

## 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 41.17804 W/N 82.88861 Zone 18 Datum NAD83 Observers J. Storm, M. Newton

COPPERHEAD  
PHYSIOLOGICAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	10:20	EPEU	A	M	SS	19	48mm	B	2.5	0	—	—	—
2													
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Moon Phase	% <u>99.6</u>	Wax / <u>Wane</u>
	Rise	Set
Sun	<u>6:25 am</u>	<u>8:51 pm</u>
Moon	<u>9:23 pm</u>	<u>9:10 am</u>

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	—

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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

## 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

Observers

J. Storm; M. NewtonDatum: NAD83

County

Seneca

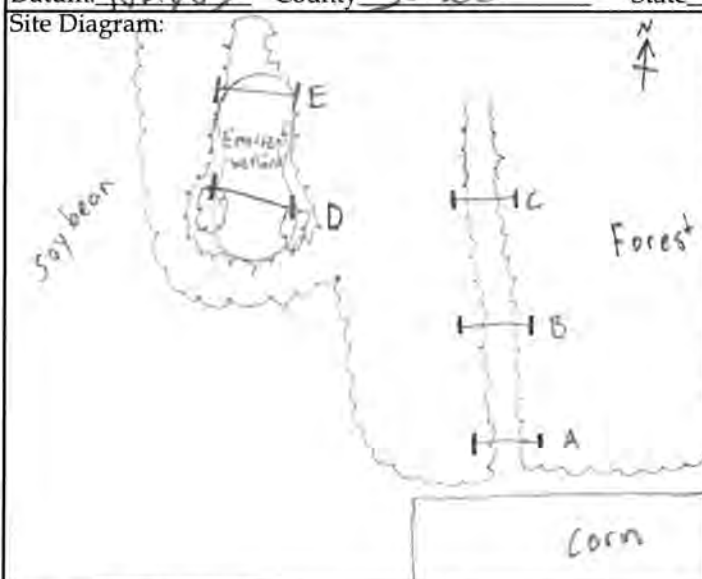
State

OH

Quad

Fireside

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	10	7/29 + 7/31
B	5.2	10	7/29 + 7/31
C	5.2	10	7/29
D	7.8	9	7/29 + 7/31
E	5.2	9	7/31
F			

Site Photographs

Camera:

Photo Log:

## Dominant Vegetation

1. shellbark hickory	4. red maple
2. black cherry	5. red oak
3. slippery elm	6. pin oak

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	X	X	X			
Cave						
Mine						
Forest						
Gap						
Other						
Emerson Creek Wetland				X	X	

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

- 3 **Roost habitat:** 1. **Poor:** No or few snags  $\geq 5"$  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.

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

Comments:

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859-925-9012

COPPERHEAD  
FOR SCIENTIFIC COLLECTION

## Mist Netting Data Form

Site No. 36 Project No./Name 412 / Emerson Creek Date 29-July-2015  
 Site Location Woodlot South of County Rd. 24  
 County Sevier State OH Time Up 2050 Time Down 0153  
 Lat/Lon; UTM: N/E 41.15548 W/N 83.00470 Zone NA Datum NAD83 Observers P. Sewell



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2150	EPFU	A	M	NR	17.5	44	B	2	0	—	—	—
2	0110	EPFU	A	M	NR	17.5	48	D	3	1	—	—	—
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Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

Moon Phase 95 % Wax / Wane

	Rise	Set
Sun	<u>0623</u>	<u>2053</u>
Moon	<u>1916</u>	<u>0432</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>82</u>	<u>3</u>	<u>0</u>	<u>1</u>
<u>2200</u>	<u>76</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>2300</u>	<u>74</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>0000</u>	<u>73</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>0100</u>	<u>72</u>	<u>2</u>	<u>2</u>	<u>1</u>
<u>0200</u>	<u>70</u>	<u>1</u>	<u>1</u>	<u>0</u>

## 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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*high 1*

## Mist Netting Data Form

Sheet 1 of 1

Site No. 36 Project No./Name 412 / Enoson Creek Date 7/31/15  
 Site Location Wood lot South of Route 11.24  
 County Scraper State OH Time Up 2045 Time Down 0155  
 Lat/Lon: UTM: N/E 41.15548 W/N 83.00470 Zone — Datum NAD83 Observers F. Scull  
A. Ashmoe

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2130	EPFU	J	F	NR	12.25	46	F	5.5	0	—	—	—
2	2130	EPFU	J	M	NR	15	46	E	4	0	—	—	—
3	2130	EPFU	A	M	S	19.25	61	E	2	0	—	—	—
4	2145	EPFU	J	A	NR	14.5	49	E	—	0	—	—	—
5	2145	EPFU	J	F	NR	13.5	47	E	—	0	—	—	—
6	2145	EPFU	J	F	NR	15.0	49	E	—	0	—	—	—
7	2148	EPFU	A	F	PL	18.75	47	D	2	0	—	—	—
8	2151	EPFU	J	M	NR	13	47	E	5	1	—	—	—
9	2153	EPFU	J	M	NR	10.75	44	E	4	0	—	—	—
10	2155	EPFU	J	F	NR	14.5	45	E	5	0	—	—	—
11	2145	EPFU	A	F	PL	21.75	50	E	—	0	—	—	—
12	0110	LABO	J	F	NR	12.25	44	E	5	0	—	—	—
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14													
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**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Moon Phase <u>00</u> % <u>Wax / Wane</u>		
	Rise	Set
Sun	<u>0626</u>	<u>2050</u>
Moon	<u>2132</u>	<u>0754</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100		0	0	8
2200		1	1	3
2300		1	0	0
0000	66	2	1	0
0100	65	2	1	1
0200	64	0	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 Netting Data Form

Sheet      of     

Site No. 1 Project No./Name 501 / Emerson West Date 11 July 2016  
 Site Location Sugar Creek and adjacent ag. field north of CR39  
 County Seneca State OH Time Up 2106 Time Down 0206  
 Lat/Lon; UTM: N/E 41.16944 N/N 83.64229 Zone - Datum NAD83 Observers T. Culbertson, A. Hawkins

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	21:44	EPFU	A	M	NR	14.5	44	D	5.5	0	Ø	Ø	Ø
2	22:53	EPFU	J	M	NR	13.25	45	E	3	0	Ø	Ø	Ø
3	00:31	EPFU	A	F	L	20.5	45	D	3.5	0	Ø	Ø	Ø
4	01:05	EPFU	J	F	NR	13.5	46	E	3	0	Ø	Ø	Ø
5	01:40	EPFU	J	M	NR	13.25	45	D	6.5	0	Ø	Ø	Ø
6													
7													
8													
9													
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**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Moon Phase	% <u>40</u>	<u>Wax</u> / <u>Wane</u>
	Rise	Set
Sun	<u>0609</u>	<u>2106</u>
Moon	<u>1331</u>	<u>0059</u>

Time	Temp (F)	Sky	Wind	No. Bats
2106	73	0	0	1
2206	68	0	0	1
2306	66	0	0	0
0006	72	0	2	1
0106	72	0	2	2
0206	71	0	2	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

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



## Mist Netting Data Form

Site No. 1 Project No./Name S01 / Emerson West Date 19 July 2016  
 Site Location Sugar Creek and adjacent Ag. Field north of CR38  
 County Seneca State OH Time Up 2100 Time Down 0200  
 Lat/Lon ; UTM: NDE 41.16944 W/N 83.04229 Zone - Datum NAD83 Observers T. Culbertson, A. Hawkins

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
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Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

Moon Phase % Full Wax / Wane

Rise Set

Sun 0616 2100

Moon 2042 0602

Time	Temp (F)	Sky	Wind	No. Bats
2100	72	1	2	0
2200	67	0	1	0
2300	67	0	2	0
0000	65	0	1	0
0100	62	0	0	0
0200	60	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

Please Return to:

P.O. Box 73, Paint Lick, KY, 40461.

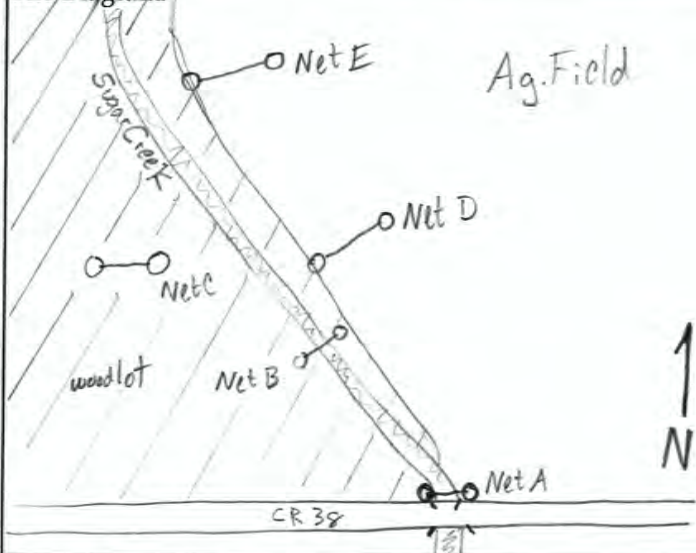
(859) 925-9012



## Mist Net Site Habitat Sheet

Site No. 1Project No./Name 501 / Emerson WestDate 11 July 2016, 19 July 2016Lat/Lon; UTM: N 41.16944W 83.04229Zone -Observers T Culbertson, A HawkinsDatum: NAD83County SenecaState OHQuad Watson

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	2.6	4	7/11, 7/19
B	2.6	6	7/11, 7/19
C	5.2	9	7/11
D	7.2	9	7/11, 7/19
E	5.2	12	7/11, 7/19
F			

Site Photographs

Camera: Red PentaxPhoto Log: Net A. 1545B. 1546C. 1548D. 1549E. 1550

## Dominant Vegetation

1. <u>Acer saccharum</u>	4. _____
2. <u>Acer negundo</u>	5. _____
3. <u>Juglans nigra</u>	6. _____

## Net Set by Habitat

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

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

- 1 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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:

Please return to:

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859-925-9012

COPPERHEAD  
ENVIRONMENTAL CONSULTING



## Mist Netting Data Form

Site No. 2 Project No./Name 501.01 / Emerson West Date 11 July 16  
 Site Location Narrow woodlot between corn fields  
 County Seneca State OH Time Up 2050 Time Down 0205  
 Lat/Lon ; UTM: N/E 41.20319 W/N 82.86085 Zone 18 Datum NAD83 Observers C. LeFevich  
A. Ashmore



**COPPERHEAD**  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2151	LABO	A	F	L	12.0	42	E	1.5	0	—	—	—
2	2335	EPFU	S	F	NR	17.5	48	E	5.0	0	—	—	—
3													
4													
5													
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Moon Phase % 50 ☒ Wax ☐ Wane

Rise Set

Sun 0608 2105

Moon 1330 0047

Time	Temp (F)	Sky	Wind	No. Bats
2100	72	0	1	—
2200	64	0	0	1
2300	63	0	0	0
0000	63	0	0	1
0100	61	0	0	0
0200	61	0	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

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

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



## Mist Netting Data Form

Sheet 1 of 1

Site No. 2 Project No./Name 501 1 Emerson West Date 16 July 16  
 Site Location \_\_\_\_\_  
 County Seneca State Ohio Time Up 2050 Time Down 0205  
 Lat/Lon ; UTM: N/E 46.20319 W/N 82.86285 Zone 18 Datum NAD83 Observers C. Lettich  
A. Ashmore

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2305	LABO	J	M	NR	8.75	37	B	1.0	0	—	—	—
2													
3													
4													
5													
6													
7													
8													
9													
10													
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26													
27													
28													
29													
30													

Moon Phase	%	90	<input checked="" type="radio"/> Wax <input type="radio"/> Wane
	Rise		Set
Sun		0613	2102
Moon		1903	0418

Time	Temp (F)	Sky	Wind	No. Bats
2100	63	0	1	—
2200	60	0	1	0
2300	59	0	0	0
0000	59	3	0	1
0100	59	2	0	0
0200	59	2	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

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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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)

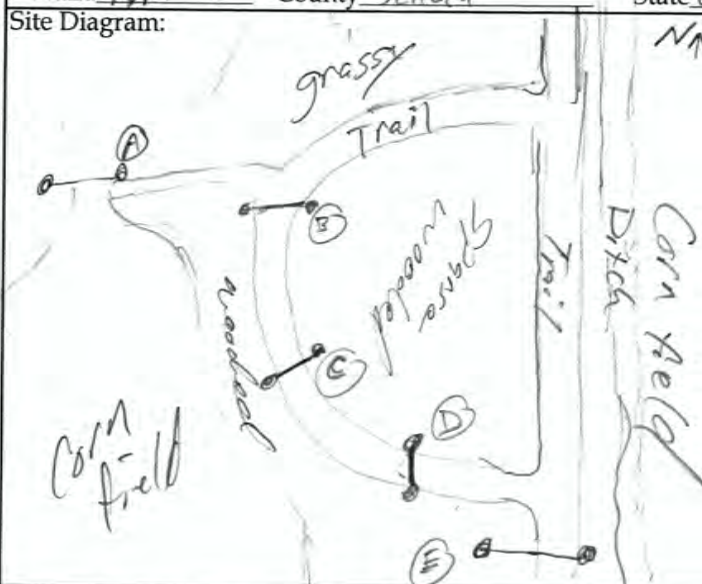
**Other Abbreviations:** Male: M; Female: F; Pregnant: P; Lactating: L; Post Lactating: PL; Scrotal: S; Non Repro: NR



## Mist Net Site Habitat Sheet

Site No. 2Project No./Name 506.01 Emerson WestDate 11 July 16Lat/Lon ; UTM: N/E 41.20319W/N 82.86285Zone 1Observers C. LeftwichDatum: NAD 83 County SenecaState OH Quad A. Ashmore

Site Diagram:



Net	Height (m)	Length (m)	July Dates
A	2.6	4	10-16
B	5.2	6	11-16
C	5.2	4	11-16
D	5.2	6	11-16
E	7.8	9	11-16
F			

Site Photographs  
 Camera: CL  
 Photo Log: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Dominant Vegetation

1. <u>J. nigra</u>	4. <u>L. americana</u>
2. <u>S. nigra</u>	5. _____
3. <u>P. deltoidea</u>	6. _____

## Net Set by Habitat

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

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

- 1 **Roost habitat:** 1. Poor: No or few snags  $\geq 5$ " 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 cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.
- 1 **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.

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

Comments:

Agricultural ditch could provide water source when wet

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## Mist Netting Data Form

Site No. 3 Project No./Name 501 1 Emerson west Date 18-July-2016  
 Site Location Small woodlot south of road  
 County Seale State OH Time Up 2101 Time Down 0201  
 Lat/Lon; UTM: N/E 41.15308 W/N -83.0278 Zone — Datum NAD83 Observers R Stinson  
M Gooden



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2215	LABO	A	M	SCR	11.0	39	B	1.5	0	—	—	—
2	2252	EPU	J	M	NR	15.75	48.5	A	4.0	0	—	—	—
3	2252	EPU	A	F	L	23.25	48	A	3.5	0	—	—	—
4	2252	EPU	J	F	NR	14.5	47.0	A	2.0	0	—	—	—
5	2308	LABO	J	M	NR	9.5	39	B	2.0	0	—	—	—
6	2332	EPU	A	M	SCR	17.75	45	B	4.0	0	—	—	—
7													
8													
9													
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30													

Moon Phase 98% (Wax) / Wane

	Rise	Set
Sun	<u>0615</u>	<u>2101</u>
Moon	<u>1455</u>	<u>0506</u>

Time	Temp (F)	Sky	Wind	No. Bats
2101	<u>79</u>	<u>2</u>	<u>1</u>	<u>0</u>
2201	<u>74</u>	<u>3</u>	<u>0</u>	<u>4</u>
2301	<u>72</u>	<u>3</u>	<u>0</u>	<u>2</u>
0001	<u>69</u>	<u>0</u>	<u>0</u>	<u>0</u>
0101	<u>69</u>	<u>0</u>	<u>0</u>	
0201	<u>69</u>	<u>0</u>	<u>0</u>	

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

Please Return to:  
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 (859) 925-9012



## Mist Netting Data Form

Sheet      of     

Site No. 3 Project No./Name 501 / Emerson west Date 12-July-2016  
 Site Location small woodlot south of road  
 County Seneca State OH Time Up 2106 Time Down 0206  
 Lat/Lon ; UTM: N/E 41.15308 W/N -83.0278 Zone      Datum NAD83 Observers R. Stinson  
C. Jacobi

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2210	EDFU	A	M	NR	15.5	48	D	5.0	0	—	—	—
2	2210	LABO	A	F	L	14.0	43	D	1.5	0	—	—	—
3	2310	LABO	J	F	NR	8.75	41	B	1.0	0	—	—	—
4													
5													
6													
7													
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10													
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Moon Phase 56% Wax / Wane

	Rise	Set
Sun	<u>0610</u>	<u>2106</u>
Moon	<u>1428</u>	<u>0116</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2106</u>	<u>81.0</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>2206</u>	<u>80.0</u>	<u>1</u>	<u>1</u>	<u>2</u>
<u>2306</u>	<u>78</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>0006</u>	<u>78</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>0106</u>	<u>76</u>	<u>2</u>	<u>2</u>	<u>0</u>
<u>0206</u>	<u>75</u>	<u>2</u>	<u>2</u>	<u>    </u>

## 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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 (859) 925-9012

p. 1

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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. 3Project No./Name 501 / Emerson west

Date \_\_\_\_\_

Lat/Lon; UTM: N/E 41.15308 W/N -83.0278

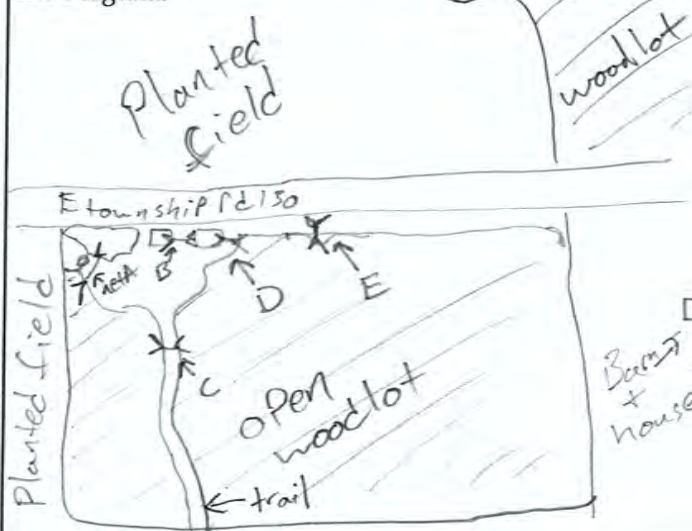
Zone \_\_\_\_\_

Observers R. Stinson

Datum: \_\_\_\_\_

County SenecaState OHQuad WatsonC. Jacobi

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	7.0	9	7-12 7-18
B	5.2	6	7-12 7-18
C	5.2	4	7-12 7-18
D	5.2	6	7-12 7-18
E	5.2	6	7-12
F			

Site Photographs

Camera: Rob's Camera

Photo Log:

net A 100-0738B 100-0735C 100-0737D 100-0744E 100-0739-740

## Dominant Vegetation

1. <u>A. rubra</u>	4. <u>A. acerharum</u>
2. <u>O. virginiana</u>	5. <u>T. americana</u>
3. <u>C. ovata</u>	6. _____

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	✓	✓	✓	✓		
Cave						
Mine						
Forest	✓					
Gap						
Other						<u>wood lot edge</u>

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

- 1 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.

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

Comments:

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## Mist Netting Data Form

Site No. 4 Project No./Name 501.01 / Emerson West Date 15 July 2016Site Location Open woodlot between ag fieldsCounty Seneca State OH Time Up 2103 Time Down 0203Lat/Lon; UTM: N/E 41,15697 W/N -83.02715 Zone 18 Datum NAD 83 Observers G. Janos, K. DeBeckCOPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
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25													
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30													

Moon Phase 80 %

Wax / Wane

	Rise	Set
Sun	<u>0612</u>	<u>2103</u>
Moon	<u>1715</u>	<u>0254</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>74</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>2200</u>	<u>72</u>	<u>0</u>	<u>1</u>	<u>0</u>
<u>2300</u>	<u>71</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0000</u>	<u>69</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0100</u>	<u>68</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0200</u>	<u>67</u>	<u>0</u>	<u>0</u>	<u>0</u>

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Please Return to:  
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(859) 925-9012



## Mist Netting Data Form

Sheet 1 of 2Site No. 4 Project No./Name 501.01 / Emerson West Date 17 July 2016Site Location Open woodlot between ag fieldCounty Seneca State OH Time Up 2102 Time Down 0202Lat/Lon; UTM: N/E 41.15697 W/N -83.02715 Zone — Datum NAD 83 Observers G. Janos, K. M.

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2240	EPFU	A	F	L	21.5	51.0	A	3.5	0	—	—	—
2	0135	LABO	A	M	S	10.25	38.5	A	4.0	0	—	—	—
3													
4													
5													
6													
7													
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29													
30													

Moon Phase/100 % Wax / Wane

	Rise	Set
Sun	0613	2102
Moon	1903	0418

Time	Temp (F)	Sky	Wind	No. Bats
2100	79	1	0	0
2200	78	3	0	1
2300	78	3	0	0
0000	77	2	2	0
0100	77	2	2	1
0200	77	2	2	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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Please Return to:  
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2 of 2

# Mist Net Site Habitat Sheet

Site No. 4

Project No./Name 501.01/ Emerson West

Date 15 July 2016

Lat/Lon; UTM: N/E 41.15697 W/N -83.02715

Zone —

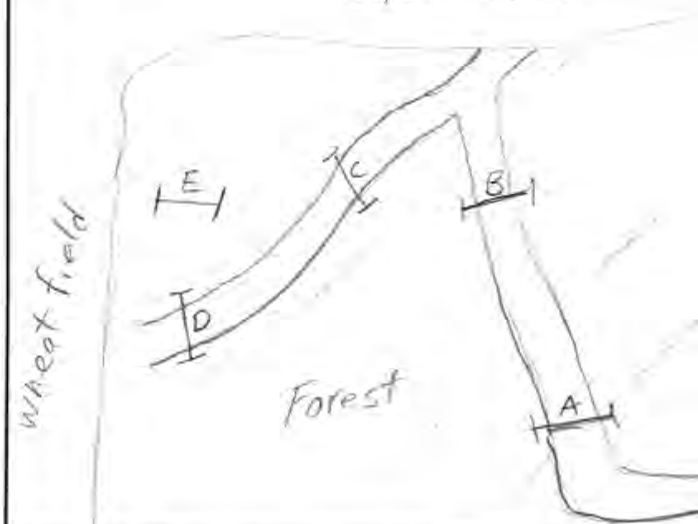
Observers G. Janos, K. DeBeck

Datum: NAD 83 County Seneca

State OH Quad Watson

Site Diagram:

Soybean Field



Net	Height (m)	Length (m)	Dates
A	5.2	6	7/15, 7/17
B	5.2	9	7/15, 7/17
C	5.2	6	7/15, 7/17
D	5.2	6	7/15
E	7.8	9	7/15, 7/17
F			

Site Photographs  
 Camera: Gregg's phone  
 Photo Log:

Dominant Vegetation	
1. <u>Fagus grandifolia</u>	4. <u></u>
2. <u>Acer saccharum</u>	5. <u></u>
3. <u>Corya ovata</u>	6. <u></u>

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

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.

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

Comments:

Please return to:

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859-925-9012





## Mist Netting Data Form

Site No. 5 Project No./Name 501 Emerson West Date 7/19/16  
 Site Location Woodlot edge next to Ag. field  
 County Shuca State OH Time Up 2059 Time Down 0200  
 Lat/Lon ; UTM: N/E 46.10144 W/N 82.88085 Zone Datum Observers J. Hankins, C. Jacobi

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2320	EPFU	JV	M	NR	14.3	44.0	B	4	0	—	—	—
2	2320	EPFU	JV	M	NR	14.3	45.0	B	3	0	—	—	—
3	0015	LABO	JV	M	NR	9.3	40.0	B	5	0	—	—	—
4	0130	LABO	JV	F	NR	9.8	39.0	C	4	0	—	—	—
5	0200	LABO	A	F	PL	12.8	41.0	B	4	0	—	—	—
6													
7													
8													
9													
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29													
30													

Moon Phase 100% Wax / Wane

	Rise	Set
Sun	<u>0616</u>	<u>2059</u>
Moon	<u>2033</u>	<u>0559</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	78	0	0	0
2200	74	0	0	0
2300	72	0	0	0
0000	68	0	0	2
0100	63	0	0	0
0200	59	0	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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

N/A Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

Coordinates \_\_\_\_\_

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

Please Return to:  
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(859) 925-9012

## Mist Netting Data Form

Sheet \_\_\_ of \_\_\_

Site No. 5 Project No./Name 501 / Emerson West Apex Date 7-12-2016  
 Site Location Woodlot Edge next to Agriculture field  
 County Seneca State OH Time Up 2104 Time Down \_\_\_\_\_  
 Lat/Lon; UTM: N/E 41.10144 W/N -82.88085 Zone - Datum - Observers J. Hawkins  
M. Gooden

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2230	LABO	A	F	PL	14.8	41	E	3.0	0	-	-	-
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase 59% Wax / Wane

	Rise	Set
Sun	<u>0610</u>	<u>2104</u>
Moon	<u>-</u>	<u>0118</u>

Time	Temp (F)	Sky	Wind	No. Bats
2104	<u>81</u>	<u>1</u>	<u>2</u>	<u>0</u>
2204	<u>77</u>	<u>1</u>	<u>2</u>	<u>1</u>
2304	<u>75</u>	<u>1</u>	<u>1</u>	<u>0</u>
0004	<u>73</u>	<u>1</u>	<u>2</u>	<u>0</u>
0104	<u>73</u>	<u>1</u>	<u>2</u>	<u>0</u>
0204	<u>73</u>	<u>1</u>	<u>2</u>	<u>0</u>

## 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

p. 1

Species Abbreviations: *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Eptesicus fuscus* (EPFU); *Lasiurus borealis* (LABO); *Lasiurus cinereus* (LACI); *Lasiurus seminolus* (LASE); *Lasionycteris 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. 5

Project No./Name 501 / Emerson West Apex

Date 7-12-2016

Lat/Lon ; UTM: N/E 46.10144

W/N 82.88085

Zone

Observers J. Hawkins, M. Gooker

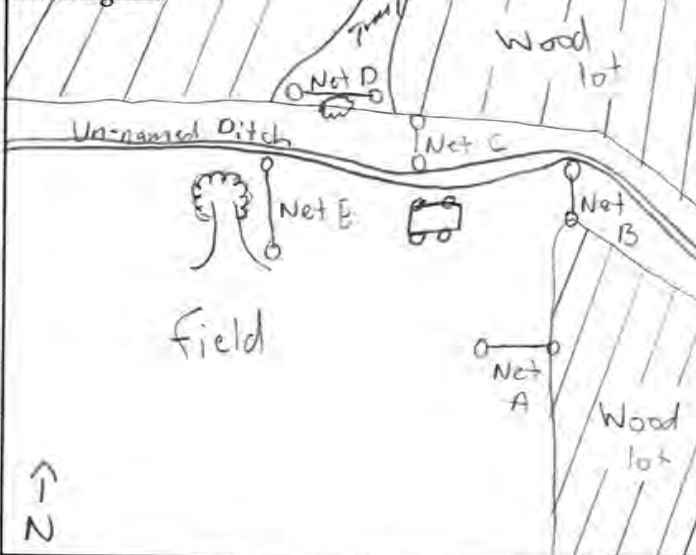
Datum:

County Lenoir

State OH

Quad

Site Diagram:



Net	Height (m)	Length (m)	2016 Dates
A	5.2	9	7-12, 19
B	5.2	9	7-12, 19
C	5.2	4	7-12, 19
D	5.2	6	7-12, 19
E	9.8	9	7-12, 19
F			

Site Photographs  
 Camera: Jeff's phone  
 Photo Log:  
 Uploaded to Google Drive  
 MFE A-Sites-net A MFE-Sites-net A  
 MFE B-Sites-net B  
 MFE C-Sites-net C  
 MFE D-Sites-net D

## Dominant Vegetation

1. <i>Acer rubrum</i>	4. <i>Quercus palustris</i>
2. <i>Crataegus</i> Sp.	5.
3. <i>Fragaria</i> Sp.	6.

## Net Set by Habitat

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

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.
- 1 **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.

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

Comments:

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859-925-9012

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## Mist Netting Data Form

Sheet      of     

Site No. 6 Project No./Name 501 / Emerson West Date 7/16/2006  
 Site Location Woodlot north of shriner ditch  
 County Seneca State OH Time Up 2103 Time Down 0203  
 Lat/Lon; UTM: N/E 41.1151 W/N -82.076591 Zone      Datum NA083 Observers R. Stinson C. Jacob



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2220	EPPU	A	F	L	19.5	48	C	2.5	0	—	—	—
2	2303	LABO	J	M	NR	9.5	41	C	3.0	0	—	—	—
3	0038	EPPU	A	M	NR	16.75	48	A	2.5	0	—	—	—
4													
5													
6													
7													
8													
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29													
30													

Moon Phase	%	Wax / Wane
	Rise	Set
Sun	06:13	21:03
Moon	18:11	03:32

Time	Temp (F)	Sky	Wind	No. Bats
21:03	72	0	0	0
22:03	71	0	0	1
23:03	63	0	0	1
00:03	62	0	0	1
01:03	65	1	0	0
02:03	61	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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPPU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Please Return to:  
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## Mist Netting Data Form

Site No. 4 Project No./Name 501 / Emerson West Date 7/22/2014  
 Site Location Woodlot north of Shriner ditch  
 County Seneca State OH Time Up 2058 Time Down 0158  
 Lat/Lon; UTM: N E 41.1151 W N 82.876591 Zone 18 Datum NAD83 Observers T. Wetzel  
M. G. Gooden

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2215	EPU	A	F	PL	19.5	48	B	1.0	0			
2	2215	EPU	A	F	PL	16.0	47	B	1.0	0			
3	2240	LABO	J	F	NR	9.5	40	C	3.5	0			
4	2320	LABO	A	M	S	11.75	40	C	7.5	0			
5	2340	LABO	J	F	NR	7.25	40	C	3.0	0			
6													
7													
8													
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29													
30													

Moon Phase 95 % Wax / Wane

	Rise	Set
Sun	<u>0617</u>	<u>2058</u>
Moon	<u>2240</u>	<u>0911</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	83	2	0	0
2200	81	1	0	3
2300	79	0	0	2
0000	78	0	0	0
0100	77	1	0	0
0200	76	1	0	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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

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

Please Return to:  
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**Mist Net Site Habitat Sheet** Site No. 6 Project No./Name 501, Emerson West Date 7/16/2016

W/N

W/N

Project No./Name

Project No./Name

Zone

### Observers

Re Stinson Co. Jacob

Datum: NAD83

County Seneca

State OH

Quad

Amica

Site Diagram:

Net	Height (m)	Length (m)	Dates
A	5.2	6	7-16
B	5.2	4	7-16, 7/22
C	7.0	9	7-16, 7/22
D	5.2	6	7-16, 7/22
E	5.2	6	7-16, 7/22
F			

Site Photographs

Camera:

## Photo Log:

### Dominant Vegetation

1. <i>R. rubra</i>	4.
2. <i>M. pomifera</i>	5.
3. <i>R. pseudoacacia</i>	6.

### Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor		✓		✓		
Cave						
Mine						
Forest			✓			
Gap						
Other	✓ edge				✓ edge	

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)

**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)

Please return to:

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**COPPERHEAD**

Comments:



## Mist Netting Data Form

Sheet 1 of 2

Site No. 7 Project No./Name 501 / Emerson West Date 11 July 2016  
 Site Location Open woodlot adjoining wheat field  
 County Seneca State OH Time Up 2106 Time Down 0206  
 Lat/Lon; UTM: N/E 41.17536 W/N -83.04250 Zone — Datum NAD 83 Observers G. Janos, K. DeBeck

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2145	EPFU	A	M	NR	17.0	46.0	D	2.0	0	—	—	—
2	2300	EPFU	A	M	S	19.25	47.0	A	4.0	0	—	—	—
3	2350	EPFU	A	F	PL	23.5	48.0	A	4.0	0	—	—	—
4	2350	MYSE	A	F	L	7.0	34.0	A	1.0	0	—	23528	—
5	2350	MYSE	A	F	L	7.5	35.0	E	2.0	0	—	23529	387
6													
7													
8													
9													
10													
11													
12													
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27													
28													
29													
30													

Moon Phase 50 % (Wax) / Wane

	Rise	Set
Sun	0609	2106
Moon	1331	0048

Time	Temp (F)	Sky	Wind	No. Bats
2100	79	0	1	1
2200	75	0	1	0
2300	72	0	1	4
0000	72	0	2	0
0100	71	0	2	0
0200	70	0	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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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

## Mist Netting Data Form

Site No. 7 Project No./Name 501 / Emerson Wheat Date 14-July 2016Site Location Open woodlot adjoining wheat fieldCounty SenecaState OHTime Up 2104Time Down 0204Lat/Lon; UTM: N/E 41.17536N/N -83.04250Zone -Datum NAD83Observers G. Janda, K. Debeck

HP Price

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	0135	LABO	J	M	NR	7.7	39.0	E	3.0	0	—	—	—
2													
3													
4													
5													
6													
7													
8													
9													
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26													
27													
28													
29													
30													

Moon Phase 75% Wax / Wane

	Rise	Set
Sun	<u>0611</u>	<u>2104</u>
Moon	<u>1619</u>	<u>0219</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2104</u>	<u>78</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>2204</u>	<u>74</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>2304</u>	<u>75</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>0004</u>	<u>73</u>	<u>0</u>	<u>1</u>	<u>0</u>
<u>0104</u>	<u>73</u>	<u>1</u>	<u>2</u>	<u>1</u>
<u>0204</u>	<u>73</u>	<u>0</u>	<u>2</u>	<u>0</u>

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

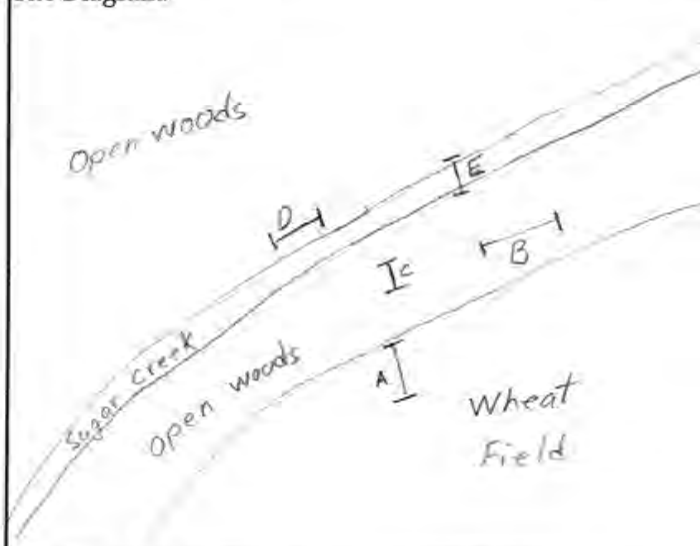
Comments:



## Mist Net Site Habitat Sheet

Site No. 7Project No./Name 501 / Emerson WestDate 11 July 2016Lat/Lon ; UTM: N/E 41.17536 W/N -83.04250Zone —Observers G. Janos, K. DeBeckDatum: NAD 83 County SenecaState OH Quad Watson

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	7.8	9	7/11, 7/14
B	5.2	12	7/11
C	5.2	6	7/11, 7/14
D	5.2	9	7/11, 7/14
E	5.2	4	7/11, 7/14
F			

Site Photographs

Camera: Gregg'sPhoto Log: 0300-0305


## Dominant Vegetation

1. <u>Acer rubrum</u>	4. <u>Acer saccharinum</u>
2. <u>Ulmus rubra</u>	5. <u></u>
3. <u>Acer negundo</u>	6. <u></u>

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream					✓	
Pond						
Corridor		✓	✓			
Cave						
Mine						
Forest						
Gap						
Other	✓					
Edge						
Forest Interior				✓		

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

- 3 **Roost habitat:** 1. Poor: No or few snags  $\geq 5$ " 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.
- 2 **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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012



## Mist Netting Data Form

Sheet 1 of 1

Site No. 8 Project No./Name 501 Emerson West Date 12 July 16  
 Site Location Inside woodlot border Cornfield  
 County Seneca State OH Time Up 2055 Time Down 2105  
 Lat/Lon; UTM: N/E 41.1555 Y N/N 82.94446 Zone 1 Datum NAD83 Observers C. Hoffrich  
A. Ashmore

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2127	EPFU	A	F	PL	17.0	50	B	1.5	0	—	—	—
2	2127	EPFU	A	F	L	16.5	50	C	1.5	0	—	—	—
3	2127	EPFU	A	F	L	17.0	46	D	2.0	0	—	—	—
4	2145	EPFU	A	F	PL	16.5	50	D	2.0	0	—	—	—
5	2145	EPFU	ESCAPED										
6	2145	EPFU	A	F	PL	15.5	46	C	1.5	0	—	—	—
7	2145	EPFU	A	F	PL	17.0	45	B	2.0	0	—	—	—
8	2208	EPFU	A	M	NR	15.5	44	A	5.0	0	—	—	—
9	2245	EPFU	A	M	S	15.0	45	B	.5	0	—	—	—
10	2245	EPFU	A	F	PL	20.5	49	B	.5	0	—	—	—
11	2245	EPFU	ESCAPED					B	.5	—	—	—	—
12	2300	EPFU	A	M	NR	17.0	46	B	2.0	0	—	—	—
13	2300	EPFU	A	F	PL	21.5	47	B	3.0	0	—	—	—
14	2320	EPFU	A	M	NR	18.5	46	C	1.5	0	—	—	—
15	2320	EPFU	A	F	PL	21.0	47	D	2.0	0	—	—	—
16	0008	EPFU	A	F	PL	27.75	48	C	3.0	0	—	—	—
17	0045	EPFU	A	M	NR	15.25	46	B	2.5	0	—	—	—
18	0156	EPFU	A	F	PL	20.0	45	B	0.5	0	—	—	—
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Moon Phase	%	Wax	Wane
		Rise	Set
Sun	0610		2104
Moon	1827		0117

Time	Temp (F)	Sky	Wind	No. Bats
2100	77	1	1	0
2200	73	1	1	7
2300	72	1	1	4
0000	70	1	1	4
0100	70	1	1	2
0200	72	1	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

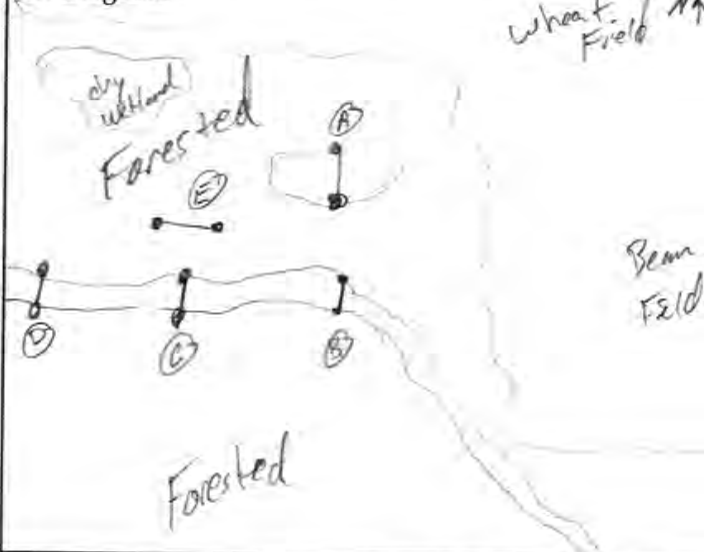
Please Return to:  
 P.O. Box 73, Paint Lick, KY, 40461.  
 (859) 925-9012



## Mist Net Site Habitat Sheet

Site No. 8Project No./Name 5011 Emerson WestDate 12 JulyLat/Lon ; UTM: N 41.15554 W 82.74446Zone -Observers C. LefthornDatum: NAD83 County Seneca State OH Quad -

Site Diagram:



Net	Height (m)	Length (m)	July Dates
A	7.8	9	12;
B	5.2	4	12;
C	5.2	4	12;
D	5.2	6	12;
E	5.2	6	12;
F			

Site Photographs  
 Camera: CL  
 Photo Log: uploaded

## Dominant Vegetation

1. <u>A. rubrum</u>	4. <u>Q. rubra</u>
2. <u>A. saccharum</u>	5. <u></u>
3. <u>A. saccharinum</u>	6. <u></u>

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream		X	X	X		
Pond						
Corridor						
Cave						
Mine						
Forest						
Gap					X	
Other dried ephemeral pond	X					

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.

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

Comments:

creek had pooled water

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859-925-9012

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## Mist Netting Data Form

Site No. B Project No./Name 501 / Emerson West Date 7/21/2016  
 Site Location inside woodlot @ edge of bean field  
 County Seneca State OH Time Up 2045 Time Down 0200  
 Lat/Lon; UTM: N/E 41.15554 W/N 82.94446 Zone  Datum NAD83 Observers G. Libby, R. Eaton

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2200	EPFU	EFN	EFN	EFN	EFN	EFN	B	3.0	—	—	—	—
2	2230	EPFU	A	M	S	18.6	44	B	1.5	0	—	DNB	—
3	2235	EPFU	A	M	S	19.25	46	D	2.0	0-P	—	DNB	—
4	2235	EPFU	A	M	NS	18.75	46	D	2.5	0	—	DNB	—
5	2305	EPFU	A	F	L	20.25	47	D	2.0	0	—	DNB	—
6	005	EPFU	A	F	L	19.75	46	C	2.0	0-P	—	DNB	—
7	010	EPFU	A	F	PL	19.5	46	D	1.5	0	—	DNB	—
8	010	EPFU	A	M	S	18.5	47	D	2.5	0	—	DNB	—
9	0100	EPFU	A	F	L	19.75	47	D	3.0	1	—	DNB	—
10	0100	LABO	A	F	L	12.25	42	D	1.5	0	—	DNB	—
11													
12													
13													
14													
15													
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28													
29													
30													

Moon Phase 90 % Wax Wane

	Rise	Set
Sun	6:16 am	8:59 pm
Moon	10:03 pm	8:06 am

Time	Temp (F)	Sky	Wind	No. Bats
2200	76°	1	0	4
2300	74°	1	0	1
000	70°	1	0	3
100	69°	1	1	2
200	68°	1	1	—
				10

## 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

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

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 (859) 925-9012



## Mist Net Site Habitat Sheet

Site No. 8Project No./Name 501 / Emerson WestDate 7/21/16Lat/Lon; UTM: N/E 41.15554W/N 82.94446Zone Observers G. Libby, R. EatonDatum: NAD 83County SenecaState OH Quad 

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	7.8	12	7/21/16
B	5.2	4	7/21/16
C	5.2	4	7/21/16
D	5.2	6	7/21/16
E			
F			

Site Photographs

Camera: AW-100 + SG7Photo Log: uploaded

## Dominant Vegetation

1. <i>A. saccharinum</i>	4. <i>V. americana</i>
2. <i>T. heterophylla</i>	5. <i>Q. rubra</i>
3. <i>A. saccharum</i>	6. <i>A. rubrum</i>

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream		X	X	X		
Pond						
Corridor						
Cave						
Mine						
Forest						
Gap						
Other dry pond	X					

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

- 2 **Roost habitat:** 1. **Poor:** No or few snags  $\geq 5"$  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.
- 2 **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.

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

Comments:

Intermittent stream had pooled water

Please return to:

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859-925-9012

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ENVIRONMENTAL CONSULTING

## Mist Netting Data Form

Site No. 9 Project No./Name 501 1. Eastern West Bats Date 7/17/2016  
 Site Location 1000 ft. SW of North County Rd 27 and road beside Woodlot w/ dry streambed  
 County Seneca State OH Time Up 2101 Time Down 0201  
 Lat/Lon ; UTM: N/E 41.15329 (W)N 82.94029 Zone \_\_\_\_\_ Datum \_\_\_\_\_ Observers J. Henkin, C. Jacobi

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2230	EPFU	A	M	S	17.0	46.0	D	2	0	—	—	—
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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27													
28													
29													
30													

Moon Phase 96% Wax Wane

	Rise	Set
Sun	<u>0614</u>	<u>2101</u>
Moon	<u>1855</u>	<u>0414</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	<u>78</u>	<u>1</u>	<u>2</u>	<u>0</u>
2200	<u>77</u>	<u>1</u>	<u>2</u>	<u>1</u>
2300	<u>77</u>	<u>1</u>	<u>2</u>	<u>0</u>
0000	<u>76</u>	<u>1</u>	<u>2</u>	<u>0</u>
0100	<u>73</u>	<u>1</u>	<u>2</u>	<u>0</u>

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

N/A

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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(859) 925-9012



Site No. 9 Project No./Name 501.01 / Emerson West Date 11 July 2016  
 Site Location 1000 feet to SW of North County Rd 27 on the edge and inside Woodlot  
 County Seneca State OH Time Up 2105 Time Down 0205 with dry stream bed.  
 Lat/Lon ; UTM: N/E 41.15329 W/N 82.94029 Zone Datum Observers J. Hawkins,  
 M. Gooden, H. Price

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
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18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

NO BATS  
CAPTURED

Moon Phase 50% Wax / Wane

	Rise	Set
Sun	0609	2105
Moon	1331	0116

Time	Temp (F)	Sky	Wind	No. Bats
2105	77	1	0	0
2205	72	0	0	0
2305	70	0	1	0
0005	70	0	1	0
0105	68	0	1	0
0205	68	0	2	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

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Please Return to:  
 P.O. Box 73, Paint Lick, KY, 40461.  
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## Mist Net Site Habitat Sheet

Site No. 9

Project No./Name 501.01, Emerson West

Date 11 July 2016

Lat/Lon ; UTM: N/E 41.15329 W/N 82.94029

Zone

Observers J Hawkins, M Gooden, H Price

Datum: County Seneca State OH Quad

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	9	11/17 July 2016
B	7.8	9	11/17 July 2016
C	5.2	6	11/17 July 2016
D	5.2	6	11/17 July 2016
E	5.2	6	11/17 July 2016
F			

Site Photographs  
 Camera: Jeff's iPhone  
 Photo Log: Uploaded to Google Drive

## Dominant Vegetation

1. <i>Acer saccharum</i>	4. <i>Acer negundo</i>
2. <i>Alnus rubra</i>	5. <i>Rubus pensilvanicus</i>
3. <i>Prunus serotina</i>	6.

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream				✓	✓	
Pond						
Corridor			✓			
Cave						
Mine						
Forest						
Gap						
Other	✓	✓				

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.
- 1 **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.

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

Comments: Stream Bed Dry

Please return to:

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## Mist Netting Data Form

Site No. 10 Project No./Name 501 / Emerson West Date 17 July 2016  
 Site Location Woodlot West of Township Rd 81  
 County Seneca State OH Time Up 2102 Time Down 0202  
 Lat/Lon: UTM: (N/E) 41.15516 (W/N) 82.90984 Zone 18 Datum NAD83 Observers T. W. J. et al  
D. Smith



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2235	EPFU	A	F	L	17.5	47	A	4.0	0	—	—	—
2	2255	EPFU	A	M	S	14.75	45	F	3.0	0	—	—	—
3	2340	EPFU	A	M	NR	19.75	47	F	3.5	0	—	—	—
4	0000	EPFU	A	F	L	22.0	47	A	4.5	0	—	—	—
5	0000	EPFU	A	F	PL	19.25	45	A	4.0	0	—	—	—
6	0005	LABO	J	M	NR	8.0	40	A	2.0	0	—	—	—
7													
8													
9													
10													
11													
12													
13													
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24													
25													
26													
27													
28													
29													
30													

Moon Phase 95% Wax / Wane

	Rise	Set
Sun	0413	2102
Moon	1903	0417

Time	Temp (F)	Sky	Wind	No. Bats
2100	81	2	1	0
2200	79	2	1	2
2300	77	3	1	1
0000	76	2	2	3
0100	78	3	2	0
0200	78	3	2	

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

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

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

## Mist Netting Data Form

Sheet 1 of 2

Site No. 10 Project No./Name SD1 / Emerson West Date 11 July 2016  
 Site Location Woodlot West of township Rd 81.  
 County Seneca State OH Time Up 2105 Time Down 0205  
 Lat/Lon ; UTM: N/E 41.15516 W/N 82.90984 Zone — Datum NAD83 Observers T. Wetzel  
D. Smith

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	0001	EPFU	A	F	L	22.0	48	A	1.5	0	—	—	—
2	0120	EPFU	A	M	S	20.25	47	E	2.0	0	—	—	—
3	0120	EPFU	A	F	L	21.75	48	E	5.0	0	—	—	—
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
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19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase 50 % ☒ Wax ☐ Wane

	Rise	Set
Sun	<u>0608</u>	<u>2105</u>
Moon	<u>0130</u>	<u>—</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	81	2	0	0
2200	75	1	0	0
2300	68	0	1	0
0000	68	0	1	1
0100	66	0	1	2
0200	66	0	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

**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Eptesicus fuscus* (EPFU); *Lasiurus borealis* (LABO); *Lasiurus cinereus* (LACI); *Lasiurus seminolus* (LASE); *Lasionycteris 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

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



## Mist Net Site Habitat Sheet

Site No.

10

Project No./Name

501, Emerson Wet

Date

11/1/2016

Lat/Lon; UTM: N/E 41.15516 W/N 82.90984

Zone

Observers T. Wetzel, D. Smith

Datum: NAD83 County Seneca State OH Quad Fireside

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	7.8	6	7/11, 7/16
B	5.2	6	7/11, 7/16
C	5.2	6	7/11
D	5.2	12	7/11
E	5.2	12	7/11, 7/16
F	5.2	9	7/16

Site Photographs

Camera: TW Phone

Photo Log:

1st - C

2nd - D

3rd - E

4th - B

5th - A

## Dominant Vegetation

1. *Fagus grandifolia*
2. *Carya ovata*
3. *Acer saccharum*
4. *Acer saccharinum*
5. *Ulmus americana*
- 6.

## Net Set by Habitat

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

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

- 3 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 1 **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: Secondary forest w/ lots of trails, forest gaps.

Vegetation indicates that it holds water at some time in the year.

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859-925-9012



## Mist Netting Data Form

Site No. 11 Project No./Name 501 / Emerson West Date 20 Jul 16  
 Site Location Woodlot N of Hwy 224 + west of Cooper Rd.  
 County Seneca State OH Time Up 82.97935 Time Down ---  
 Lat/Lon, UTM: (N)E 41.08601 (W)N 82.97935 Zone --- Datum NAD83 Observers T. Wetzel, D. Smith

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2230	EPFU	J	F	NR	14.0	50	F	1.5	0	---	---	---
2	2355	EPFU	J	M	NR	12.5	47	D	1.0	0	---	---	---
3	0117	MYSE	J	F	NR	5.75	34	C	1.0	0	---	22705	---
4													
5													
6													
7													
8													
9													
10													
11													
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28													
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30													

Moon Phase 100% Wax / Wane

Rise Set

Sun 0616 2400Moon 2123 0703

Time	Temp (F)	Sky	Wind	No. Bats
2400	76	0	1	0
2200	73	0	0	1
2300	72	0	0	1
0000	71	0	0	0
0100	70	0	0	1
0200	69	0	0	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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

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

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 (859) 925-9012

\* Did not transmitter due to low weight and newly volant juvenile



## Mist Netting Data Form

Sheet \_\_\_ of \_\_\_

Site No. 11 Project No./Name 501 / Emerson West Date 12 July 2016  
 Site Location Woodlot north of HWY 224 + west of Cooper Rd.  
 County Seneca State OH Time Up 2105 Time Down 0205  
 Lat/Lon; UTM: N/E 41.58601 W/N 82.97935 Zone — Datum NAD83 Observers T. Wetzel, D. Smith



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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27													
28													
29													
30													

No Bat  
Captures

Moon Phase	55%	Wax / Wane
	Rise	Set
Sun	0609	2105
Moon	1427	0017

Time	Temp (F)	Sky	Wind	No. Bats
2100	79	2	2	0
2200	76	2	2	0
2300	75	2	2	0
0000	73	1	1	0
0100	73	1	2	0
0200	73	1	2	—

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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**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Eptesicus fuscus* (EPFU); *Lasiurus borealis* (LABO); *Lasiurus cinereus* (LACI); *Lasiurus seminolus* (LASE); *Lasionycteris 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. 11

Project No./Name

501, Emerson West

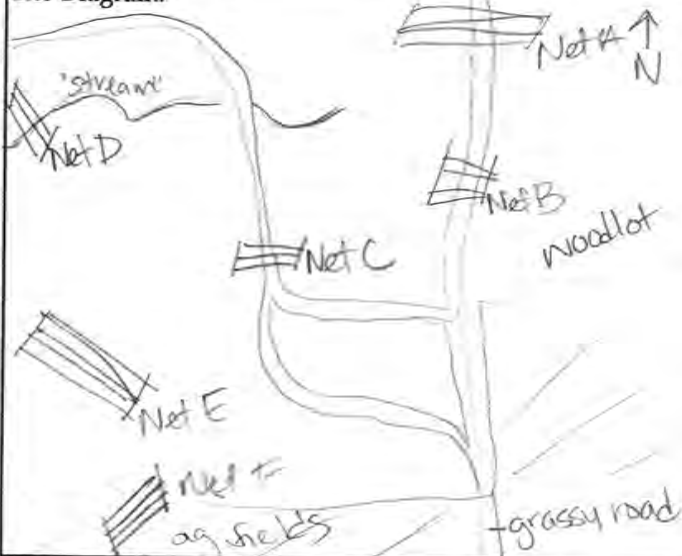
Date

12 July 16Lat/Lon; UTM: (N/E) 41.08601(W/N) 82.97935

Zone

Observers T. Wetzel, D. SmithDatum: NAD83 County SenecaState OH Quad Attica

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	12	7/12
B	7.8	6	7/12
C	5.2	9	7/12, 7/20
D	5.2	6	7/12, 7/20
E	5.2	12	7/12, 7/20
F	7.8	6	7/20

Site Photographs

Camera: TW PhonePhoto Log: 1st - Net C2nd - Net D3rd - Net B4th - Net A5th - Net E

## Dominant Vegetation

1. Acer saccharum
2. Carya ovata
3. Ulmus americana
4. Juglans nigra
5. Tilia americana

## Net Set by Habitat

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

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

- 3 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.
- 10

Total Habitat Score (Should be between 4 &amp; 12)

Comments:

Please return to:

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859-925-9012





## Mist Netting Data Form

Sheet      of     

Site No. 12 Project No./Name 501 Emerson West Wind project survey Date 7/11/2016  
 Site Location Small wood lot off of CR 38  
 County Geneca State OH Time Up 21:06 Time Down 02:06  
 Lat/Lon; UTM: N/E 41.16958 W/N 083.03641 Zone      Datum NAD83 Observers C. Jacobs



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	21:20	EPFU	J	M	S	14	46	D	1	0	—	—	—
2	22:20	EPFU	Escaped			NE		D	2.0	—	—	—	—
3	23:40	EPFU	J	M	NR	14	47	E	1.5	0	—	—	—
4	01:50	EPFU	J	M	NR	13.5	44	C	6.5	0	—	—	—
5	01:50	EPFU	J	M	NR	15.25	47	C	6.5	0	—	—	—
6													
7													
8													
9													
10													
11													
12													
13													
14													
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23													
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25													
26													
27													
28													
29													
30													

Moon Phase 90% Wax / Wane

	Rise	Set
Sun	<u>06:09 AM</u>	<u>21:06 PM</u>
Moon	<u>13:31 PM</u>	<u>12:47 AM</u>

Time	Temp (F)	Sky	Wind	No. Bats
21:06	79	1	0	0
22:06	72	0	0	2
23:06	75	0	0	1
00:06	75	0	0	0
01:06	74	0	0	1
02:06	73	0	0	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

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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

## Mist Netting Data Form

Site No. 12 Project No./Name 501 Emerson West Date 17-July-2016  
 Site Location small woodlot off of CR38  
 County Geneca State OH Time Up 2102 Time Down 0202  
 Lat/Lon ; UTM: N/E 41.16958 W/N 083.03641 Zone Datum NAD83 Observers R Stinson  
M Gooden



COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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23													
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27													
28													
29													
30													

Moon Phase 94 % Wax / Wane

	Rise	Set
Sun	<u>0614</u>	<u>2102</u>
Moon	<u>1904</u>	<u>0417</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2102</u>	<u>78</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>2202</u>	<u>77</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>2302</u>	<u>78</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>0002</u>	<u>78</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>0102</u>	<u>77</u>	<u>1</u>	<u>3</u>	<u>0</u>
<u>0202</u>	<u>77</u>	<u>1</u>	<u>3</u>	<u>-</u>

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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



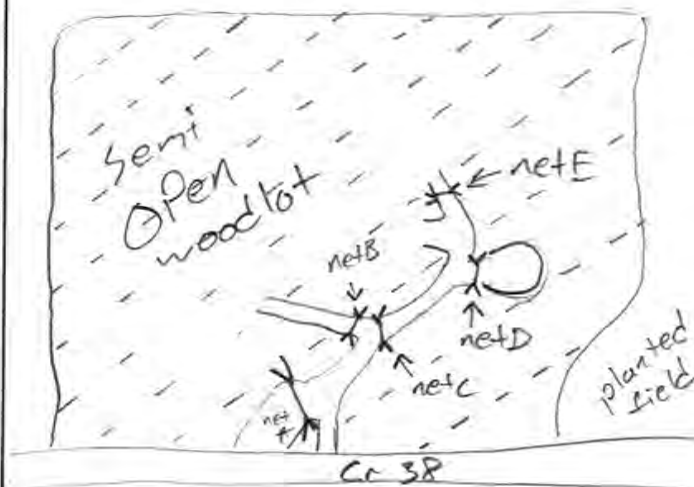
## Mist Net Site Habitat Sheet

Site No. 12Project No./Name 501 / Emerson WestDate 11-Jul-2016Lat/Lon ; UTM: N/E 46.16958W/N 083.03641

Zone

Observers C. Jacobi R. StinsonDatum: NAD83 County SenecaState OH Quad Watson

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	9	7-11
B	5.2	6	7-11 7-17
C	7.0	6	7-11 7-17
D	5.2	6	7-11 7-17
E	5.2	4	7-11 7-17
F			

Site Photographs

Camera:

Photo Log:

## Dominant Vegetation

1. <i>O. virginiana</i>	4. <i>C. caroliniana</i>
2. <i>C. ovata</i>	5.
3. <i>A. saccharum</i>	6.

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	✓	✓	✓	✓	✓	
Cave						
Mine						
Forest Gap						
Other						

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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 cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.
- 2 **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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012

COPPERHEAD  
ENVIRONMENTAL CONSULTING

Site No. 13 Project No./Name 501 / Emerson West Date 15 July 2016Site Location Woodlot South E Township Rd 122County Seneca State OH Time Up 2103 Time Down 0203Lat/Lon; UTM: N/E 41.13262 WYN-82.83958 Zone      Datum NAD 83Observers J Adams, A HawkinsH Price

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2233	EPFU	A	M	NR	14.5	43.0	B	2.0	0	—	—	—
2	2233	EPFU	A	F	PL	19.5	41.0	C	1.0	0	—	—	—
3	2335	LABO	J	M	NR	8.5	37.0	A	2.5	0	—	—	—
4	0005	LACI	J	F	NR	19.5	55.0	B	4.0	0	—	—	—
5	0040	LABO	J	M	NR	8.75	38.0	A	3.5	0	—	—	—
6													
7													
8													
9													
10													
11													
12													
13													
14													
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**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Eptesicus fuscus* (EPFU); *Lasiurus borealis* (LABO); *Lasiurus cinereus* (LACI); *Lasiurus seminolus* (LASE); *Lasionycteris 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

Moon Phase 75 % Wax / Wane

	Rise	Set
Sun	<u>0611</u>	<u>2103</u>
Moon	<u>1714</u>	<u>0254</u>

Time	Temp (F)	Sky	Wind	No. Bats
2103	73	1	1	0
2203	70	1	0	2
2303	68	2	1	1
0003	56	1	1	2
0103	68	2	1	0
0203	66	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

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

## Mist Netting Data Form

Site No. 13 Project No./Name 501 / Emerson West Date 17 July 2016  
 Site Location Woodlot South of E Township Rd 122  
 County Seneca State OH Time Up 2101 Time Down 0201  
 Lat/Lon; UTM: N/E 41.13262 W/N -82.83958 Zone — Datum NAD83 Observers J Adams, H Price



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2200	EPFU	A	F	L	16.25	47.0	C	0.5	0	—	—	—
2	2200	EPFU	J	F	NR	12.75	47.0	B	4.0	0	—	—	—
3	2250	EPFU	A	F	NR	19.50	45.0	A	1.0	0	—	—	—
4	2325	EPFU	A	F	PL	18.00	46.0	A	3.0	0	—	—	—
5	2345	EPFU	A	F	L	19.00	45.0	B	4.0	0	—	—	—
6	0005	EPFU	J	M	NR	10.75	45.0	B	2.5	0	—	—	—
7	0030	EPFU	A	M	TD	17.50	45.0	B	1.5	0	—	—	—
8	0030	EPFU	A	F	PL	20.00	46.0	A	2.5	0	—	—	—
9	0030	EPFU	J	M	NR	15.00	47.0	B	0.5	0	—	—	—
10	0110	EPFU	A	F	PL	18.75	48.0	A	2.5	0	—	—	—
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
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25													
26													
27													
28													
29													
30													

Moon Phase <u>☾</u> % <u>9</u>	Wax / Wane
Rise	Set
Sun <u>0143</u>	<u>2101</u>
Moon <u>1902</u>	<u>0417</u>

Time	Temp (F)	Sky	Wind	No. Bats
2101	75	1	0	0
2201	72	0	0	3
2301	73	2	1	2
0001	72	0	1	4
0101	72	1	2	1
0201	72	2	2	—

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

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

Comments:

\* Recapture

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



## Mist Net Site Habitat Sheet

Site No. 13

Project No./Name 501, Emerson West

Date 15 July 2016

Lat/Lon; UTM: N/E 41.13262 W/N -82.83958

Zone

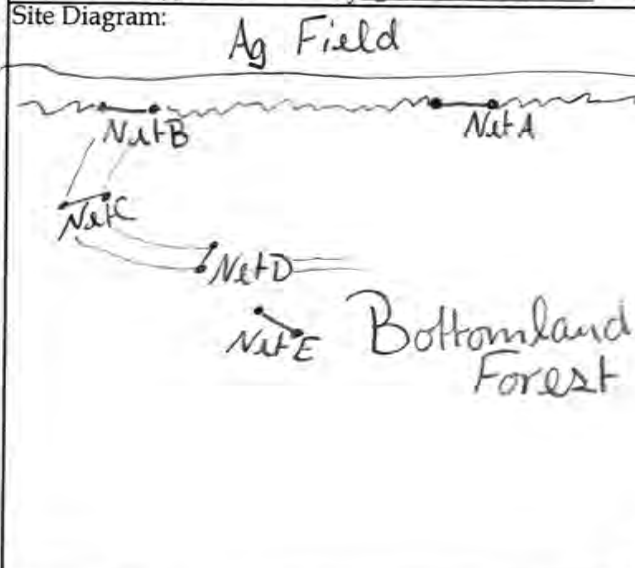
Observers J Adams, A Hawkins, H Price

Datum: NAD83 County Seneca

State OH

Quad Flat Rock

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	9.0	15 July 2016
B	7.8	6.0	15 July 2016
C	5.2	6.0	15 July 2016
D	2.6	6.0	15 July 2016
E	5.2	9.0	15 July 2016
F			

Site Photographs  
 Camera:  
 Photo Log:

Dominant Vegetation						
1. <i>Quercus palustris</i>	4. _____					
2. <i>Carya ovata</i>	5. _____					
3. <i>Quercus rubra</i>	6. _____					
Net Set by Habitat						
Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	✓	✓	✓	✓		
Cave						
Mine						
Forest						
Gap					✓	
Other						

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.
- 1 **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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012



## Mist Netting Data Form

Site No. 14 Project No./Name 501.01 / Emerson West Date 18 July 2016  
 Site Location logged woodlot adjoining cornfield  
 County Seneca State OH Time Up 2100 Time Down 0201  
 Lat/Lon: UTM: N/E 41.13567 W/N -82.96475 Zone — Datum NAD83 Observers G. James H. DeBrick

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2150	LABO	A	F	PL	11.75	42.0	A	0.5	0	—	—	—
2	2205	LABO	A	F	L	12.00	42.0	C	1.0	0	—	—	—
3	2205	EPFU	A	M	S	15.75	46.0	E	1.0	0	—	—	—
4	2215	EPFU	A	F	L	15.75	45.0	B	4.0	0	—	—	—
5	2215	EPFU	J	M	NR	14.50	46.5	B	4.0	0	—	—	—
6	2215	EPFU	A	F	PL	17.25	46.0	A	4.0	0	—	—	—
7	2245	EPFU	A	F	PL	18.75	47.0	A	3.5	0	—	—	—
8	2250	EPFU	A	F	PL	21.25	50.0	B	2.0	0	—	—	—
9	2315	LABO	Escaped from net					C	3.0	—	—	—	—
10	2330	EPFU	A	F	PL	22.25	49.0	D	1.0	0	—	—	—
11	2330	EPFU	A	M	S	18.75	47.0	A	4.0	0	—	—	—
12	2330	EPFU	J	M	NR	15.00	45.0	B	4.0	0	—	—	—
13	0110	LABO	A	M	NR	10.5	38.5	B	2.5	0	—	—	—
14	0125	LABO	A	F	L	14.25	41.0	B	1.0	0-P	—	—	—
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase 100% Wax / Wane

	Rise	Set
Sun	<u>0614</u>	<u>2101</u>
Moon	<u>1953</u>	<u>0507</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	77	1	1	1
2200	73	2	0	7
2300	71	1	0	4
0000	68	0	0	0
0100	68	0	0	2
0200	66	0	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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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

## Mist Netting Data Form

Sheet 1 of 2

Site No. 14 Project No./Name 501.01 / Emerson West Date 20 July 2016  
 Site Location Logged woodlot adjoining corn field  
 County Seneca State OH Time Up 2100 Time Down 0200  
 Lat/Lon; UTM: N/E 41.13567 W/N -82.96475 Zone — Datum NAD 83 Observers G. Janos, M. Gooden



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
* 1	2150	EPFU	A	M	S	15.50	46.0	F	2.0	0	—	—	—
2	2215	EPFU	J	F	NR	13.50	44.0	A	3.0	0P	—	—	—
3	2215	EPFU	J	F	NR	14.50	48.0	A	3.0	0	—	—	—
4	2220	EPFU	A	F	PL	19.00	48.0	B	4.0	0	—	—	—
5	2230	EPFU	A	F	PL	16.25	46.0	C	0.5	0	—	—	—
6	2230	LACT	J	M	NR	18.50	53.0	B	2.0	0	—	—	—
7	2235	EPFU	A	F	PL	19.75	46.0	B	3.0	0-P	—	—	—
8	2300	EPFU	A	F	PL	19.00	46.0	B	4.0	0	—	—	—
9	2300	EPFU	J	M	NR	13.25	47.0	B	2.0	0	—	—	—
10	2320	LABO	J	F	NR	9.50	46.0	C	3.5	0	—	—	—
11	2345	EPFU	J	M	NR	13.50	45.0	B	5.0	0	—	—	—
12	2345	LABO	J	F	NR	9.75	38.0	B	5.0	0	—	—	—
13	2345	LABO	J	M	NR	9.25	39.0	B	3.0	0	—	—	—
14	0015	LABO	A	F	PL	12.25	44.0	B	3.0	0	—	—	—
** 15	0215	LABO	A	F	L	14.25	41.0	B	2.5	0-P	—	—	—
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Moon Phase <u>100</u> %		Wax / Wane	
	Rise		Set
Sun	<u>0616</u>		<u>2100</u>
Moon	<u>2123</u>		<u>0703</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	74	0	0	1
2200	71	0	0	6
2300	69	0	0	6
0000	69	0	0	1
0100	68	0	0	0
0200	67	0	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

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

p. 2

\* Recapture of bat #13 from 7/18

\*\* Recapture of bat #14 from 7/20



## Mist Net Site Habitat Sheet

Site No. 14

Project No./Name 501.01/ Emerson West

Date 18 July 2016

Lat/Lon: UTM: N/E 41.13567 W/N - 82.96475

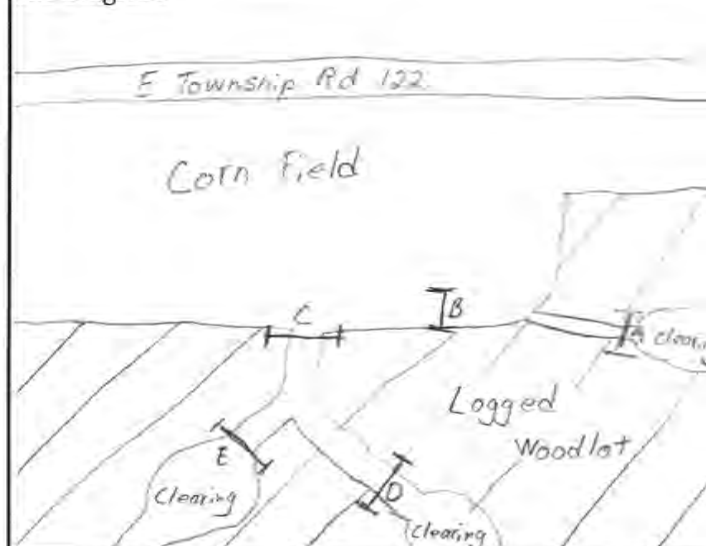
Zone

Observers G. Janos K. DeBeck

Datum: NAD83 County Seneca

State OH Quad Fireside

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	6	7/18, 7/20
B	7.8	9	7/18, 7/20
C	5.2	6	7/18, 7/20
D	5.2	4	7/18, 7/20
E	5.2	9	7/18
F			

Site Photographs  
 Camera: Fujifilm  
 Photo Log: 338, 341, 342, 345, 346

Dominant Vegetation					
1. <i>Quercus rubra</i>	4. <i>Vitis americana</i>				
2. <i>Carya ovata</i>	5.				
3. <i>Acer saccharum</i>	6.				
Net Set by Habitat					
Habitat	A	B	C	D	E
River					
Stream					
Pond					
Corridor	X		X	X	X
Cave					
Mine					
Forest Gap					
Other Edge		X			

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

- 2 **Roost habitat:** 1. **Poor:** No or few snags  $\geq 5"$  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.
- 2 **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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012

COPPERHEAD  
 ENVIRONMENTAL SENSITIVITY

## Mist Netting Data Form

Sheet \_\_\_\_\_ of \_\_\_\_\_

Site No. 15 Project No./Name 501.01 / Emerson West Date 12 Jul 16  
 Site Location Woodlot North of E. Township Rd. 130  
 County Seneca State OH Time Up 2105 Time Down 0205  
 Lat/Lon; UTM: N/E 41.15335 W/N -83.02054 Zone — Datum NAD83 Observers J. Adams  
A. Hawkins

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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29													
30													

No Captured

Moon Phase 50% Wax / Wane

	Rise	Set
Sun	<u>0609</u>	<u>2105</u>
Moon	<u>1427</u>	<u>0117</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>82</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>2200</u>	<u>77</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>2300</u>	<u>75</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>0000</u>	<u>72</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>0100</u>	<u>73</u>	<u>1</u>	<u>2</u>	<u>0</u>
<u>0200</u>	<u>72</u>	<u>1</u>	<u>1</u>	<u>—</u>

## 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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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

## Mist Netting Data Form

Site No. 15 Project No./Name 501 / Emerson West Date 19 July 2014  
 Site Location Woodlot North of E Township Rd 130  
 County Seneca State OH Time Up 2101 Time Down 0201  
 Lat/Lon ; UTM: N/E 41.15335 W/N - 83.02054 Zone — Datum NAD83 Observers J Adams, H Price



**COPPERHEAD**  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2205	EPFU	A	F	L	18.25	47.0	A	3.5	0	—	—	—
2	2243	EPFU	J	M	NR	13.50	45.0	A	2.0	0	—	—	—
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase <u>Full</u> (%) <u>Wax</u> / Wane		
	Rise	Set
Sun	<u>0615</u>	<u>2101</u>
Moon	<u>2041</u>	<u>0603</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2101</u>	<u>73</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>2201</u>	<u>68</u>	<u>0</u>	<u>0</u>	<u>2</u>
<u>2301</u>	<u>66</u>	<u>0</u>	<u>2</u>	<u>0</u>
<u>0001</u>	<u>64</u>	<u>0</u>	<u>2</u>	<u>0</u>
<u>0101</u>	<u>61</u>	<u>0</u>	<u>1</u>	<u>0</u>
<u>0201</u>	<u>59</u>	<u>0</u>	<u>1</u>	<u>0</u>

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Coordinates \_\_\_\_\_

Weatherproofing \_\_\_\_\_

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

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



## Mist Net Site Habitat Sheet

Site No.

15

Project No./Name

S0101 / Emerson West

Date

12/19 Jul 16

Lat/Lon; UTM: N/E 41.15335

W/N -83 02054

Zone

Observers

J. Adams, A. Hawkins

Datum: NAD83

County Sarco

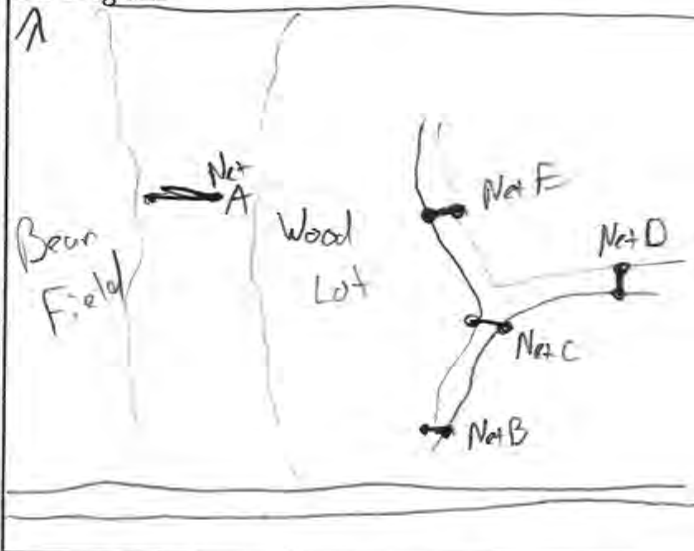
State OH

Quad

Watson

H. Price

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	7.8	6	12/19 Jul
B	2.6	4	12/19 Jul
C	5.2	9	12/19 Jul
D	5.2	6	12/19 Jul
E	5.2	4	12/19 Jul
F			

Site Photographs  
 Camera: Josh S. Phone  
 Photo Log:

## Dominant Vegetation

1. C. ovata	4. Q. palustris
2. A. rubrum	5.
3. D. americana	6.

## Net Set by Habitat

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

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 1 **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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012

COPPERHEAD  
ENVIRONMENTAL CONSULTING

## Mist Netting Data Form

Sheet \_\_\_\_\_ of \_\_\_\_\_

Site No. 16 Project No./Name 501 / Emerson West Apex Date 7-14-2016  
 Site Location Morrison Creek North of East Township Road 122  
 County Seneca State OH Time Up 2103 Time Down 0203  
 Lat/Lon ; UTM: N/E 4113923 W/N -83.04941 Zone - Datum - Observers J. Hawkins  
M. Gooden

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2230	EPFU	J	M	NR	14.75	43	C	2.5	0	-	-	-
2	2230	EPFU	A	F	PL	19.5	45	C	3.0	0	-	-	-
3	2230	EPFU	-	-	-	-	-	E	3.0	Bst	Escaped	Net	-
4	0140	EPFU	A	F	PL	18.0	44	C	1.0	0	-	-	-
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
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23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase 77 % Wax / Wane

	Rise	Set
Sun	0612	2103
Moon	-	0220

Time	Temp (F)	Sky	Wind	No. Bats
2103	79	2	1	0
2203	73	1	0	3
2303	73	1	1	0
0003	75	1	0	0
0103	72	0	1	1
0203	71	0	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

**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Eptesicus fuscus* (EPFU); *Lasiurus borealis* (LABO); *Lasiurus cinereus* (LACI); *Lasiurus seminolus* (LASE); *Lasionycteris 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

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

## Mist Netting Data Form

Site No. 16 Project No./Name 501 1 Emerson West Apex Date 7/18/2016  
 Site Location Morrison Creek North 3 East Township Rd. 122  
 County Scheneca State OH Time Up 2100 Time Down 0200  
 Lat/Lon ; UTM: N/E 41.13923 W/N 83.04941 Zone Datum Observers J. Hawkins, C. Jacob



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2335	EPFU	A	M	S	19.3	44	B	2	0	—	—	—
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
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23													
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25													
26													
27													
28													
29													
30													

Moon Phase 99% Wax Wane

	Rise	Set
Sun	<u>0615</u>	<u>2100</u>
Moon	<u>1946</u>	<u>0504</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>79</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>2200</u>	<u>77</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>2300</u>	<u>75</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0000</u>	<u>72</u>	<u>0</u>	<u>0</u>	<u>1</u>
<u>0100</u>	<u>68</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0200</u>	<u>66</u>	<u>0</u>	<u>0</u>	<u>0</u>

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

N/A Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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



## Mist Netting Data Form

Sheet      of     

Site No. 16 Project No./Name 501 / Emerson West Apex Date 7-13-2016  
 Site Location Morrison Creek North of East Township Road 122  
 County Seneca State OH Time Up 2104 Time Down       
 Lat/Lon; UTM: N/E 41,13923 W/N -83.04941 Zone      Datum      Observers J. Hawkins  
M. Gooden

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ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
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25													
26													
27													
28													
29													
30													

Survey terminated  
due to weather  
2200 hrs

Moon Phase	69 %	Wax / Wane
	Rise	Set
Sun	0611	2104
Moon	-	0146

Time	Temp (F)	Sky	Wind	No. Bats
2104	-	6	4	0
2204	-	5	3	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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Please Return to:  
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(859) 925-9012

## Mist Netting Data Form

Site No. \_\_\_\_\_ Project No./Name \_\_\_\_\_ / \_\_\_\_\_ Date \_\_\_\_\_  
 Site Location \_\_\_\_\_  
 County \_\_\_\_\_ State \_\_\_\_\_ Time Up \_\_\_\_\_ Time Down \_\_\_\_\_  
 Lat/Lon ; UTM: N/E \_\_\_\_\_ W/N \_\_\_\_\_ Zone \_\_\_\_\_ Datum \_\_\_\_\_ Observers \_\_\_\_\_



**COPPERHEAD**  
 ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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24													
25													
26													
27													
28													
29													
30													

See additional  
 data sheet  
 for nights  
 7/14 & 7/18

Moon Phase	%	Wax / Wane
	Rise	Set
Sun		
Moon		

Time	Temp (F)	Sky	Wind	No. Bats

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Coordinates \_\_\_\_\_

Weatherproofing \_\_\_\_\_

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

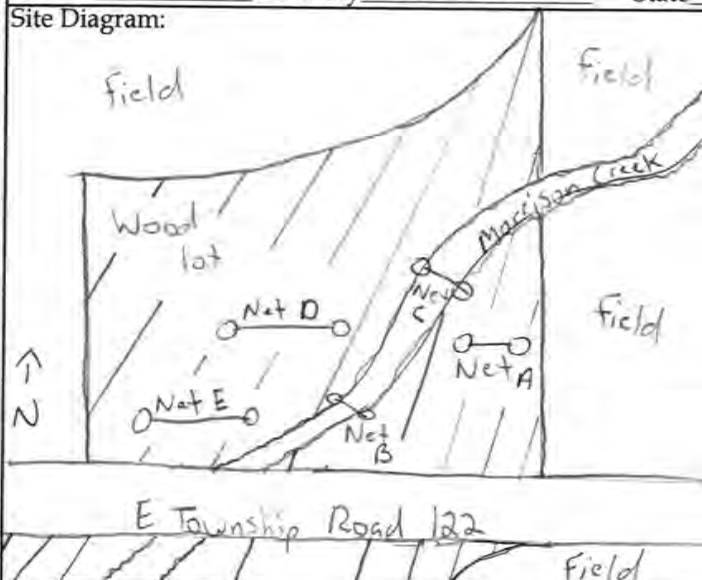
Please Return to:  
 P.O. Box 73, Paint Lick, KY, 40461.  
 (859) 925-9012

**Mist Net Site Habitat Sheet** Site No. 16 Project No./Name 501 / Emerson West Apex Date 7-14-2016

Lat/Lon ; UTM: (N)E 41-13923 (W)N 83, 04941 Zone Observers J. ... M. ...

Datum: \_\_\_\_\_ County Seneca State NY Quad \_\_\_\_\_

Site Diagram:



Net	Height (m)	Length (m)	2016 Dates
A	6	5.2	7/13, 14, 18
B	4	5.2	7/13, 14, 18
C	6	5.2	7/13, 14
D	9	5.2	7/13, 14, 18
E	9	7.8	5/13, 14, 18
F			

Site Photographs  
Camera: *Jeff's iPhone*  
Photo Log:  
*Downloaded to Google Drive*

### Dominant Vegetation

1. Juglans nigra 4. Acer rubrum  
2. Acer negundo 5.  
3. Fraxinus pennsylvanica 6.

### Net Set by Habitat

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

**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)  
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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY, 40461

859-925-9012



**COPPERHEAD**  
ENVIRONMENTAL CONSULTANTS



## Mist Netting Data Form

Site No. 17 Project No./Name 501 Emerald West Date 18 July 16

Site Location

County SenecaState OHTime Up 2055Time Down 2205Lat/Lon; UTM: N/E 46.11934W/N 82.97486Zone 18Datum NAD83Observers C. Leitch  
A. AshmoreCOPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2130	EPFU	J	F	NR	10.25	44	C	2.0	0		02NR	172
2	2130	EPFU	A	F	PL	16.25	45	C	3.0	0			
3	2230	EPFU	J	F	NR	12.0	46	B	1.0	0			
4	2030	EPFU	A	F	PL	21.75	47	D	1.0	0			
5	0045	EPFU	A	F	L	21.5	47	C	3.0	0			
6	0215	MYSE	A	M	NR	7.0	33	C	5.0	0		23S80	.267
7													
8													
9													
10													
11													
12													
13													
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30													

Moon Phase % 98 ☒ Wax ☐ WaneSun Rise 0614 Set 2101Moon 1953 0508

Time	Temp (F)	Sky	Wind	No. Bats
2100	77	2	1	—
2200	73	1	0	2
2300	73	1	0	1
0000	72	1	0	0
0100	70	1	0	2
0200				

## 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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

## Mist Netting Data Form

Sheet 1 of 1

Site No. 17 Project No./Name 501 1 Emerson West Date 14 July 16  
 Site Location trails in woodlot  
 County Seneca State OH Time Up 2055 Time Down 0203  
 Lat/Lon ; UTM: N 41.11934 W 02.97486 Zone 18 Datum NAD83 Observers C. Leftwich  
A. Ashmore

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2155	EPFU	Ad	M	NR	16.25	43	B	1.5	0	—	—	—
2	2230	EPFU	ESCAPED					C	1.0	—	—	—	—
3	2250	EPFU	A	M	N	18.5	46	A	2.5	—	—	—	—
4													
5													
6													
7													
8													
9													
10													
11													
12													
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25													
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27													
28													
29													
30													

Moon Phase % 60 Wax Wane

	Rise	Set
Sun	<u>0612</u>	<u>2103</u>
Moon	<u>1715</u>	<u>0254</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>77</u>	<u>1</u>	<u>0</u>	<u>—</u>
<u>2200</u>	<u>73</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>2300</u>	<u>73</u>	<u>1</u>	<u>1</u>	<u>3</u>
<u>0000</u>	<u>73</u>	<u>1</u>	<u>1</u>	<u>0</u>
<u>0100</u>	<u>73</u>	<u>0</u>	<u>2-3</u>	<u>0</u>
<u>0200</u>	<u>72</u>	<u>0</u>	<u>2</u>	<u>0</u>

## 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

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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

## Mist Net Site Habitat Sheet

Site No.

17

Project No./Name

Sol, Emerson West

Date

14 July 16

Lat/Lon ; UTM: N/E 41.11934

W/N 82.97486

Zone

Observers

C. Lottwich

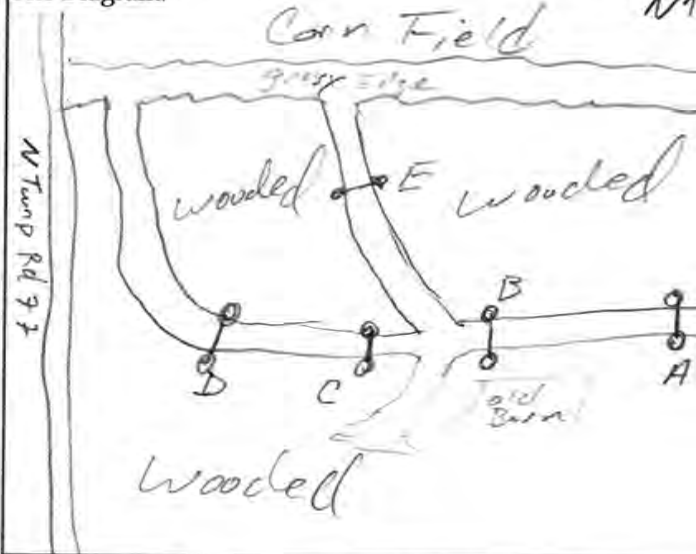
Datum: NAD 83

County Seneca

State OH

Quad

Site Diagram:



Net	Height (m)	Length (m)	July Dates
A	7.8	9	14, 18
B	5.2	6	14, 18
C	5.2	9	14, 18
D	5.2	6	14, 18
E	5.2	6	14
F			

Dominant Vegetation					
1. <i>A. saccharum</i>	4. <i>P. serotina</i>				
2. <i>C. ovata</i>	5.				
3. <i>F. grandifolia</i>	6.				
Net Set by Habitat					
Habitat	A	B	C	D	E
River					
Stream					
Pond					
Corridor	X	X	X	X	X
Cave					
Mine					
Forest					
Gap					
Other					

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

- 2 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.
- 2 **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.
- 3 **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





## Mist Netting Data Form

Sheet 1 of 1

Site No. 18 Project No./Name 501 / Emerson West Date 17 July 16  
 Site Location Nets in open area and dry stream bed in woodlot to edge  
 County Seneca State OH Time Up 2250 Time Down 0805  
 Lat/Lon; UTM N/E 41-13416 W/N -82.97333 Zone — Datum NAD 83 Observers C. Leftwich  
A. Ashmore

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2325	EPFU	A	M	NR	16.5	45	A	3.0	0			
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
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16													
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19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Moon Phase	% <u>90</u>	<u>Wax</u>	Wane
	Rise	Set	
Sun	<u>0613</u>	<u>2101</u>	
Moon	<u>1953</u>	<u>0508</u>	

Time	Temp (F)	Sky	Wind	No. Bats
2100	79	2	2	—
2200	77	1	2	0
2300	77	3	2-3	0
0000	77	2	2-3	1
0100	77	2	3	0
0200	75	1	4	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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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 (859) 925-9012

## Mist Netting Data Form

Site No. 18 Project No./Name 501 / Emerson West Date 21 July 16  
 Site Location Same as 1754  
 County Sevier State OH Time Up 2050 Time Down 0158  
 Lat/Lon; UTM: N E 41.13416 N 82.97333 Zone 18 Datum NAD 83 Observers C. Leftwich  
A. Ashmore

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2220	EPTFU	J	F	NR	16.25	47	C	3.0	0			
2	2235	EPTFU	A	M	NR	18.25	45	F	6.5	0			
3	2315	EPTFU	J	F	NR	17.0	43	A	3.0	0			
4	0115	EPTFU	A	F	PL	20.0	45	F	6.5	0			
5													
6													
7													
8													
9													
10													
11													
12													
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28													
29													
30													

Moon Phase	% <u>100</u>	Wax / Wane
	Rise	Set
Sun	<u>0618</u>	<u>2058</u>
Moon	<u>2240</u>	<u>0912</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	77	3	3	-
2200	73	2	1	0
2300	70	2	1	2
0000	70	3	1	1
0100	70	2	2	0
0200	72	3	2	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

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

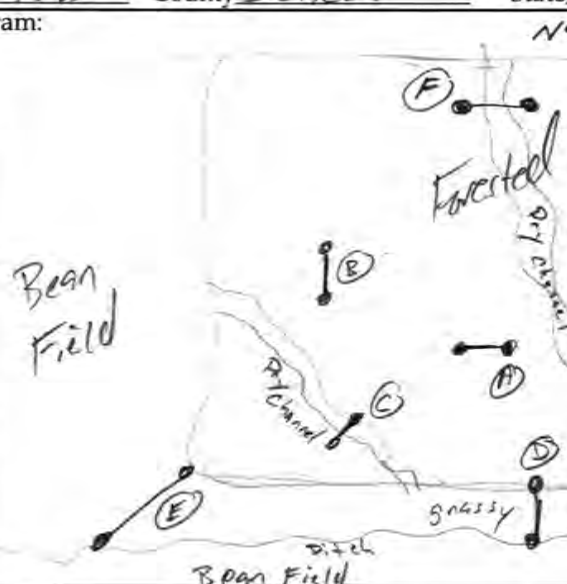
Comments:

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

## Mist Net Site Habitat Sheet

Site No. 18Project No./Name 501, Emerson WestDate 17 July 11Lat/Lon; UTM: N/E 41.13416W/N -82.97333Zone Observers C. LettichDatum: NAD83County SenecaState OH Quad 

Site Diagram:



Net	Height (m)	Length (m)	7-9 Dates
A	5.2	6	17, 20
B	5.2	7	17, 20
C	5.2	6	17, 20
D	5.2	4	17
E	7.8	9	17
F	7.8	6	20

Site Photographs

Camera: CLPhoto Log: 

## Dominant Vegetation

1. <u>C. ovata</u>	4. <u></u>
2. <u>A. saccharum</u>	5. <u></u>
3. <u>P. palustris</u>	6. <u></u>

## Net Set by Habitat

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

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

1 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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.

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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.

2 **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.1 **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.

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

Comments:

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## Mist Netting Data Form

Sheet \_\_\_\_\_ of \_\_\_\_\_

Site No. 19 Project No./Name SD1 / Emerson West Date 14 July  
 Site Location Wood lot South of Eagle Township Rd 122  
 County Seneca State OH Time Up 2103 Time Down 0203  
 Lat/Lon; UTM: N/E 41.13266 W/N -82.84191 Zone \_\_\_\_\_ Datum \_\_\_\_\_ Observers J. Adams



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2115	LABO	Jv	F	NR	8.75	41	C	3	0	-	-	-
2	2158	EPFU	Ad	F	PL	18.25	48	C	2	0	-	-	-
3	2158	EPFU	Jv	F	NR	12.5	48	C	5	0	-	-	-
4	2158	LABO	-	M	-	-	-	D	4	Escaped Net	-	-	-
5	2215	EPFU	Ad	F	PL	19.75	47	A	1.5	0	-	-	-
6	2215	EPFU	Ad	F	PL	16.25	45	C	3	0	-	-	-
7	2215	EPFU	Jv	F	NR	18	46	C	4	0	-	-	-
8	2215	EPFU	Jv	F	NR	13.5	45	C	4	0	-	-	-
9	2215	EPFU	Ad	F	PL	15.25	44	D	5.1	0	-	-	-
10	2215	EPFU	Ad	M	NR	14	44	C	3.5	0	-	-	-
11	2230	EPFU	Ad	F	L	15.5	44	D	2.5	0	-	-	-
12	2240	EPFU	Ad	F	L	20.75	47	C	3	0	-	-	-
13	2240	EPFU	Ad	F	L	20.25	48	C	3.5	0	-	-	-
14	2240	EPFU	Ad	F	NR	19.0	46	C	3.5	0	-	-	-
15	2310	EPFU	Ad	F	PL	17.25	46	C	3	0	-	-	-
16	2310	EPFU	Ad	F	L	18.5	46	C	4	0	-	-	-
17	2320	EPFU	Jv	M	NR	12.5	45	A	5	0	-	-	-
18	2320	EPFU	Jv	M	NR	11.0	44	A	1.5	0	-	-	-
19	2335	EPFU	Ad	F	PL	19	48	A	1	0	-	-	-
20	2335	EPFU	Ad	M	NR	17.25	44	A	3	0	-	-	-
21	2340	EPFU	Ad	F	L	20.75	47	C	3.5	0	-	-	-
22	2340	EPFU	Ad	F	L	20.25	47	C	3.5	0	-	-	-
23	2355	EPFU	Ad	F	L	20.5	47	A	3.5	0	-	-	-
24	0045	EPFU	Ad	M	S	17.5	45	C	5.5	0	-	-	-
25	0055	EPFU	Ad	M	NR	19.25	48	C	1.5	0	-	-	-
26													
27													
28													
29													
30													

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Moon Phase <u>68</u> % <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Wax</span> / Wane		
	Rise	Set
Sun	<u>0610</u>	<u>2103</u>
Moon	<u>1619</u>	<u>0218</u>

Time	Temp (F)	Sky	Wind	No. Bats
2100	73	1	1	4
2200	68	1	1	10
2300	68	1	1	9
0000	68	1	1	2
0100	66	1	1	
0200	66	1	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

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

## Mist Netting Data Form

Site No. 19 Project No./Name 501 / Emerson West Date 16 July 2016  
 Site Location Woodlot South of East Township Rd 122  
 County Seneca State OH Time Up 2102 Time Down 0202  
 Lat/Lon ; UTM: N/E 41.13266 W/N -82.84191 Zone 18 Datum NAD83 Observers J Adams, H Price

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#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
* 1	2140	LABO	J	F	NR	9.5	39.0	C	6.0	0	—	—	—
2	2143	EPFU	A	F	L	14.25	46.0	A	2.0	0	—	—	—
3	2155	LABO	A	M	NR	11.25	40.0	D	4.0	0	—	—	—
4	2205	EPFU	A	F	PL	17.5	44	A	1.5	0	—	—	—
5	2205	EPFU	Ju	M	NR	11.5	41	C	3	0	—	—	—
6	2205	EPFU	Ju	M	NR	10.25	43	C	6	0	—	—	—
7	2222	EPFU	J	F	NR	11.50	44.0	C	3.0	0	—	—	—
8	2222	EPFU	A	F	L	17.25	49.0	C	5.0	0	—	—	—
9	2245	EPFU	J	F	NR	12.00	45.0	A	2.0	0	—	—	—
10	2245	EPFU	A	F	PL	17.00	44.0	C	3.0	0	—	—	—
* 11	2245	EPFU	J	F	NR	14.00	46.0	C	6.0	0	—	—	—
12	2300	EPFU	J	F	NR	13.50	45.0	C	5.5	0	—	—	—
13	2308	EPFU	J	M	NR	16.00	44.0	C	7.8	0	—	—	—
14	2325	EPFU	J	F	NR	15.25	46.0	C	3.5	0	—	—	—
15	0105	LABO	A	F	L	11.00	34.0	C	2.5	0	—	—	—
16													
17													
18													
19													
20													
21													
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30													

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_  
 Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

\* Recapture

Moon Phase 82% Wax Wane  
 Rise 0612 Set 2102  
 Moon 1809 0333

Time	Temp (F)	Sky	Wind	No. Bats
2102	64	0	1	3
2202	61	0	0	8
2302	59	0	0	3
0002	59	0	0	0
0102	59	2	0	1
0202	59	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

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

## Mist Net Site Habitat Sheet

Site No. 19

Project No./Name 501 / Emerson West

Date 14-16 Jun

Lat/Lon; UTM: N/E 41, 13266

W/N - 82.09191

Zone

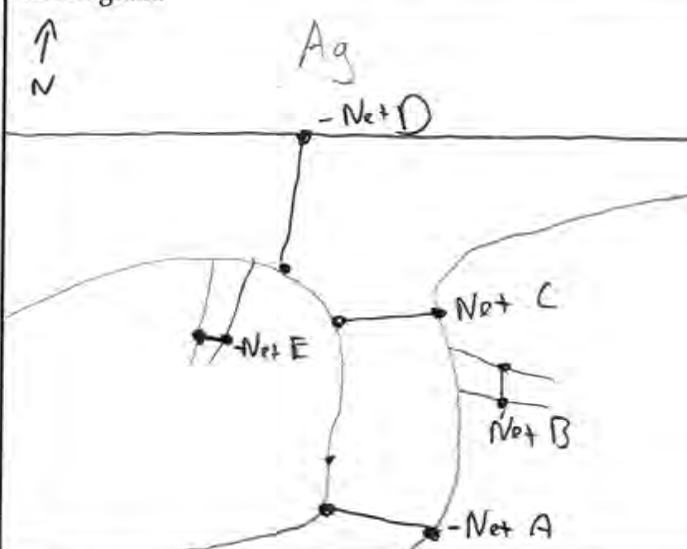
Observers J. Adams, A. Hawkins, H. Price

Datum:

County Seneca

State OH Quad Flat Rock

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	9	14-16 Jun
B	2.6	6	14-16 Jun
C	7.8	12	14-16 Jun
D	5.2	6	14-16 Jun
E	5.2	6	14-16 Jun
F			

Site Photographs

Camera:

Photo Log:


## Dominant Vegetation

1. C. oaks	4.
2. Q. rubra	5.
3. Q. prinus	6.

## Net Set by Habitat

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

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

- 1 **Roost habitat:** 1. **Poor:** No or few snags  $\geq 5"$  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.
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 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.

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

Comments:

Please return to:

P.O. Box 73, Paint Lick, KY. 40461

859-925-9012

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ENVIRONMENTAL CONSULTING



## Mist Netting Data Form

Sheet \_\_\_\_ of \_\_\_\_

Site No. 20 Project No./Name 501 1 Emerson West Date 7/15/2016  
 Site Location woodlot west of center heights rd.  
 County Seneca State OH Time Up 21:03 Time Down 02:03  
 Lat/Lon; UTM: N/E 41.10168 W/N 082.90656 Zone Datum NAD83 Observers R. Stinson C. Jacob



#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2245	EPFU	A	M	NR	17.5	47	B	3.0	0	—	—	—
2	2100	EPFU	A	M	NR	16.25	51	B	1.5	0	—	—	—
3	2143	EPFU	A	M	NR	18.5	49	E	1.5	0	—	—	—
4													
5													
6													
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10													
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27													
28													
29													
30													

Moon Phase 75% Wax / Wane

	Rise	Set
Sun	<u>6:11</u>	<u>21:03</u>
Moon	<u>17:15</u>	<u>02:54</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>21:03</u>	<u>75</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>22:03</u>	<u>74</u>	<u>2</u>	<u>1</u>	<u>1</u>
<u>23:03</u>	<u>73</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>00:03</u>	<u>70</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>01:03</u>	<u>69</u>	<u>2</u>	<u>0</u>	<u>—</u>
<u>02:03</u>	<u>69</u>	<u>2</u>	<u>0</u>	<u>—</u>

## 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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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

## Mist Netting Data Form

Site No. 20 Project No./Name 501 Emerson West Date 7/22/2016  
 Site Location woodlot west of Center Heights Rd.  
 County Seneca State OH Time Up 2056 Time Down 0156  
 Lat/Lon ; UTM: N/E 41.10168 W/N 82.90856 Zone \_\_\_\_\_ Datum \_\_\_\_\_ Observers J. Hankins, C. Jacobi

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1													
2													
3													
4													
5													
6													
7													
8													
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26													
27													
28													
29													
30													

NO BATS  
CAPTURED

Moon Phase 89% Wax / Wane

	Rise	Set
Sun	<u>0618</u>	<u>2056</u>
Moon	<u>2234</u>	<u>0707</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>85</u>	<u>0</u>	<u>2</u>	<u>0</u>
<u>2200</u>	<u>81</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>2300</u>	<u>78</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0000</u>	<u>75</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0100</u>	<u>73</u>	<u>0</u>	<u>1</u>	<u>0</u>

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

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

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## Mist Net Site Habitat Sheet

Site No. 20

Project No./Name 501 / Emerson west

Date 7/15/2014

Lat/Lon ; UTM: N/E 41.10168 W/N 082.90656

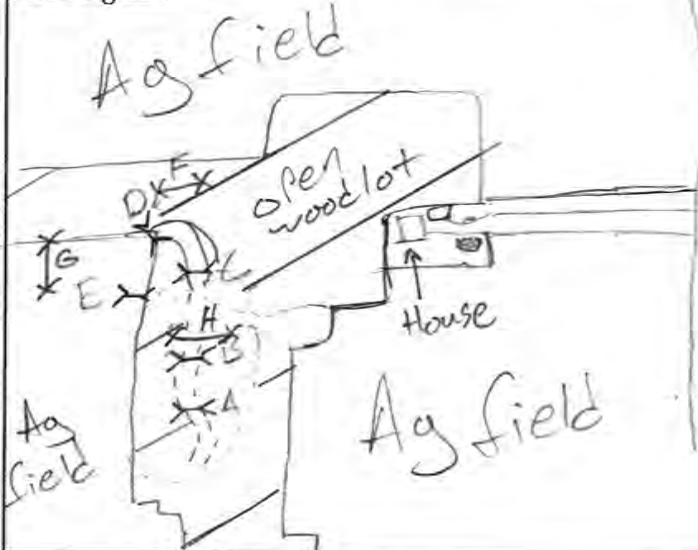
Zone

Observers R. Stinson

Datum: NAD83 County Seneca State OH Quad

C. Jacobi

Site Diagram:



Net	Height (m)	Length (m)	Dates
A	5.2	9	7/15
B	7.0	6	7/15
C	5.2	4	7/15
D	5.2	6	7/15, 22
E	5.2	6	7/15
F	5.2	4	7/22
G	7.0	9	7/22
H	5.2	9	7/22

Site Photographs

Camera:

Photo Log:

## Dominant Vegetation

1. <i>A. rubrum</i>	4.
2. <i>U. rubra</i>	5.
3. <i>U. rubra</i>	6.

## Net Set by Habitat

Habitat	A	B	C	D	E	F
River						
Stream						
Pond						
Corridor	✓	✓	✓	✓	✓	✓
Cave						
Mine						
Forest						not H
Gap						not G (edge)
Other						

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

- 1 **Roost habitat:** 1. Poor: No or few snags  $\geq 5"$  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 cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.
- 2 **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.

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

Comments:

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859-925-9012





## Mist Netting Data Form

Sheet 1 of 2

Site No. 21 Project No./Name 501.01 / Emerson West Date 12 July 2016  
 Site Location Forested area with pond  
 County Seneca State OH Time Up 2105 Time Down 0205  
 Lat/Lon; UTM: N/E 41.15591 W/N -83.02460 Zone Datum NAD83 Observers G. Janor, K Debeck  
 H Price



COPPERHEAD ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2145	LABO	J	M	NR	9.0	41.0	A	5	0	—	—	—
2	2150	EPFU	A	F	L	18.75	47.0	D	2.5	0	—	—	—
3	2150	EPFU	A	F	PL	16.75	45.0	D	4.0	0	—	—	—
4	2150	EPFU	A	F	L	16.75	48.0	D	2.5	1-P	—	—	—
5	2230	EPFU	A	M	NR	16.75	45.0	D	2.0	0	—	—	—
6	2230	EPFU	A	M	NR	16.25	42.0	D	3.0	0	—	—	—
7	2251	EPFU	A	F	PL	21.50	47.0	D	2.0	0	—	—	—
8	2250	EPFU	A	F	PL	19.50	49.0	A	5.0	0	—	—	—
9	2312	EPFU	A	F	L	23.0	47.0	A	4.0	0	—	—	—
10	2345	EPFU	A	M	S	19.0	47.0	A	3.0	0	—	—	—
11	2345	EPFU	A	F	L	18.75	47.0	A	4.0	0	—	—	—
12	0010	EPFU	A	M	S	17.00	46.0	A	7.0	0	—	—	—
13	0010	EPFU	A	M	S	18.00	44.0	D	1.5	0	—	—	—
14	0040	EPFU	A	F	L	21.25	49.0	D	4.0	0	—	—	—
15	0105	EPFU	A	F	L	21.25	38.0	D	4.0	0	—	—	—
16	0130	EPFU	A	F	PL	20.00	46.0	A	5.0	0	—	—	—
17	0206	LABO	A	F	PL	15.25	43.0	D	2.0	0	—	—	—
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Moon Phase 60% Wax Wane

	Rise	Set
Sun	0609	2105
Moon	1427	0117

Time	Temp (F)	Sky	Wind	No. Bats
2105	80°	1	1	4
2205	78°	1	1	4
2305	76	2	1	3
0005	74	1	0	3
0105	75	1	0	
0205	74	0	2	

## 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

**Species Abbreviations:** Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

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## Mist Netting Data Form

Site No. 21 Project No./Name 501.01 / Emerson West Date 7/16/2016  
 Site Location Forested area with pond  
 County Seneca State OH Time Up 2103 Time Down 0203  
 Lat/Lon; UTM: N/E 41.15591 W/N -83.02460 Zone — Datum NAD83 Observers G. Janos, K. DeBeck



**COPPERHEAD**  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2245	LABO	J	M	NR	9.25	41.0	A	4.0	0	—	—	—
2	2250	EPFI	A	M	NR	16.0	45.0	A	4.0	0	—	—	—
3													
4													
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Moon Phase <u>95%</u> <input checked="" type="radio"/> Wax / <input type="radio"/> Wane		
	Rise	Set
Sun	<u>0613</u>	<u>2103</u>
Moon	<u>1810</u>	<u>0334</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>66</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>2200</u>	<u>64</u>	<u>0</u>	<u>0</u>	<u>2</u>
<u>2300</u>	<u>63</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0000</u>	<u>62</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0100</u>	<u>60</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>0200</u>	<u>59</u>	<u>1</u>	<u>0</u>	<u>0</u>

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

Acoustic Survey: Unit type \_\_\_\_\_ Unit # \_\_\_\_\_ Date \_\_\_\_\_ Start time \_\_\_\_\_ Stop time \_\_\_\_\_

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

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

Weatherproofing \_\_\_\_\_ Coordinates \_\_\_\_\_

Comments:

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(859) 925-9012





## Mist Netting Data Form

Sheet      of     

Site No. 22 Project No./Name 501 / Emerson West Date 7/21/2016  
 Site Location Woodlot adjacent to County Line Rd 10 S  
 County Seneca State OH Time Up 2059 Time Down 0159  
 Lat/Lon: UTM: N/E 41.09754 W/N 82.83337 Zone      Datum NAD83 Observers T. Wetzel  
D. Smith

COPPERHEAD  
ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2210	EPFU	A	M	S	16.5	46	A	1.5	0			
2	2300	EPFU	A	F	NR	19.75	47	A	2.0	0			
3	2330	LABO	J	F	NR	8.25	41	A	3.0	0			
4	0118	LABO	A	IM	S	10.5	40	B	4.0	0			
5	0145	LABO	A	IM	S	11.75	39	B	3.5	0			
6													
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Moon Phase 100% Wax / Wane

	Rise	Set
Sun	<u>0617</u>	<u>2059</u>
Moon	<u>2202</u>	<u>0806</u>

Time	Temp (F)	Sky	Wind	No. Bats
<u>2100</u>	<u>78</u>	<u>2</u>	<u>1</u>	<u>0</u>
<u>2200</u>	<u>79</u>	<u>2</u>	<u>0</u>	<u>1</u>
<u>2300</u>	<u>75</u>	<u>1</u>	<u>0</u>	<u>2</u>
<u>0000</u>	<u>74</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>0100</u>	<u>74</u>	<u>0</u>	<u>0</u>	<u>2</u>
<u>0200</u>	<u>72</u>	<u>1</u>	<u>0</u>	

## 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

Species Abbreviations: Corynorhinus rafinesquii (CORA); Corynorhinus t. virginianus (COVI); Eptesicus fuscus (EPFU); Lasiurus borealis (LABO); Lasiurus cinereus (LACI); Lasiurus seminolus (LASE); Lasionycteris 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

Please Return to:  
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## Mist Netting Data Form

Site No. 22 Project No./Name 501 / Emerson West Date 7/15/2016  
 Site Location Woodlot adjacent to County Line Rd 10 S.  
 County Seneca State OH Time Up 2102 Time Down 0202  
 Lat/Lon; UTM: N/E 41.09254 W/N 82.83337 Zone — Datum NAD83 Observers T. Wetzel, D. Smith



COPPERHEAD ENVIRONMENTAL CONSULTING

#	Time	Species	Age	Sex	Repr.	Mass (g)	FA (mm)	Net	Height (m)	WDI	G/H/B/T	Band# Type	Freq.
1	2235	EPFU	A	M	S	15.75	46	A	4.0	0	—	—	—
2	2250	EPFU	A	F	NR	19.25	49	E	3.5	0	—	—	—
3	2350	EPFU	A	M	S	16.75	47.5	D	2.0	0	—	—	—
4	0005	EPFU	A	F	L	20.75	47.0	A	8.0	0	—	—	—
5	0150	EPFU	—	—	—	—	—	A	5.5	—	—	—	—
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Moon Phase 70% (Wax) Wane

	Rise	Set
Sun	0611	2102
Moon	1714	0254

Time	Temp (F)	Sky	Wind	No. Bats
2100	75	2	1	0
2200	71	2	0	2
2300	69	2	1	1
0000	70	2	1	1
0100	66	2	0	1
0200	66	3	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

Acoustic Survey: Unit type — Unit # — Date — Start time — Stop time —  
 Date — Start time — Stop time —  
 Date — Start time — Stop time —

Weatherproofing — Coordinates —Comments: —

Please Return to:  
 P.O. Box 73, Paint Lick, KY, 40461.  
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7.1  
—

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

**Commission of Ohio Docketing Information System on**

**2/2/2018 2:02:19 PM**

**in**

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

Summary: Application Exhibit J Appendix E - Part 10 of 12 electronically filed by Teresa Orahod on behalf of Sally W. Bloomfield