



Site 17 Net A



Site 17 Net D



Site 17 Net E



Site 17 Net F

Night 2



Site 18 Net A



Site 18 Net B



Site 18 Net C



Site 18 Net D



Site 18 Net E



Site 18 Net F



Site 19 Net A



Site 19 Net B



Site 19 Net C



Site 19 Net D



Site 20 Net A



Site 20 Net B



Site 20 Net C



Site 20 Net D



Site 21 Net A



Site 21 Net B



Site 21 Net C



Site 21 Net D



Site 21 Net E



Site 21 Net F



Site 22 Net A



Site 22 Net B



Site 22 Net C



Site 22 Net D



Site 23 Net A



Site 23 Net B



Site 23 Net C



Site 23 Net D



Site 24 Net A



Site 24 Net B



Site 24 Net C



Site 24 Net D



Site 24 Net E



Site 25 Net A



Site 25 Net B



Site 25 Net C



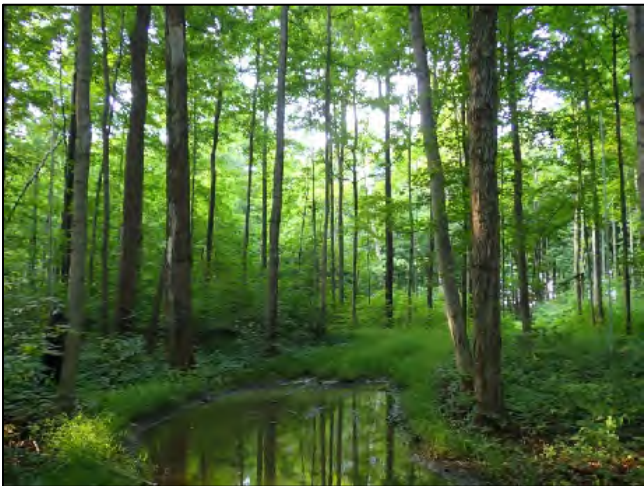
Site 25 Net D



Site 26 Net A



Site 26 Net B



Site 26 Net C



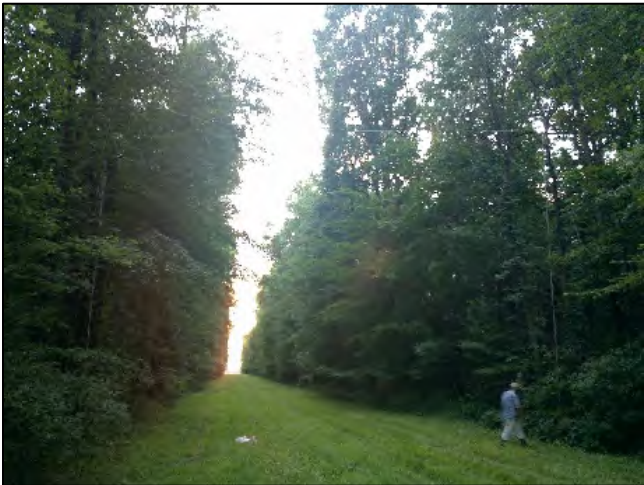
Site 26 Net D



Site 27 Net A



Site 27 Net B



Site 27 Net C



Site 27 Net D



Site 28 Net A



Site 28 Net B



Site 28 Net C



Site 28 Net D



Site 28 Net E



Site 29 Net A



Site 29 Net B



Site 29 Net C



Site 29 Net D



Site 30 Net A



Site 30 Net B



Site 30 Net C



Site 30 Net D



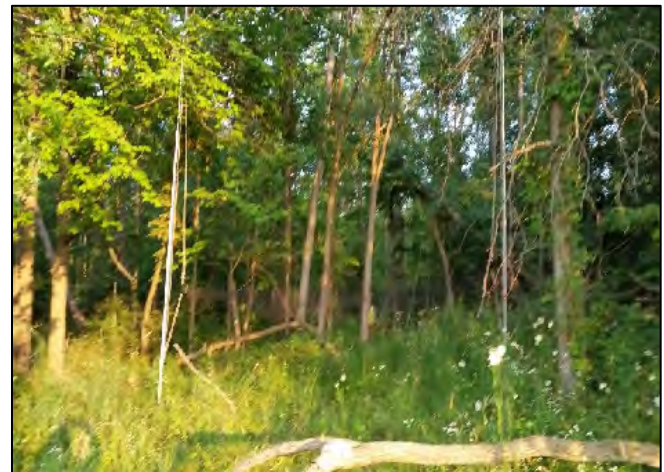
Site 31 Net A



Site 31 Net B



Site 31 Net C



Site 31 Net D



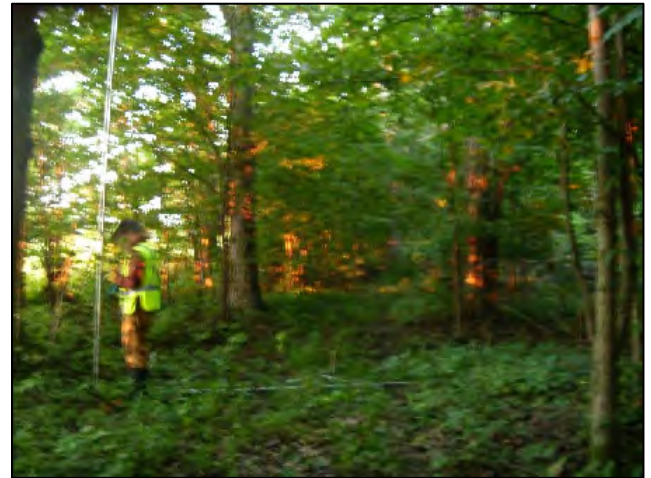
Site 32 Net A



Site 32 Net B



Site 32 Net C



Site 32 Net D



Site 33 Net A



Site 33 Net B



Site 33 Net C



Site 33 Net D



Site 34 Net A



Site 34 Net B



Site 34 Net C



Site 34 Net D



Site 35 Net A



Site 35 Net B



Site 35 Net C



Site 35 Net D



Site 36 Net A



Site 36 Net B



Site 36 Net C



Site 36 Net D



Site 36 Net E



Site 36 Net F



Site 36 Net G

APPENDIX C

Bat Capture Photographs

T&E bats

MYSE 172.188_ODNR23551_Site26_24July



MYSE 172.587_ODNR23552_Site26_26July



MYSO 172.779_ODNR23553_Site26_26July



MYSE 172.030_ODNR23361_Site18_26July



MYSE 172.137_ODNR23360_Site18_26July



MYSE 172.205_ODNR17178_Site13_26July



MYSE ODNR17179_Site13_26July



MYSE_ODNR17344_Site12_28July



MYSE_ODNR23362_Site18_28July



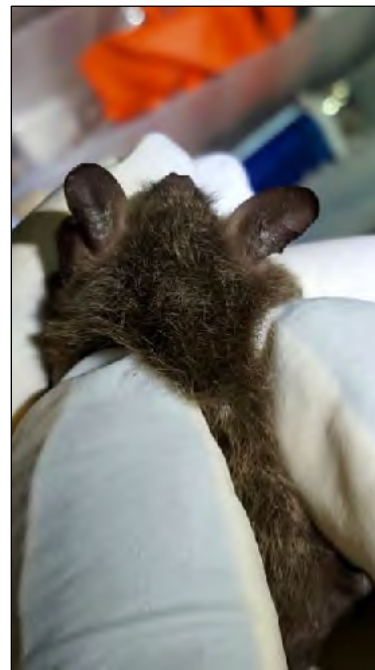
MYSE_ODNR17168_Site20_28July



MYSE_ODNR17345_Site15_31July



MYSE 172.450_ODNR17166_Site33_31July



Non T&E bats



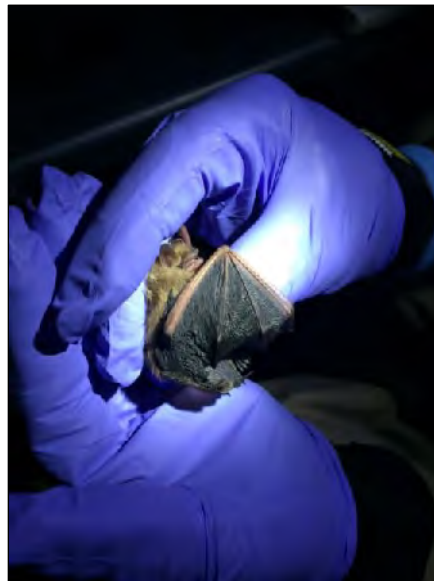
Lasiurus cinereus



Eptesicus fuscus



Lasiurus borealis



Perimyotis subflavus

APPENDIX D

Roost Tree Data Sheets

Roost Tree # 983

Project No./Project Name

412.01 / Emerson Creek

Date First Found

25 July 2015

Location

East of mist net site 26

County

Seneca

State

OH

Quad

Fireside

Lat-Long/UTM

N/E 41.21880

W/N

82.97015

Zone

Datum:

NAD83

Observers:

T. Wetzel

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	983	<i>F. pennsylvanica</i>	27	9	3	S	H	H	S	bark
2		<i>A. saccharum</i>	41.5	20	-	L	L	H	C	none
3		<i>A. saccharum</i>	55.5	17	-	L	L	H	C	none
4		<i>F. pennsylvanica</i>	22.6	22	-	S	L	H	C	bark
5		<i>F. grandifolia</i>	82	19	-	L	L	H	C	none
6		<i>A. saccharum</i>	67.5	18	-	L	L	H	C	none
7		<i>A. saccharum</i>	71	18	-	L	L	H	C	none
8		<i>A. saccharum</i>	62.1	19	-	L	L	H	C	none
9		<i>A. saccharum</i>	72.5	19	-	L	L	H	C	none
10		<i>A. saccharum</i>	78.4	19	-	L	L	H	C	none
11		<i>F. grandifolia</i>	72.8	18	-	L	L	H	C	cavity
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
90	20	0

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10- < 25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 983Bat Species/Sex/Frequency: MYSE/F/188Band # ODNR 23551

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/25			1		2129	2129	2129	1	
2	7/31			1		2035	2035	—	—	Camera 1
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/25	188	ODNR 23551	F	can see transmitter
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Roost is on a fallen limb off of tree # 4 and leaning between tree # 2 + 3

Roost Tree # 395 Project No./Project Name 412 / Apex Emerson Creek Date First Found 7/26/15Location In plot 26County SenecaState OHQuad Fire sideLat-Long/UTM: N/E 41.21851W/N 82.96867Zone — Datum: NAD83Observers: A. Ashmore, K. Ferraro

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	396	<i>Prunus serotina</i>	37.2	85'	35	snag	L	H	C	roost in bark of possible crevice
2		<i>Acer saccharum</i>	20.3	60'	—	live	L	H	C	
3		<i>Corya sp.</i>	39.4	75'	—	live	L	H	C	
4		Unknown	47.8	70'	—	live	L	H	C	possibly bark crevice
5		<i>Fraxinus americana</i>	56.9	80'	—	snag	M	H	C	
6		<i>Acer saccharum</i>	28.9	65'	—	live	L	H	C	
7		<i>Fraxinus americana</i>	46.3	80'	—	snag	H	H	C	
8		<i>Fraxinus americana</i>	40	10'	—	snag	L	L	UC	
9		<i>Acer saccharum</i>	19.2	65'	—	live	L	H	C	
10		<i>Fraxinus americana</i>	45.3	7'	—	snag	L	H	U	
11		<i>Acer saccharum</i>	32	45'	—	live	L	H	C	
12		<i>Acer saccharum</i>	59.5	20	—	snag	L	H	U	
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Habitat		
☒ Interior	☐ Edge	☐ Open

Canopy Cover at Roost		
☐ Open	☒ Intermediate	☐ Closed

Basal Area		
Live Trees	Snags	All Trees
60	60	120

Roost Location		
☒ Bark	☐ Cavity	☐ Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

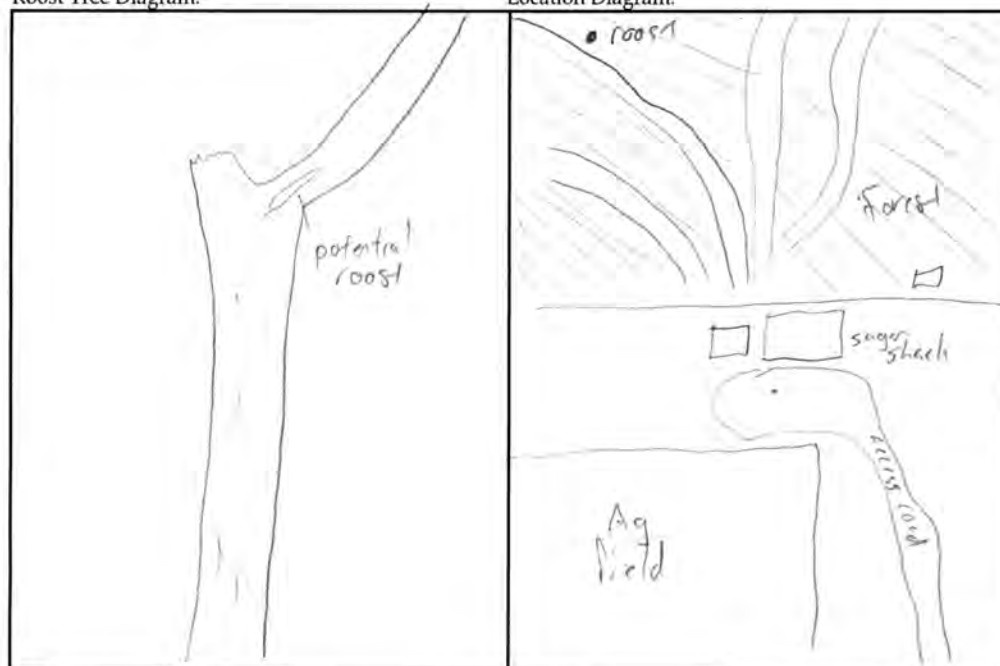
A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 395Bat Species/Sex/Frequency: MYSE/F/188Band # ODNR 23551

107

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/26			1						transmitter still in tree
2	7/29	78	clear	0	2054					Camera 1
3	7/30	75°	clear	0	2054					Camera 1
4										

Bat Days					
No.	Date	Bat Freq.	Bat Band	Sex of Bat	Observations
1	7/26	188	ODNR 23551	F	
2	7/27	188 587	23551 23552	F	188 shed transmitter
3	7/28	188	23551	F	shed transmitter
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Flying squirrels observed in potential roost site 7/28

Roost Tree #

985

Project No./Project Name

412.02 / Emerson Creek

Date First Found

7/27/2015

Location

NW of site 18

County

Caneva

State OH

Quad

Fireside

Lat-Long/UTM: N/E

41.18069

W/N 82.93027

Zone

Datum: NAD83

Observers:

T. W. J. A. Housdale

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	985	F. pennsylvanica	28.5	12	8	S	M	H	C	bark
2		U. americana	21	9	—	S	L	H	S	none
3		U. americana	38	10	—	S	M	H	S	bark
4		U. americana	18.7	10	—	S	L	H	S	bark
5		F. pennsylvanica	26.5	14	—	S	L	H	C	none
6		A. saccharum	21.2	12	—	L	L	H	S	none
7		A. saccharum	19.0	12	—	L	L	H	S	none
8		P. serotina	19.5	10	—	S	L	H	S	none
9		J. nigra	35.0	15	—	L	L	H	C	none
10		A. saccharum	12.6	6	—	S	L	H	V	crevice
11		Q. alba	107.5	17	—	L	L	H	C	bark/crevice
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.



Signal no longer found w/ attenuator @ 21:50

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
40	70	110

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

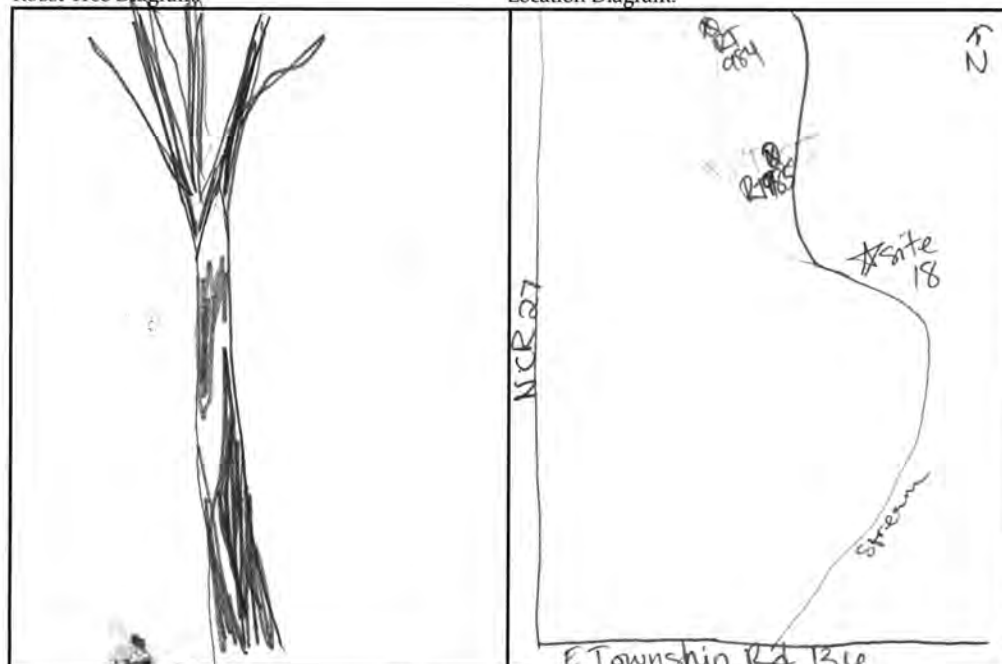
**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 985Bat Species/Sex/Frequency: mySE/F/137Band # ODNR 23361

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/ Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	27 July	72	calm clear	2	2054	2100	2150	2150	2nd	—
2	7-28	81	Clear	1	2055	2112	2112	N/A		A. McGary
3										
4										

Bat Days					
No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	5-1/2	137	ODNR 23361	F	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

* Bat was not tracked to this tree on 7/28/15

Roost Tree # 986 Project No./Project Name 412.01 / Emerson Creek Date First Found 7-28-15

Location SE of site 18

County Saracen

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.17857

W/N -82.92802

Zone Datum: NAD83

Observers: B. Ranley / R. McGregor

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	986	A. saccharinum	16.6	15	13	S	M	M	S	Bark/Cavity/crevice
2	-	A. saccharinum	13.4	25	-	L	L	H	S	Bark
3	-	A. saccharinum	19.1	35	-	L	L	H	S	NONE
4	-	A. saccharinum	62.7	50	-	LD	M	H	C	Bark/crevice
5	-	A. saccharinum	35.3	45	-	S	M	H	C	Bark
6	-	A. saccharinum	36.9	55	-	L	L	H	C	NONE
7	-	A. saccharinum	27.7	65	-	L	L	H	C	NONE
8	-	A. saccharinum	35.7	17	-	LD	L	M	S	crevice
9	-	P. deltooides	88.2	60	-	L	L	H	C	crevice
10	-	P. deltooides	85.9	65	-	L	L	H	C	NONE
11	-	A. saccharinum	28.6	50	-	L	L	H	C	NONE
12	-	A. saccharinum	29.3	45	-	L	L	H	C	NONE
13	986	A. saccharinum	36.3	50	-	LD	L	H	C	crevice/Bark
14	-	A. saccharinum	40.4	14	-	S	L	M	U	crevice
15	-	A. saccharinum	29.3	50	-	L	L	H	C	NONE
16	-	A. saccharinum	37.6	60	-	LD	M	H	C	BARK
17	-	A. saccharinum	29.6	45	-	L	M	H	C	BARK
18	-	A. saccharinum	34.7	20	-	S	L	M	S	crevice
19	-	A. saccharinum	34.4	45	-	L	L	H	C	NONE
20	-	A. saccharinum	26.1	35	-	L	L	H	S	NONE
21	-	A. saccharinum	31.8	50	-	L	L	H	C	NONE
22	-	A. saccharinum	43.9	55	-	L	L	H	C	NONE

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

-	986	A. saccharinum	44.6	65	L	L	H	C	NONE
-	-	A. saccharinum	62.1	30	LD	M	H	S	Bark/crevice

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
200	40	240

Roost Location		
Bark	Cavity	Crevice

QUICK REFERENCE / CIRCLE

*Condition		
Snag	Live	Live-Damaged

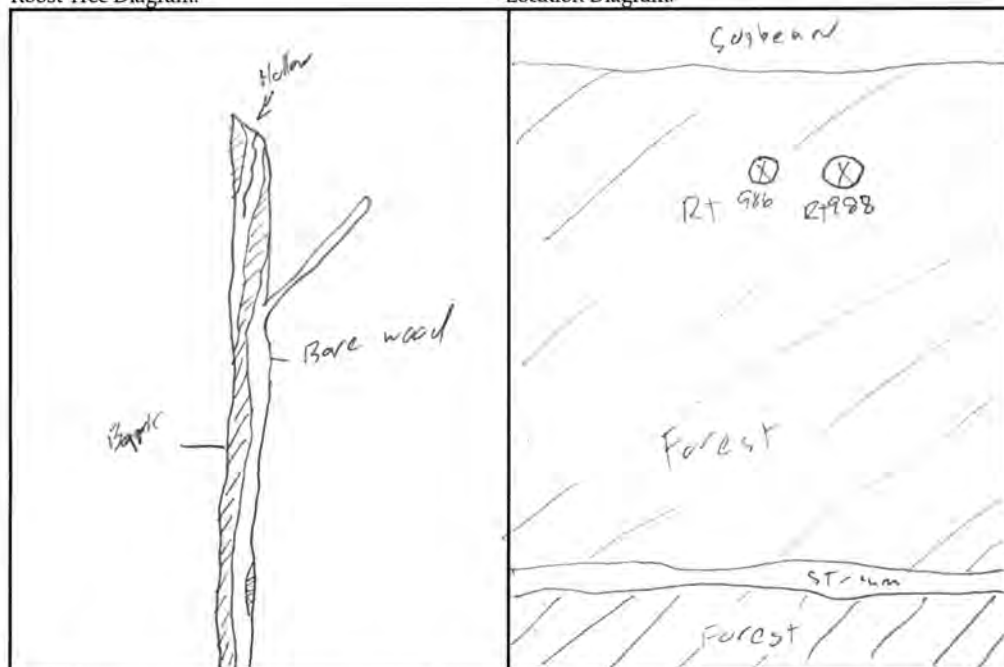
**% Bark Cover		
High = $\geq 25\%$	Moderate = $\geq 10-25\%$	Low = $< 10\%$

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 986Bat Species/Sex/Frequency: MYSE/F/137Band # ODNR 233101

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/ Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7-28	81	Clear	1	2053	2110	2110	2110	1	
* 2	7-31	76	Clear	0	20:49	N/A	N/A	N/A	N/A	C. 1364d
3										
4										

Bat Days					
No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7-28	137	ODNR 233101	F	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

* tree observed 8:45 - 9:25

Roost Tree #

988

Project No./Project Name

412.01

1 EMERSON CREEK

Date First Found

7.29.15

Location

30 of 988

County

Savanna

State

OH

Quad

F.v. side

Lat-Long/UTM: (N)/E

41.17866

(W)/N

- 82.92805

Zone

Datum: NAD83

Observers:

B. Renley/P. McGregg

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	988	A. saccharinum	36.3	50	20	LD	L	H	C	Bark/Crevice
2		A. saccharinum	22.6	20	-	LD	L	H	S	Crevice
3		A. saccharinum	42.3	40	-	LD	L	H	C	Crevice
4		A. saccharinum	43.0	55	-	L	L	H	C	NONE
5		A. saccharinum	61.4	30	-	LD	M	M	S	Bark/Crevice
6	986	A. saccharinum	16.6	15	13	S	M	M	S	Bark/Cavity Crevice
7		A. saccharinum	27.7	60	-	L	L	H	C	NONE
8		A. saccharinum	62.1	40	-	LD	M	H	C	Bark/Crevice
9		A. saccharinum	36.9	35	-	L	L	H	C	NONE
10		A. saccharinum	35.7	15	-	LD	L	M	S	Crevice
11		A. saccharinum	28.6	50	-	L	L	H	C	NONE
12		A. saccharinum	29.0	30	-	LD	L	H	S	Crevice
13		A. saccharinum	40.4	10	-	S	L	M	U	Crevice
14		A. saccharinum	37.2	60	-	L	L	H	C	NONE
15		A. saccharinum	29.6	40	-	L	L	H	C	NONE
16		A. saccharinum	37.6	50	-	L	L	H	C	Bark
17		A. saccharinum	26.7	45	-	LD	L	H	C	Crevice
18		A. saccharinum	30.2	30	-	L	L	H	S	Bark
19		A. saccharinum	33.1	15	-	LD	M	M	S	Bark/Crevice
20		A. saccharinum	34.7	30	-	L	L	H	S	NONE
21		A. rubrum	25.8	40	-	L	L	H	C	NONE
22		A. saccharinum	30.6	40	-	L	L	H	C	NONE

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

COPPERHEAD
ENVIRONMENTAL CONSULTING

A. saccharinum 47.7 50 - L L H C NONE

P. latoides 86.2 60 - L L H C Crevice

P. latoides 85.9 65 - L L H C NONE

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
230	20	250

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

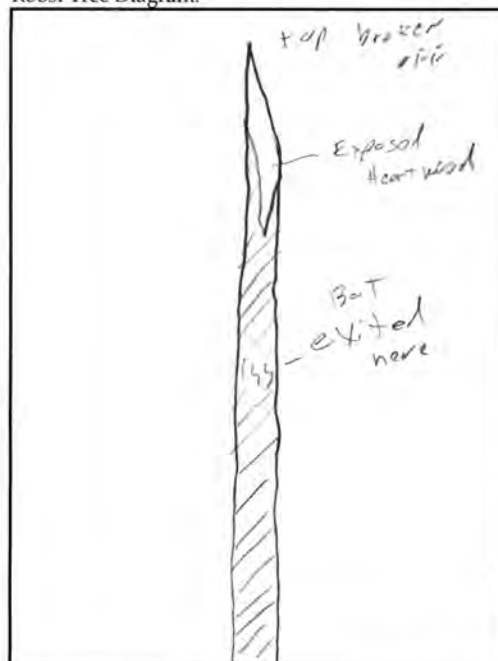
*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 986Bat Species/Sex/Frequency: MYSE/F/137Band # ODNR 23361

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7-29	81	cloudy light rain	2	8:53	8:56	8:58	-	-	Haid
2	7-30	80	clear	0	8:50	N/A	N/A	N/A	N/A	C. Boyd
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/29	137	ODNR 23361	F	
2	7/30				
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

* Transmitter fell off bat day of 7/30, tree observed that night for emergence.

MYSE/F/030

ODNR
23360

Roost Tree #

984

Project No./Project Name

412.03

Emerson Creek

Date First Found

27 July 2015

Location

NW of RT 985

County

Seneca

State

OH

Quad

Fireside

Lat-Long/UTM:

N/E 41.18175

W/N 82.93174

Zone

Datum:

NAD83

Observers:

J. Wetzel, A. Trousdale

#	Tree Tag #	Species	DBH (cm)	Height ft on m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	984	F. pennsylvanica	34.3	12	7	S	H	H	C	bark
2		A. saccharum	54	13	-	S	M	H	C	crevice bark
3		A. saccharum	58	15	-	LD	L	H	C	crevice
4		A. saccharum	54.8	15	-	LD	L	H	C	bark
5		C. ovata	54.0	16	-	L	L	H	C	bark
6		A. saccharum	81.6	13	-	LD	M	H	S	bark crevice
7		V. americana	11.3	9	-	L	L	H	V	none
8		V. americana	8.5	6	-	L	L	H	V	none
9		V. americana	13.4	9	-	L	L	H	V	none
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
70	20	90

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10- < 25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree #

984

Bat Species/Sex/Frequency:

MYSE/F/030

Band #

ODNR 23360

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	July Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	27	72	Sunny/Cloudy warm/humid	1	2054	2123	2123	2123	513	AT
2	28	81	Cloudy	1	2055	2105	2105			RJR
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #ODNR	Sex of Bat	Observations
1	7/27	030	23360	F	only bat seen emerge
2	7/28	030	23360	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

HC # 0416, JW Olympus

Roost Tree # 987 Project No./Project Name 412.03 / Emerson Creek Date First Found 7-29-15
Location

County Seneca

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.18179

W/N -82.92933

Zone Datum:

Observers: B. Remy / R. McGregor

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	987	A. saccharinum	56.3	40	25	S	M	M	C	Bark
2		A. saccharinum	54.1	15	-	S	L	M	U	Crevice
3		A. saccharinum	38.2	45	-	LD	L	H	C	Bark
4		A. saccharinum	53.5	50	-	L	L	H	C	None
5		A. saccharinum	37.9	30	-	LD	L	H	C	Crevice
6		A. saccharinum	37.6	45	-	L	L	H	C	None
7		A. saccharinum	31.8	30	-	L	L	H	C	None
8		A. saccharinum	52.5	50	-	L	L	M	C	None
9		A. saccharinum	42.7	20	-	S	M	M	S	Bark
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.



Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
60	30	90

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

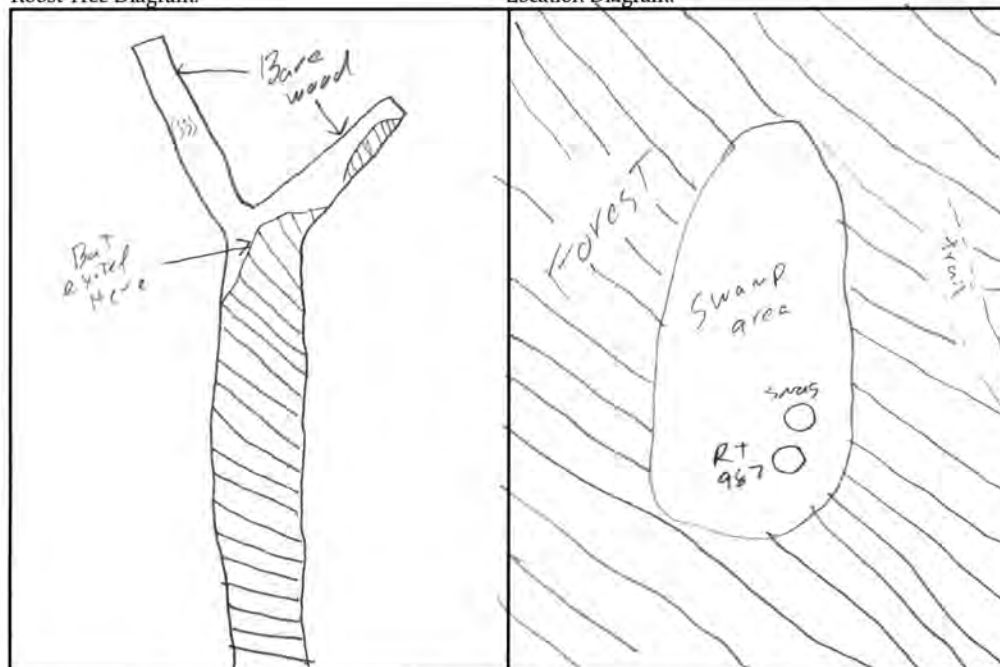
**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10- < 25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 987Bat Species/Sex/Frequency: MYSE/F/030Band # ODNR 23360

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7-29	80	Partly cldy	3	20:51	20:59	21:21	21:21	3	R. McGregor
2	7-30	80	Clear	3	20:50	21:01	21:14	21:14	3	R. McGregor
3	7-31	76	Clear	5	20:49	21:02	21:12	21:12	5	R. McGregor
4	8-1	75	Clear	1	20:48	21:17	21:17	21:17	1	C. Boyd
	8-2	77	Clear	1	20:47	21:06	21:06	21:06	1	C. Boyd

Comments:

Battery signal weak on 8/2

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7-29	030	23360	F	
2	7-30	030	23360	F	
3	7-31	030	23360	F	
4	8-1	030	23360	F	
5	8-2	030	23360	F	
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Roost Tree # 369 Project No./Project Name 412 / Emerson Creek Date First Found 7/28/15

Location Site 26

County Seneca

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.21838 W/N 82.96845 Zone — Datum: NAD83 Observers: J. Storm

Rain Storm

#	Tree Tag #	Species	DBH (cm)	Height (m)		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	369	Fraxinus pennsylvanica	40.0	12	9	S	M	L	U	cracks & crevices
2		Fraxinus pennsylvanica	45.1	50	—	S	L	L	C	cracks & crevices
3		Fraxinus pennsylvanica	35.7	50	—	S	M	H	C	Bark
4		Fraxinus pennsylvanica	48.0	60	—	S	H	H	C	Bark
5		Pine sp.	37.3	40.5	—	S	L	H	C	Bark cracks/crevices
6		oak sp.	60.2	20	—	S	L	H	U	cracks crevices
7	395	cherry	37.8	80	Yes	S	H	H	C	Roost tree
8		Sugar maple	19.8	85	—	L	H	H	C	
9		Sugar maple	34.4	100	—	L	L	H	C	
10		Sugar maple	8.2	20	—	L	L	H	SC	
11		Sugar maple	23.3	80	✓	L	L	H	C	
12		Sugar maple	13.2	60	—	L	L	H	C	
13		Sugar maple	32.3	100	—	L	L	H	C	
14		Sugar maple	15.5	80	✓	L	L	H	SC	
15		Sugar maple	6.2	40	✓	L	L	H	U	
16		Sugar maple	4.2	12	—	L	L	H	U	
17		Sugar maple	9.0	25	—	L	L	H	SC	
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.



Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
100	170	170

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

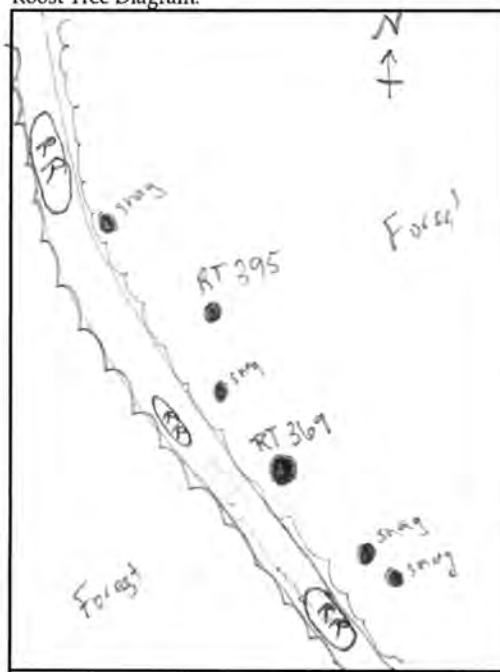
*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

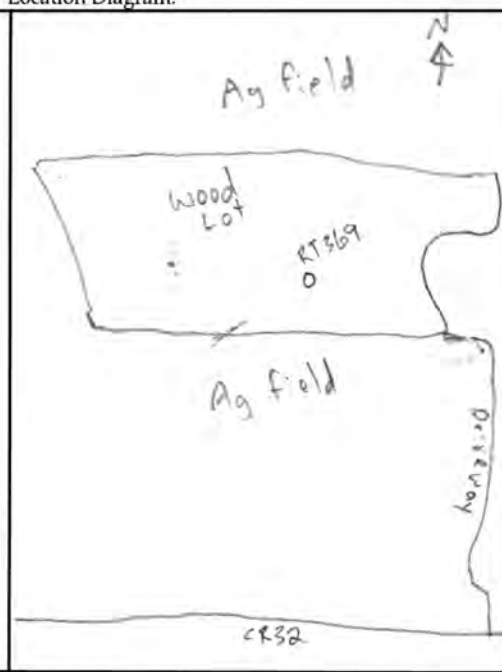
***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 369Bat Species/Sex/Frequency: MYSE/F/587Band # ODNR 23552

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/28	78	clear	0	2054	—	—	—	—	Caution 2
2				0						
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/28	587	23552	F	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Roost Tree # 371

Project No./Project Name 412.02 / Emerald Cuck

Date First Found 7/29/15

Location In woodlot site 210 is in.

County Seneca

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.21921

W/N 82.96834

Zone

Datum: NAD83

Observers: J. Storm, B. Smith

#	Tree Tag #	Species	DBH (cm)	Height (ft or m)		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	371	fraxinus pennsylvanica	42.4	60	30	S	L	H	C	Bark
2		fraxinus pennsylvanica	36.1	65	-	S	H	H	C	Bark
3		fraxinus pennsylvanica	28	50	?	S	M	H	C	Poss. live roost tree cracks / crevices
4		oak sp	74.3	20	-	S	L	H	SC	none
5		sugar maple	15.5	30	-	Live	L	H	SC	none
6		sugar maple	20.5	60	-	LNE	L	H	C	no
7		sugar maple	41	100	-	L	L	H	C	no
8		sugar maple	24	75	-	L	L	H	C	none
9		Boxwood	34	75	-	L	L	H	C	none
10		Black cherry	49.5	100	-	L	L	H	C	none
11		sugar maple	35	75	-	L	L	H	C	none
12		sugar maple	70	60	-	L	L	H	C	none
13		Beech	59	100	-	L	L	H	C	none
14		sugar maple	19	50	-	L	L	H	SC	none
15		Slippery elm	4	15	-	L	L	H	U	none
16		sugar maple	23	60	-	L	L	H	SC	none
17		Slippery elm	50	100	-	L	L	H	C	none
18		sugar maple	36.5	50	-	L	L	H	SC	none
19		Black walnut	43.5	100	-	L	L	H	C	none
20		sugar maple	12	40	-	L	L	H	SC	none
21		sugar maple	81	120	-	L	L	H	C	none
22		Slippery elm	4	20	-	L	L	H	U	none

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.



Tree # 3 is leaning against the tree marked as RT 371. RT 371 is believed to be the roost.

Slippery elm 20 150 - L H SC none
sugar maple 23 110 - L H SC none

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
210	40	250

Roost Location		
Bark?	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

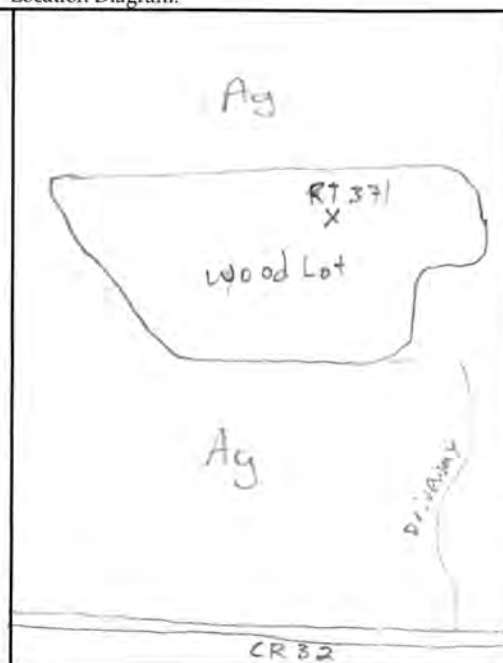
***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 371Bat Species/Sex/Frequency: SB7Band # ODNR
23552

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/ Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/29	79°	partly cloudy	3	2051	2058	2115	2058	1	K. DP
2	7/30			5	2050	2049	2102	2100	1	J. Barne
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	29 July	SB7	23552	F	
2	30 July	SB7	23552	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Bats emerged from where the two trees touch

Roost Tree # 372

Project No./Project Name 412.02

/ Emerson

Date First Found 7/31/15

Location Same woodlot as 371, 369

County Seneca

State NY

Quad Fireside

Lat-Long/UTM: N/E 41.21920

W/N -82.97147

Zone — Datum: NAD83

Observers: Rain Storm, Tony Wayne

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	372	snag bark	34	75ft	50ft	Live	100	100	Canopy	typical snag
2		Sugar maple	9	50	—	Live	0	100	sub-c	none
3		Sugar map.	14.5	50	—	Live	0	100	sub	none
4		Sugar map.	15	50	—	Live	0	100	sub	none
5		Ash snag	48.5	100	100	snag	50%	100	canopy	limited
6		Sugar maple	9.5	50	—	Live	0	100	sub	none
7		Sugar map	9.5	40	—	Live	0	100	sub	none
8		Ash snag	42.5	110	—	snag	50%	100	canopy	limited
9		Sug. maple	17.0	75	—	Live	0	100	subcan	none
10		Sug. maple	6.5	30	—	Live	0	100	subcan	none
11		Ash snag	50	120	50	snag	0	0	canopy	crevice
12		Sugar maple	14	60	—	Live	0	100	sub	none
13		basswood?	25.5	75	—	Live	0	100	canopy	none
14		Sug. maple	14	50	—	Live	0	100	sub	none
15		Sug. maple	20	60	—	Live	0	100	sub	none
16		Sug.	10.5	45	—	Live	0	100	sub	none
17		snag bark	49	90	all	Live	100	100	can	none
18		hickory	45.5	80	60	Live	5	100	canopy	broken bark
19		Sugar maple	15	50	—	Live	0	100	sub	none
20		Ash snag	44	90	all	snag	30	30	sub	broken bark
21		Am. Beech	35	100	—	Live	0	100	canopy	none
22		Am. Beech	25.5	60	—	Live	0	100	sub	none

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

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Ash snag	39	75	45	snag	40	80	can	100
Ash	50	100	50	snag	40	80	can	100
Sugar maple	10.5	40	—	Live	0	100	sub	none
Sugar maple	82.0	100	50ft	Live	10	100	can	100

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
200	50	250

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

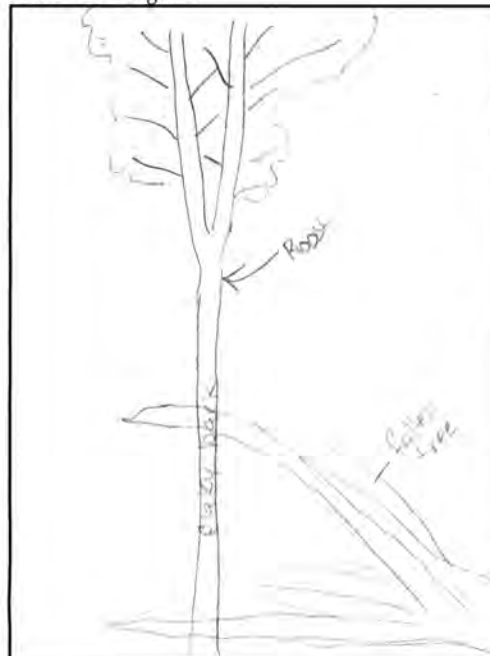
*Condition		
Snag	Live	Live-Damaged

***Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

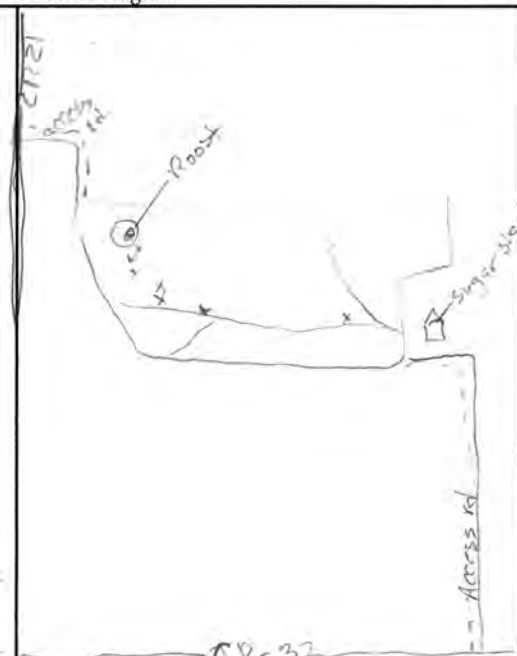
***Tree Ranking		
Canopy	Sub-Canopy	Understory

Roost Tree # 372Bat Species/Sex/Frequency: MYSE/F/.587Band # ODNR23552

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/ Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/31	70	clear	1	20:00	21:04	21:04	21:04	21	
2										
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/31	.587	ODNR 23552	F	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Recent tree fall creates forest gap @ roost tree and promotes solar exposure from the northwest. Roost believed to be hollow tree.

- picked up bat on 5/6 for emergence

Roost Tree # 373 Project No./Project Name 412.01 / Emerson Creek Date First Found Aug. 1, 2015

Location Same woodlot as 369, 371, 372

County Somerset

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.21954

W/N -82.96838

Zone 18E Datum: NAD83

Observers: Rain Storm

C. Anderson Smith

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/Observation
				Tree	Roost		Usable	Total		
1	373	Ash snag	47.2	80	40	S	H	L	C	Yes
2		Boxwood	56.2	110	-	L	L	H	C	
3		Sugarmaple	33	80	-	L	L	H	C	
4		Sugarmaple	14.5	50	-	L	L	H	SC	
5		Sugarmaple	3.6	15	-	L	L	H	U	
6		Beech	5.1	12	-	L	L	H	U	
7		Sugarmaple	16.4	75	-	L	L	H	SC	
8		Sugarmaple	5.2	12	-	L	L	H	U	
9		Sugarmaple	28.1	75	-	L	L	H	C	
10		Sugarmaple	5.3	15	-	L	L	H	U	
11		Sugarmaple	5.0	10	-	L	L	H	U	
12		Sugarmaple	21.4	60	-	L	L	H	SC	
13		Sugarmaple	5.1	15	-	L	L	H	U	
14		Sugarmaple	8.1	25	-	L	L	H	U	
15		Beech	80.1	90	-	L	L	H	C	
16		Sugarmaple	6.5	30	-	L	L	H	U	
17		Beech	23.8	60	-	L	L	H	C	
18										
19										
20										
21										
22										

Habitat		
☒ Interior	☐ Edge	☐ Open

Canopy Cover at Roost		
☐ Open	☒ Intermediate	☐ Closed

Basal Area		
Live Trees	Snags	All Trees
160	10	170

Roost Location		
☒ Bark	☐ Cavity	☐ Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
☐ Snag	☐ Live	☐ Live-Damaged

***Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

***Tree Ranking		
☐ Canopy	☐ Sub-Canopy	☐ Understory

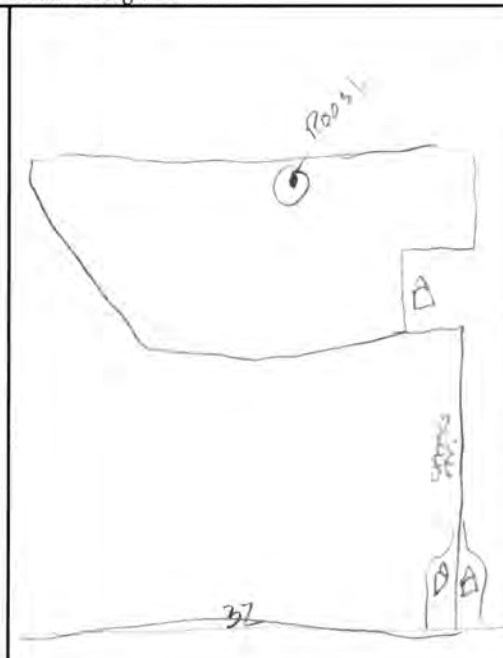
A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 373Bat Species/Sex/Frequency: MYSE/F/587Band # ODNR 23552

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/ Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	8/1	21°C	clear	1	8:58	9:10	9:10	1	1	Rain
2	8/2	22°C	clear	1	8:58	9:02	9:02	1	1	Rain
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	8/1	587	23552	F	Rain + Brandon
2	8/2	587	23552	F	Rain + Brandon
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Ash snag near edge of woodland and large road cut. Little bark remaining. Bat emerged from smaller openings above canopy corner of 2 other trees.

Roost Tree #

Project No./Project Name

Date First Found

Location

County

State

Quad

Lat-Long/UTM: N/E

W/N

Zone

Datum:

Observers:

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/Observation
				Tree	Roost		Usable	Total		
1		OFF	Parcel							
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

***% Bark Cover		
High = $\geq 25\%$	Moderate = $\geq 10-25\%$	Low = $< 10\%$

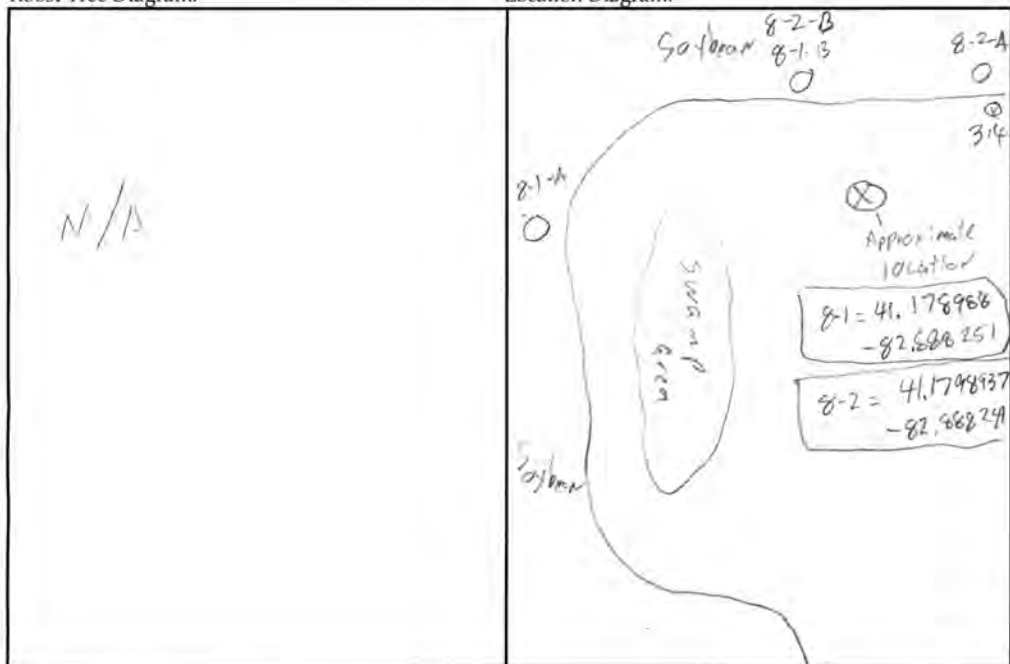
***Tree Ranking		
Canopy	Sub-Canopy	Understory

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ENVIRONMENTAL CONSULTINGCopperhead Environmental Consulting Inc.
P.O. Box 73, 11641 Richmond Rd.
Paint Lick, KY 40461 (859) 925-9012

Roost Tree # N/ABat Species/Sex/Frequency: MYSE/F/205Band # ODNR 17178

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1										
2										
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	8-1	205	17178	F	
2	8-2	205	17178	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

GPS coordinates 8-1-A = 41.17860/-82.88918, 242° Back, 8-1-B 41.17904/-82.88830, 332° Back
 8-2-A = 41.17906/-82.88768, 66° Back, 8-2-B = 41.17907/-82.88832, 340° Back

MYSE/F/172.205

00NR
17178

Roost Tree #

140

Project No./Project Name

412-02, Emerson CI

Date First Found

27 July 15

Location

near wood lot w/ creek bordered by agriculture

County

Spencer

State

OH

Quad

Fireside

Lat-Long/UTM: N/E

41.17892

W/N

82.89089

Zone

Datum: NAD83

Observers:

C. Lettich

#	Tree Tag #	Species	DBH (cm)	Height ft of m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/Observation
				Tree	Roost		Usable	Total		
1	140	Fraxinus sp.	48.5	25	20	Snag	10	90	Canopy	Bark
2		U. americana	6.7	3	—	Live	0	100	Sub	—
3		Fraxinus sp.	45.8	23	—	Snag	30	70	Canopy	Bark
4		Fraxinus sp.	54	20	—	Snag	30	50	Canopy	Bark
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
10	30	40

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

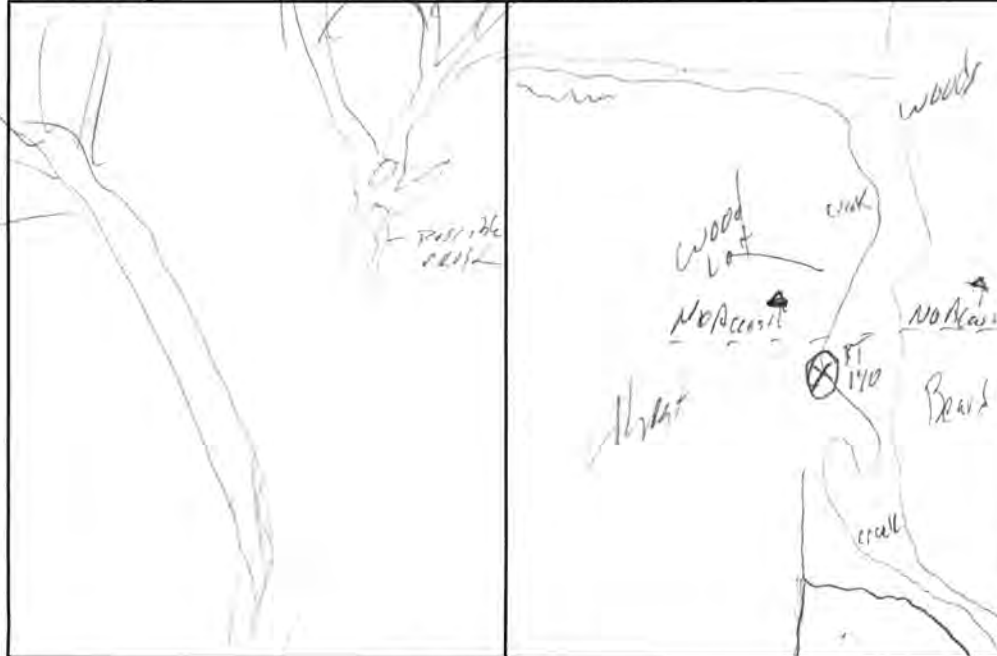
***Tree Ranking		
Canopy	Sub-Canopy	Understory

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 140Bat Species/Sex/Frequency: MYSE/F/172.205Band # ODNR 17178

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	27	20°C	clear	2	20:55	21:09	21:13	21:13	2	
2	28	68.5	clear	2	20:53	21:11	21:20	21:20	2	
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	27 July	172.205	ODNR 17178	F	
2	28 July	172.206	17178	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

walk wheel field/woodlot edge to 41.17889; -82.89136 then turn due East to tree
 across creek
 - Double Red Flagging marks good emergence spot

Per 16 = 41.175375
 -82.889903

Roost Tree # 314

Project No./Project Name 412.01 / EMERSON CREEK

Date First Found 7-30-15

Location Easton RT140

County SEVILLA

State OH

Quad Fireside

Lat-Long/UTM: N/E 41.17900

W/N - 82.88789

Zone — Datum: NAD83 Observers: MTM, ELS

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/Observation
				Tree	Roost		Usable	Total		
1	314	Quercus sp.	91	60'		SNAG	Low	High	C	
2		Ulmus sp.	10"	12'		LIVE	Low	High	Sub-C	
3		Ulmus sp.	7"	10'		LIVE	Low	High	Under	
4		Ulmus sp.	23"	40'		LIVE	Low	High	Sub-C	
5		Acer rubrum	19.5"	35'		LIVE	Low	High	C	
6		Carya ovata	36"	55'		LIVE	High	High	C	
7		Carya ovata	31"	55'		LIVE	High	High	C	
8		Carya ovata	9"	12'		LIVE	Low	High	Under	
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
70	10	80

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

***% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10- < 25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

Plus / Emergent

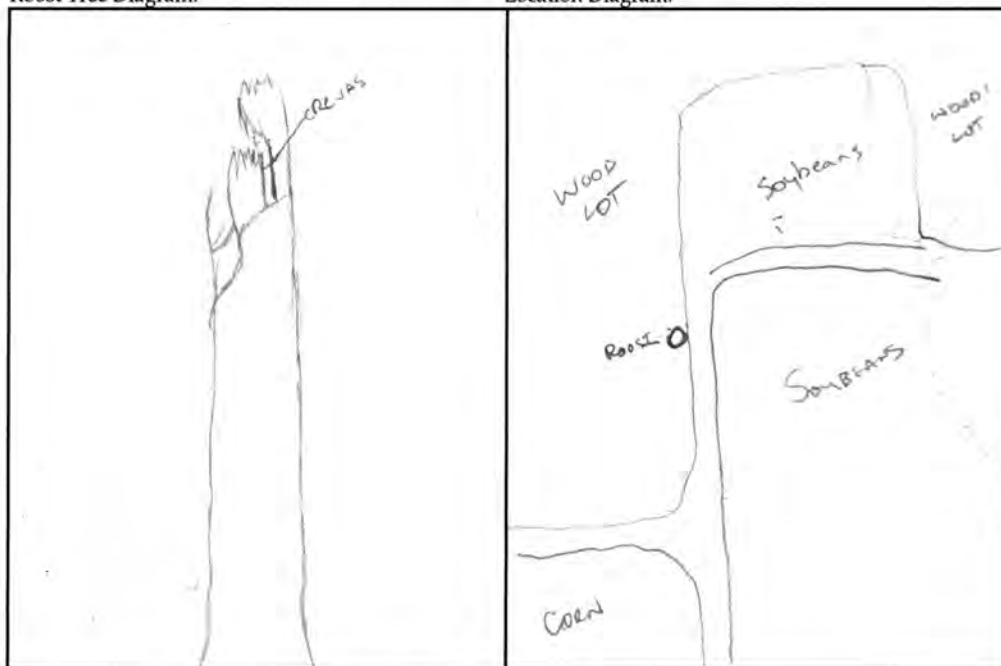
Roost Tree # 314

Bat Species/Sex/Frequency: MYSE / F / 205

Band # ODNR
17178

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/30/15	81	Clear	3	8:44	8:47	9:44	9:44		TAB
2										
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7-30	205	17178	F	
2	7-31	205	17178	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

81° - Start time : 8:35 pm ; Frequency 206
 75° - End Time : 10:14 pm

First bat tree to the right, not Northern
 Second - left Big Brown



847

9:10 > possibly same bat

9:12

9:44 - Northern Emerged - no ping on Receiver

8-1-15 off parcel
 8-2-15

N 41.17860 W 82.88918 - 242
 N 41.17904 W 82.88830 - 332'

Copperhead Environmental Consulting Inc.
 P.O. Box 73, 11641 Richmond Rd.
 Paint Lick, KY 40461 (859) 925-9012

Likely tree location

N 41.178988
 W 82.888251

MYSE/F/450

DNR
17160

Roost Tree #

396

Project No./Project Name

412.01

Emerson Creek

Date First Found

8-1-15

Location

Wood lot next to soybean field + Coyote Grove campground

County

Seneca

State

OH

Quad

Fireside

Lat-Long/UTM:

(N)E 41.18123

(W)N

82.93402

Zone

Datum: NAD83

Observers:

B. Realey/C. Blayd

#	Tree Tag #	Species	DBH (cm)	Height ft or m		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	396	Fraxinus sp.	31	35	20	S	L	L	C	Bark
2	-	Fraxinus sp.	30	40	-	S	L	H	C	Bark
3	-	Fraxinus sp.	26.5	40	-	S	M	H	C	Bark
4	-	Fraxinus sp.	21.5	35	-	S	L	H	C	Bark
5	-	Juglans nigra	62.5	60	-	L	L	H	C	NONE
6	-	Juglans nigra	91	75	-	L	L	H	C	NONE
7	-	Fraxinus sp.	39	55	-	S	M	M	C	Bark
8	-	Fraxinus sp.	16	17	-	S	L	H	S	NONE
9	-	Ulmus rubra	17	20	-	L	L	H	S	NONE
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Habitat		
Interior	Edge	Open

Canopy Cover at Roost		
Open	Intermediate	Closed

Basal Area		
Live Trees	Snags	All Trees
30	100	90

Roost Location		
Bark	Cavity	Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
Snag	Live	Live-Damaged

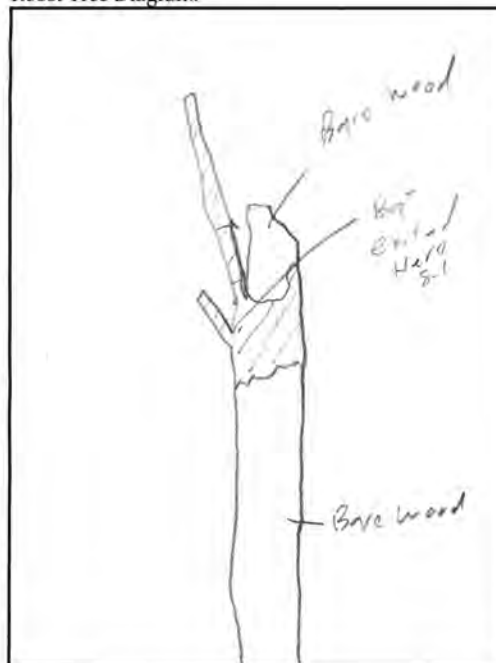
**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

***Tree Ranking		
Canopy	Sub-Canopy	Understory

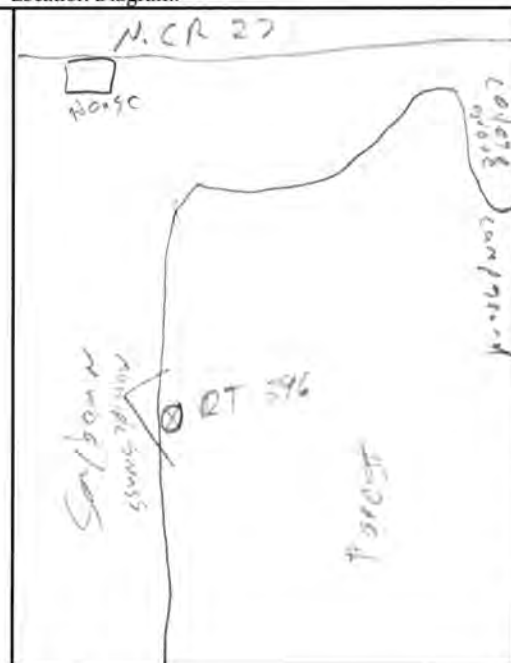
A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 396Bat Species/Sex/Frequency: MYSE/F/450Band # ODNR 17166

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	8-1	75	Clear	1	2046	21:27	21:27	21:27	1	B. Remick
2	8-2	77	Clear	2	2047	21:05	21:34	21:34	2	B. Remick
3										
4										

Bat Days

No.	Date	Bat Freq.	Bat Band	Sex of Bat	Observations
1	8-1	450	ODNR 17166	F	
2	8-2	450	17166	F	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

Snags are dead ash trees, evidence of Emerald Ash borer
 * Windy, 1st bat to exit was large (maybe red bat or big brown)

Roost Tree # 370 Project No./Project Name 412 / Emerson Creek Date First Found 7/20/15Location Site 26County SenecaState OHQuad FiresideLat-Long/UTM: N/E 41.20894W/N 82.9628Zone — Datum: NAD83 Observers: J. Storm

#	Tree Tag #	Species	DBH (cm)	Height (ft or m)		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/ Observation
				Tree	Roost		Usable	Total		
1	370	Fraxinus pennsylvanica	58.7	60	710	S	M	L	C	
2		Fraxinus pennsylvanica	46.2	20	—	S	L	H	SC	cracks & crevices
3		Beech	42.3	18	—	S	L	H	SC	Bark
4		oak sp	70	30	—	S	L	H	C	Bark & cracks
5		unknown	44	40	—	S	L	L	C	cracks & crevices
6		Fraxinus pennsylvanica	42.3	25	—	S	L	H	SC	cracks & crevices
7		Sugar maple	17.1	50	—	L	L	H	SC	
8		Sugar maple	18.4	50	—	L	L	H	SC	
9		Sugar maple	4.3	15	—	L	L	H	U	
10		Sugar maple	12.9	40	—	L	L	H	SC	
11		Sugar maple	6.9	30	—	L	L	H	SC	
12		Sugar maple	11.6	40	—	L	L	H	SC	
13		Sugar maple	14.4	40	—	L	L	H	SC	
14		Sugar maple	11.8	30	—	L	L	H	SC	
15		elm	58.3	100	—	L	L	H	C	
16		Sugar maple	16.9	75	—	L	L	H	SC	
17		Sugar maple	10.2	60	—	L	L	H	SC	
18		Sugar maple	11.6	60	—	L	L	H	SC	
19		Sugar maple	14.9	75	—	L	L	H	SC	
20										
21										
22										

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Habitat		
☒ Interior	☐ Edge	☐ Open

Canopy Cover at Roost		
☐ Open	☒ Intermediate	☐ Closed

Basal Area		
Live Trees	Snags	All Trees
130	60	190

Roost Location		
☒ Bark	☐ Cavity	☐ Crevices

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
☐ Snag	☐ Live	☐ Live-Damaged

**% Bark Cover		
High = ≥ 25%	Moderate = ≥ 10-25%	Low = < 10%

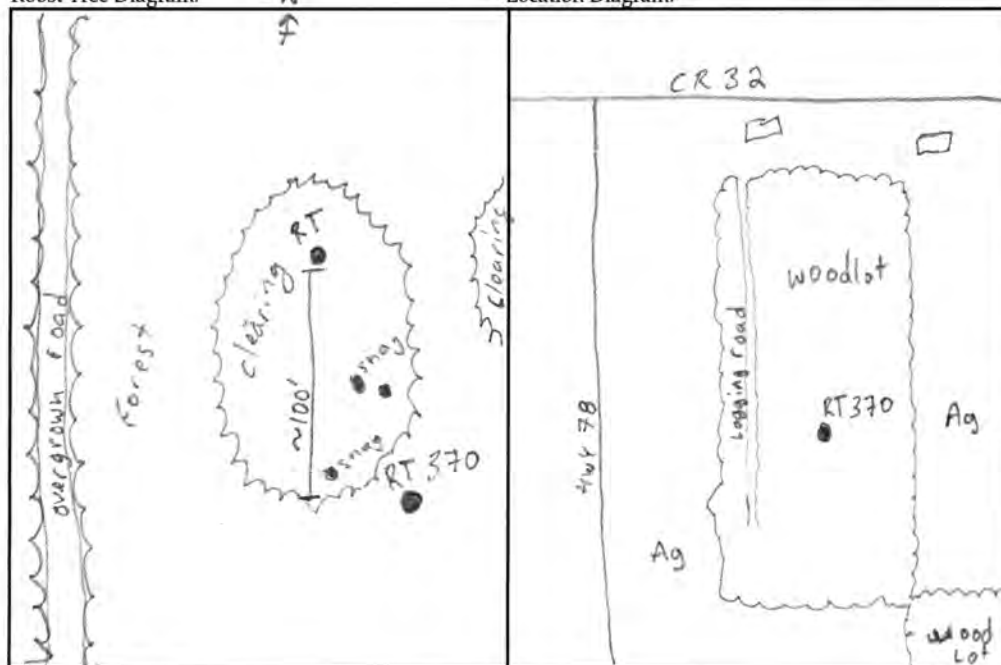
***Tree Ranking		
☐ Canopy	☐ Sub-Canopy	☐ Understory

PLOT REDD

Roost Tree # 370Bat Species/Sex/Frequency: M/SO/P 1778Band # ODNR 23553

Roost Tree Diagram:

Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/28	79°	Clear/Hot	1	2054	2100	2100	2100	1	
2	7/30	80°	Clear	0		—	—	—	—	
3										
4										

Video →

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/28	779	23553	F	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

Comments:

RT 370 is approximately 100ft south of RT 368

MYSO/F/779

ODNR 23553

1 of 1

Roost Tree # 368

Project No./Project Name

412 / APEX

Date First Found

27 July 2015

Location

In same woodlot as must net site 21

County

Seneca

State

OH

Quad

Tireside

Lat-Long/UTM:

N/E 41.20927

W/N

82.96308

Zone

Datum:

NAD83

Observers:

K. Pearman, A. A. Shm

#	Tree Tag #	Species	DBH (cm)	Height (ft or m)		Condition*	% Bark Cover**		Tree Ranking***	Available Roost/Observation
				Tree	Roost		Usable	Total		
1	368	unk.	52.7	70	25	snag	L/O	L/O	C	squeaking
2		acer seedling	60.3	50	-	snag	L	H	SC	
3		acer seedling	29.7	50	-	snag	L	H	SC	
4		acer seedling	66.9	20	-	snag	L	L	US	sp. hole in trunk
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Habitat		
☒ Interior	☐ Edge	☐ Open

Canopy Cover at Roost		
☒ Open	☐ Intermediate	☐ Closed

Basal Area		
Live Trees	Snags	All Trees
0	40	40

Roost Location		
☐ Bark	☐ Cavity	☒ Crevice

↓ QUICK REFERENCE / ↑ CIRCLE

*Condition		
☐ Snag	☐ Live	☐ Live-Damaged

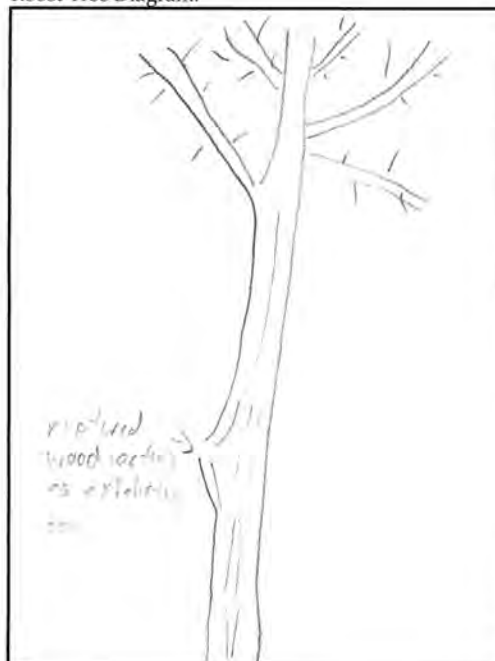
**% Bark Cover		
High = $\geq 25\%$	Moderate = $\geq 10 < 25\%$	Low = $< 10\%$

***Tree Ranking		
☐ Canopy	☐ Sub-Canopy	☐ Understory

A 10 factor English prism is used to identify trees within the plot, centered on the roost tree.

Roost Tree # 368Bat Species/Sex/Frequency: MYSO/F/779Band # ODNR-23553

Roost Tree Diagram:



Location Diagram:



Emergence Count

No.	Date	Temp °F	Weather	# of Bats	Time				Focal Bat exit #	Personnel/Comments
					Sunset	Bats Start	Bats End	Tagged Bat		
1	7/27	75	clear	4	2054	2109	2221	2109	1	
2	7/28	78	clear	1	2054	2104	2104	—		
3	7/29	82	partly cloudy	2	2053	2053	2110	2053	1	
4	7/31	70°	clear	5	20	20:56	21:31	20:56	1	

8/1
 Comments: 230C clear 2 20:56 20:58 20:58 2
 Mouse/bird call out of low end of roost area crowd
 Squirrels call will be heard in area roost area but were observed leaving since 2204
 7/29-7/30 more observed than 7/28-7/29

Bat Days

No.	Date	Bat Freq.	Bat Band #	Sex of Bat	Observations
1	7/27	779	23553	F	
2	7/29	779	23553	F	
3	7/31	779	23553	F	
4	8/1	779	23553	F	Rain + Brandon
5	8/2	779	23553	F	Rain + Brandon
6					
7					
8					
9					
10					
11					
12					
13					
14					

Cavity or Crevice Characteristics

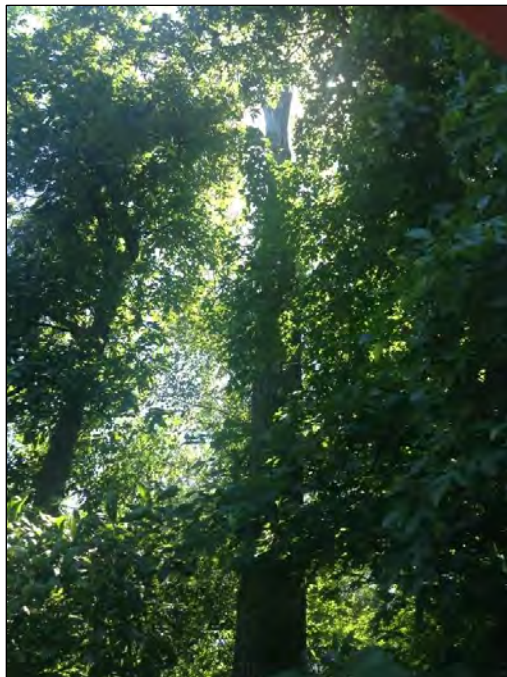
No.	Nature	Aspect	Opening Measurements			
			Width	Height	Ground	H ₂ O Level
1						
2						
3						

APPENDIX E

Roost Tree Photographs



RT 140



RT 314



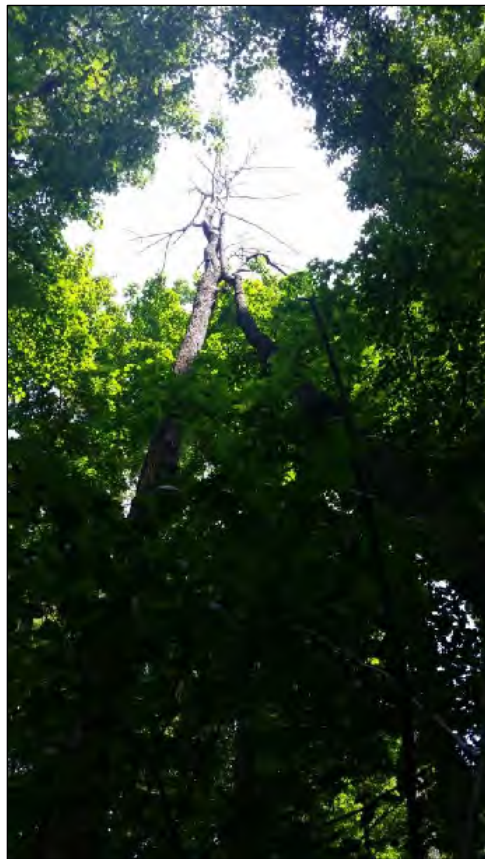
RT 368



RT 369



RT 370



RT 371



RT 372



RT 373



RT 395



RT 396



RT 983



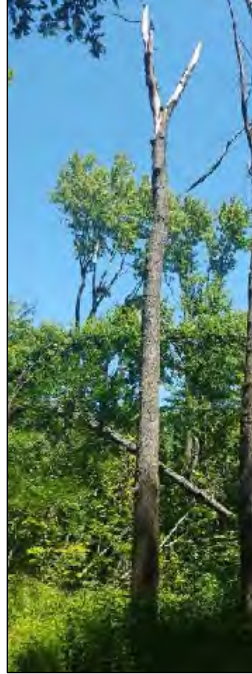
RT 984



RT 985



RT 986



RT 987



RT 988

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in

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

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