EPFU	J	M	NR	19.3	46	A	3	0	0		
2	9:40	EPFU	J	M	NR	15.25	45	A	4	0	0		
3	9:40	EPFU	J	F	NR	16.0	47	A	1	0	0		
4	10:05	EPFU	J	M	NR	13.25	47	A	3	0	0		
5	10:30	LABO	J	F	NR	12.0	40	B	2.5	0	0		
6	10:30	EPFU	J	M	NR	15.5	46	C	3.0	0	0		
7	10:45	LABO	A	M	TD	11.0	39	A	2.5	0	0		
8	10:45	EPFU	A	F	NR	18.5	49	A	4.0	0	0		
9	11:40	EPFU	J	M	NR	14.5	44	A	2.0	1	0		
10	12:10	LABO	A	M	TD	10.0	39	B	2.0	0	0		
11	1:46	EPFU	J	M	NR	16.25	45	A	2.0	0	0		
12	1:46	EPFU	A	F	NR	17	45	A	3.5	0	0		
13	1:48	LABO	J	M	NR	9.75	39	A	.5	0	0		
14													
15													
16													
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29													
30													

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasiurus noctivagus (LANO); Myotis austroriparius (MYAU); Myotis grisescens (MYGR); Myotis leibii (MYLE); Myotis lucifugus (MYLU); Myotis septentrionalis (MYSE); Myotis sodalis (MYSO); Nycticeius humeralis (NYHU); Perimyotis subflavus (PESU); Tadarida brasiliensis (TABR)

Other Abbreviations: Male: M; Female: F; Pregnant: P; Lactating: L; Post Lactating: PL; Scrotal: S; Non Repro: NR



## Mist Netting Data Form

Site No. 25 Project No./Name 112101 Emerson Creek Date 31 July 13  
 Site Location Dickerson Property at 150232  
 County Seneca State NY Time Up 2050 Time Down 0150  
 Lat/Lon ; UTM: N/E 41.217306 W/N 82.90825 Zone 18 Datum NAD83 Observers C. Leffler  
J. Bourne, J. R. Buhner



COPPERHEAD

Moon Phase <u>100%</u>		Wax / Wane	
Rise	Set		
Sun	0625		2051
Moon	2052		0642

Time	Temp (F)	Sky	Wind	No. Bats
2100	70	1	1	1
2200	66	1	1	11
2300	65	1	1	2
0000	64	1	1	0
0100	63	1	1	1
0150	62	2	1	0

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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p. 2

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	0115	LAR0	A	F	PL	11.25	38.0	B	2.0	0			
2	2210	LAR0	J	F	NR	11	40	A		0			
3	2210	EPFU	A	F	PL	19.25	43	A		0			
4	2210	LAR0	J	F	NR	12.75	38	A		0			
5	2210	EPFU	A	F	PL	19.75	44	A		0			
6	2210	LAR0	J	M	NR	7.5	34	A		0			
7	2210	EPFU			ESCAPED			A					
8	2210	LAR0			ESCAPED			B					
9	2235	EPFU	A	M	S	16	45	C	2	0			
10	2235	LAR0	J	M	NR	9.75	37	A	2	0			
11	2235	LAR0	J	F	NR	12.25	38	D	3	0			
12	2250	LAR0			ESCAPED			B					
13	2310	LAR0	J	F	NR	12.5	37	A	1	0			
14	2310	LAR0			ESCAPED			B					
15	0110	LAR0	J	F	NR	17.25	38	D	1.5	0			
16													
17													
18													
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Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Coordinates \_\_\_\_\_

Weatherproofing \_\_\_\_\_

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

# Mist Net Site Habitat Sheet

Site No. 25 Project No./Name 41701 / Emerald Creek Date 7/29/2015  
 Lat/Lon, UTM: N/E 411.773016 W/N -82.90825 Zone 18  
 Datum: NAD83 County Franklin State VA Quad 18N08E01  
 Observers Rainstorm, Brandon, Andy, Cary, Blake

Site Diagram:

Net	Height (m)	Length (m)	Dates
A	30ft	9m	7/29, 7/31
B	30ft	10m	7/29, 7/31
C	30ft	10m	7/29, 7/31
D	30ft	10m	7/29, 7/31
E			
F			

Dominant Vegetation	
1. <u>N. Red Oak</u>	4. <u>Sugar Maple</u>
2. <u>White Oak</u>	5. <u>American Elm</u>
3. <u>Red Maple</u>	6. <u>Black Cherry</u>

Net Set by Habitat						
Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	Y	X	X	Y		
Cave						
Mine						
Forest						
Gap						
Other						

Site Photographs

Camera: Canon

Photo Log: 55A 258, 25C 25D

## Indiana Bat Habitat Characterization (Choose appropriate score for each habitat characteristic)

- 2 **Roost habitat:** 1. Poor: No or few snags >= 5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc)  
 2. Moderate: Snags with sloughing bark or other roost features present 5-15 inch DBH within 1000 feet of forested areas.  
 3. Optimal: Snags with sloughing bark or other roost features present >15 inch DBH within 1000 feet of forested areas.

1 **Water Resources:** 1. Poor: bat drinking resources not present at the site.

2. Moderate: Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource.

3. Optimal: Streams or ponds (including road ruts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

3 **Forest Structure:** (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).

1. Poor: Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging

2. Moderate: some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare.

3. Optimal: Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.

2 **Land Cover:** 1. Poor: Square kilometer surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees.

2. Marginal: Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas.

3. Optimal: Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

8 **Total Habitat Score** (Should be between 4 & 12)

Comments:

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 859-925-9012



**COPPERHEAD**  
 FIELD RESEARCH & EDUCATION

## Mist Netting Data Form

Sheet    of   

Site No. 26 Project No./Name 41201 / Emerson Creek Date 7/26/13  
 Site Location Trails through woods behind "Isager Shack"  
 County Seneca State NY Time Up 2050 Time Down     
 Lat/Lon: UTM: NYE 412814 W/N 8290718 Zone    Datum NAD83 Observers T. Netel  
A. Ashmore

COPPERHEAD  
ENTOMOLOGICAL CONSULTING

Moons Phase	Wax / Wane
60%	
Sun	Rise <u>0620</u> Set <u>2056</u>
Moon	Rise <u>1628</u> Set <u>0803</u>

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq. / TL
1	2158	EPFU	A	M	S	19	47	C	1.0	0	—	—	—
2	2255	EPFU	JV	F	NR	15	49	A	3.5	0	—	—	—
3	2301	LADO	—	F	—	14.2	—	C	0.5	Escape	—	—	—
4	2335	LADO	—	NET	PS	APF	11.2	C	0.5	—	—	—	—
5	0050	MYSE	A	F	PL	28.5	36	D	1.0	0	—	25552	.587
6	0125	LADO	A	F	L	14.3	43	C	0.5	0*	—	—	—
7	0159	LADO	A	F	L	13.5	42	A	2.5	0	—	—	—
8	0159	MYSO	A	F	PL	8.5	38	A	4.0	0	—	25553	.779
9													
10													
11													
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Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVt); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasiurus noctivagans (LANO); Myotis austroriparius (MYAU); Myotis grisescens (MYGR); Myotis leibii (MYLE); Myotis lucifugus (MYLU); Myotis septentrionalis (MYSE); Myotis sodalis (MYSO); Nycticeius humeralis (NYHU); Perimyotis subflavus (PESU); Tadarida brasiliensis (TABR)

Other Abbreviations: Male: M; Female: F; Pregnant: P; Lactating: L; Post Lactating: PL; Scrotal: S; Non Repro: NR

\* Left wing with distal missing wing membrane & bone exposed

## Sky Code

0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm


## Beaufort Wind Scale

0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

Please Return to:

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## Mist Netting Data Form


 Site No. 24 Project No./Name 412 / Emerson creek Date 24-July-2015  
 Site Location Trails through woods behind "Sugar Shack"  
 County Seneca State OH Time Up 055 Time Down 0157  
 Lat/Lon: UTM: N 41.21810 WYN 82.910718 Zone — Datum NAD83 Observers T. Wetzel  
 N. Wachsmuth



**COPPERHEAD**

Moon Phase 50%		Wax / Wane
	Rise	Set
Sun	0618	2057
Moon	1432	2051

Time	Temp (F)	Sky	Wind	No. Bats
2100	73	2	0	1
2200	72	2	0	4
2300	73	2	0	1
0000	72	2	1	1
0100	70			1
0200	70			

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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(859) 925-9012

[illegible]

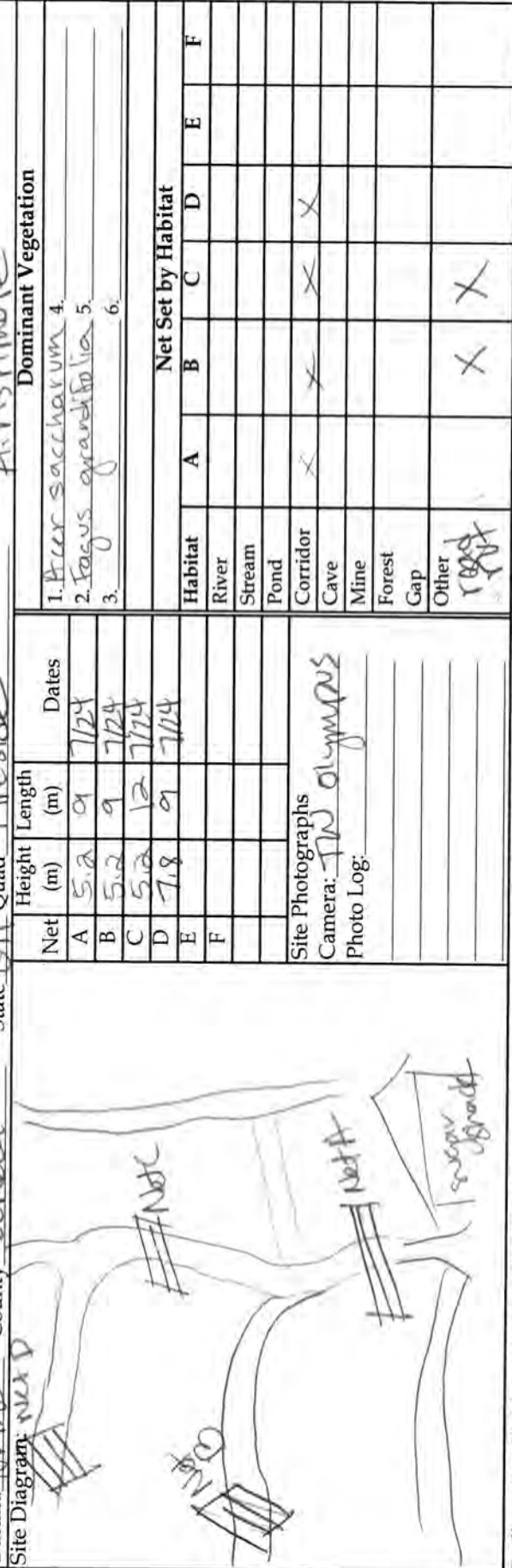
Acoustic Survey: Unit type	Unit #	Date	Start time	Stop time
		Date	Start time	Stop time
		Date	Start time	Stop time
Weatherproofing		Coordinates		
Comments:				

WALSLEY MCS - 0373, 0370, 0370, 0370, 0375, 0377



# Mist Net Site Habitat Sheet

Site No. 24 Project No./Name 412 / Emerson Creek Date 24 July 2005  
 Lat/Lon: UTM: N/E 4121811 Zone 18 Observers T. Wetzel  
 Datum: NAD83 County Sevier State OH Quad Preside A. Ashmore

Site Diagram: 

Net	Height (m)	Length (m)	Dates	Dominant Vegetation
A	5.2	9	7/24	1. <i>Pteris saccharum</i> 4.
B	5.2	9	7/24	2. <i>Fagus grandifolia</i> 5.
C	5.2	12	7/24	3. _____ 6.
D	7.8	9	7/24	
E				
F				

Site Photographs  
 Camera: TW Olympus  
 Photo Log: \_\_\_\_\_

Net Set by Habitat						
Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	X	X	X	X		
Cave						
Mine						
Forest						
Gap						
Other		X	X			

## Indiana Bat Habitat Characterization (Choose appropriate score for each habitat characteristic)

- 3 Roost habitat: 1. Poor: No or few snags >= 5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc)  
 2. Moderate: Snags with sloughing bark or other roost features present 5-15 inch DBH within 1000 feet of forested areas.  
 3. Optimal: Snags with sloughing bark or other roost features present >15 inch DBH within 1000 feet of forested areas.
- 3 Water Resources: 1. Poor: bat drinking resources not present at the site.  
 2. Moderate: Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource.  
 3. Optimal: Streams or ponds (including road ruts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.
- 3 Forest Structure: (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).  
 1. Poor: Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging  
 2. Moderate: some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare.  
 3. Optimal: Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.
- 2 Land Cover: 1. Poor: Square kilometer surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees.  
 2. Marginal: Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas.  
 3. Optimal: Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

Total Habitat Score (Should be between 4 & 12)

## Comments:

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 859-925-9012



# OHIO BAT BANDING DATA FORM

Principle Investigator(s)	Wesley Nelson
Location (lat/longs in D:M:S format)	

County	Site Description	Survey dates	Total mist net nights
Seneca	Trails through woodlot behind "sugar shack"	24/26 July 2015	8

[illegible]

**N/R?**: N = new capture, unbanded when captured, R = recapture, already banded when captured; **HABITAT** (at capture site): C = creek/riparian, B = bottomland forest, U = upland forest, P = pond, O = other (note type in margin); **ARM BANDED**: L = left, R = right (typically males are banded on the right forearm and females on the left); **SEX**: M = male, F = female; **AGE**: A = adult, J = juvenile, U = unknown; **REPRODUCTIVE CONDITION**: S = scrotal, P = pregnant, L = lactating, PL = post lactating, NR = nonreproductive, U = unknown

## Mist Netting Data Form

Site No. 24 Project No./Name 411.01 / Emerton Creek Date 7/24/2015  
 Site Location Snarely property off 16138  
 County Seneca State NY Time Up 9:00 Time Down 2:00 Observers Ron Storm  
 Lat/Lon: UTM: N7E 41118834 W/N -82.986353 Zone 18 Datum NAD83

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	10:30	EPFU	A	F	PL	19.5	50	C	4.0	0	-		
2	11:20	EPFU	A	M	NR	16.0	46	C	2.0	0	-		
3	12:30	EPFU	A	M	NR	16.0	47	C	4.0	0	-		
4	12:30	EPFU	J	M	NR	16.0	45.5	C	2.0	0	-		
5	1:50	EPFU	A	F	L	20.25	48	C	2.0	0	-		
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Acoustic Survey: Unit type \_\_\_\_\_ Date \_\_\_\_\_ Unit # \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Coordinates \_\_\_\_\_

Weatherproofing \_\_\_\_\_

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

Moon Phase 4 % Wax / Wane

	Rise	Set
Sun	6:19 am	8:58 pm
Moon	2:35 pm	12:53 am

Time	Temp (F)	Sky	Wind	No. Bats
9:20	71.0	1	0	0
12:30	67.5	1	0	4
2:00	68	1	0	4

Sky Code	
0	Clear
1	Few Clouds
2	Partly Cloudy
3	Cloudy or overcast
4	Fog or smoke
5	Drizzle or light rain
6	Heavy rain - thunder storm

Beaufort Wind Scale	
0	Calm: <1 mph
1	Light air: 1-3 mph
2	Light breeze: 4-6 mph
3	Gentle breeze: 7-10 mph
4	Moderate breeze: 11-16 mph

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## Mist Netting Data Form

Sheet of

Site No. 27 Project No./Name 412.01 / Emerston Creek Date 7/28/2015 (Night)

Site Location Savannah property off TR 138 Time Up 8:45 Time Down 2:00

County Savannah State GA W/N 83.986353 Zone - Datum NAD83 Observers Rain Storm Brandon Sawyer

Lat/Lon; UTM: N/E 4118854

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	9:50	EPUV	J	F	NR	13.5	44	C	5.0	1	O	---	---
2	9:50	EPUV	J	M	NR	14.75	46	C	4.5	0	O	---	---
3	10:30	EPUV	J	M	NR	2.0	44	C	4.0	1	O	---	---
4	12:16	EPUV	J	F	NR	13.5	45	C	2.5	1	O	---	---
5													
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7													
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Time	Temp (F)	Sky	Wind	No. Bats
9:07	73.4	1	0	0
11:24	67.5	1	0	2
2:00	65.8	1	0	4

Mo. Phase	%	Rise	Set
Sun		6:23am	8:54pm
Moon		7:28pm	5:29am

Wax / Wane
(W) / (W)

Sky Code
0 Clear
1 Few Clouds
2 Partly Cloudy
3 Cloudy or overcast
4 Fog or smoke
5 Drizzle or light rain
6 Heavy rain - thunder storm

Beaufort Wind Scale
0 Calm: <1 mph
1 Light air: 1-3 mph
2 Light breeze: 4-6 mph
3 Gentle breeze: 7-10 mph
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Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasius borealis (LABO); Lasius cinereus (LACI); Lasius seminolus (LASE); Lasiotyteris noctivagans (LANO); Myotis austroriparius (MYAU); Myotis grisescens (MYGR); Myotis leibii (MYLE); Myotis lucifugus (MYLU); Myotis septentrionalis (MYSE); Myotis sodalis (MYSO); Nycticeius humeralis (NYHU); Perimyotis subflavus (PESU); Tadarida brasiliensis (TABR)

Other Abbreviations: Male: M; Female: F; Pregnant: P; Lactating: L; Post Lactating: PL; Scrotal: S; Non Repro: NR



## Mist Net Site Habitat Sheet

Site No. 27

Project No./Name

412.01 / Emerson Creek

Date

7/24/2015

Lat/Lon: UTM: 18854 W 92.586353

Zone

Observers

Rain Storm + Brandon Smith

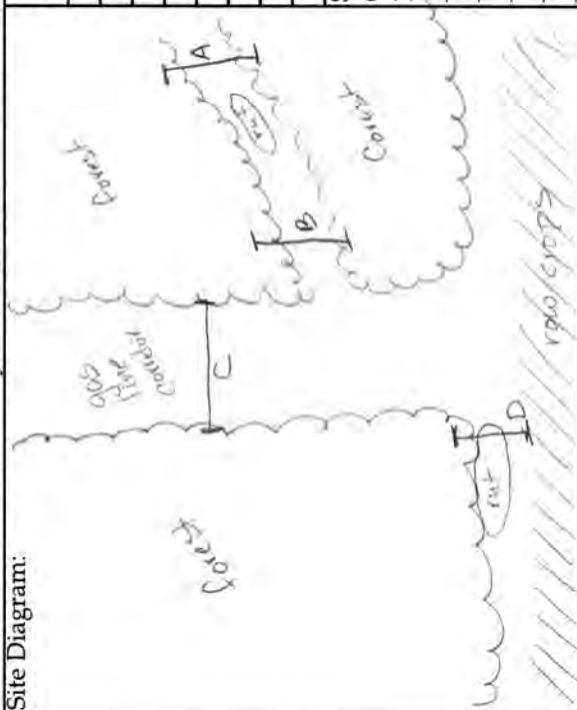
Datum: NAD83

State OH

Quad

Firehole

Site Diagram:



Dominant Vegetation	
1. Hickory	4. Elm
2. Red Maple	5. Cottonwood
3. Sugar Maple	6. Ironwood

Net Set by Habitat					
Habitat	A	B	C	D	E
River					F
Stream					
Pond					
Corridor	X	X			
Cave					
Mine					
Forest					
Gap					
Other				X	exp

Site Photographs

Camera: Rain's

Photo Log:

27A, 27B, 27C, 27D

## Indiana Bat Habitat Characterization (Choose appropriate score for each habitat characteristic)

**Roost habitat:** 1. Poor: No or few snags  $\geq 5'$  DBH with sloughing bark or other usable roost features (cracks, crevices, etc)

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**Total Habitat Score** (Should be between 4 & 12)

**Comments:**



COPPERHEAD

RESEARCH &amp; CONSULTING

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**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**12/26/2018 3:25:54 PM**

**in**

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

Summary: Application Exhibit R Part 6 of 11 electronically filed by Teresa Orahood on behalf of Dylan F. Borchers