



September 14, 2021

Ms. Karen Herrington
Field Supervisor
Missouri Ecological Services Field Office
U.S. Fish and Wildlife Service

<submitted electronically>

Re: High Prairie Monitoring Summary

Dear Ms. Herrington,

Please find attached the summer post-construction monitoring summary for Ameren Missouri's High Prairie Renewable Energy Center as required in Table 8-1 of the Habitat Conservation Plan (HCP). We worked with our consultant, Stantec, to complete this report.

If you have any questions or comments on this report, please feel free to contact me at jepplin2@ameren.com or 314-941-2402. You may also contact Mr. Craig Giesmann, P.E., at cgiesmann@ameren.com or 314-315-3035.

Thank you,

A handwritten signature in black ink that reads "Julianne Epplin".

Julianne Epplin
Environmental Scientist
Ameren Missouri

cc:

S. Whitworth
C. Giesmann
J. Moore
D. Meiners



Stantec Consulting Services Inc.
2300 Swan Lake Boulevard, Suite 202, Independence IA 50644

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Reference: Summer 2021 ITP Post-Construction Monitoring Seasonal Summary High Prairie Renewable Energy Center Schuyler and Adair Counties, Missouri

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Julianne Epplin
1901 Chouteau Avenue, MC 602
St. Louis, MO 63166-6149

**Reference: Summer 2021 ITP Post-Construction Monitoring Seasonal Summary
High Prairie Renewable Energy Center
Schuyler and Adair Counties, Missouri**

Dear Ms. Epplin,

Following is a seasonal summary containing the preliminary data and results of summer 2021 post-construction monitoring at the High Prairie Renewable Energy Center (Project or High Prairie), owned and operated by Ameren Missouri (Ameren). The Project consists of 175 turbines with an approximate 400-megawatt (MW) operating capacity in Schuyler and Adair Counties, Missouri. This memo fulfills the requirements of the seasonal summary for the 2021 summer monitoring period (May 15 – August 15, 2021) outlined in the Habitat Conservation Plan (HCP). As required by the HCP, this summary is due to the U.S. Fish and Wildlife Service (USFWS) and Missouri Department of Conservation (MDC) by September 15, 2021. Figures are provided following the text.

On May 14, 2021, an Incidental Take Permit (ITP) was issued for the federally-endangered Indiana bat (*Myotis sodalis*), federally-threatened northern long-eared bat (*Myotis septentrionalis*), and the little brown bat (*Myotis lucifugus*). The Indiana bat is also state-endangered and the northern long-eared bat is state-threatened, and both species are Species of Conservation Concern (SOCC) in Missouri. The ITP covers operations of the wind project, and starting the evening of May 14, 2021, the Project began operating at a 5.0 meters-per-second (m/s) cut-in speed, in accordance with the HCP and Permit conditions. This curtailment is only required from 45 minutes before sunset to 45 minutes after sunrise from April 1 through October 31. As noted below, this curtailment has been revised as required by the Permit.

The ITP requires post-construction monitoring to occur at all 175 turbines, with twice-weekly searches conducted at 100% of the turbines. At 40% of turbines (n=70 turbines), a 60-meter (m) diameter circle full plot was searched, while at the remaining turbines (n=105) the roads and pads were searched within a 95 m diameter circle. During the monitoring period, the turbines operated under a variety of cut-in speeds, summarized in Table 1.

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Table 1. Summary of operational protocols (from 45 minutes before sunset to 45 minutes after sunrise) from May 15 through August 15, 2021, at the High Prairie Renewable Energy Center.

Date(s)	Number of Nights	Number of Turbines	Cut-in speed
May 14 – June 2	20	175	5.0 m/s
June 3 – June 8	6	175	6.0 m/s
June 9 – June 13	5	175	7.0 m/s
June 14	1	175	No operations
June 15 – June 20	6	84	7.0 m/s
		91	No operations
June 21 – August 15	56	175	No operations

Methods

Post-construction mortality monitoring activities followed the post-construction monitoring requirements outlined in the Project's HCP. Post-construction monitoring included the following components:

1. Standardized carcass searches to systematically search plots at all turbines for bat and bird casualties attributable to the turbines
2. Searcher efficiency trials to estimate the percentage of bat casualties that were found by the searcher(s)
3. Carcass removal trials to estimate the persistence time of bat carcasses on-site before scavengers removed them

Bat carcasses were collected and retained under the ITP and Missouri Department of Conservation Wildlife Collector's Permits #19170, #19158, #19171, #19376, #19374, #19372 and #19378. Standardized carcass searches were conducted for the summer season from May 17 - August 13. Post-construction monitoring occurred at 100% of the turbines, though three turbines were not searched after May 21, 2021 due to landowner issues and staff safety (Figure 1). Searches consisted of searching pads and roads out to 328 feet (ft; 100 meters [m]) at 60% of the turbines (n=105) and full plots out to 197 ft (60 m) at 40% of the turbines (n=70). On August 2, 2021, 10 plots previously searched as full plots were converted to road and pad searches, resulting in a total of 60 full plots and 115 roads and pads for searches from August 2 through August 13. This decision was made based on the inability to mow these plots due to landowner communication issues and land access.

Initial species identification was made in the field based on morphology and/or dentition. Photos of any unknown bats discovered were sent to a Stantec bat biologist for positive identification, and carcasses were kept on-site. Any unknown bat or suspected *Myotis* was identified by a Stantec bat biologist, or was sent in for genetic testing at Northern Arizona University's Bat Ecology and Genetics

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Lab. Genetic testing was also used to confirm or determine sex of any *Myotis* carcasses found and if the carcasses had white nose syndrome.

The Generalized Estimator (GenEst; Dalthorp et al. 2018) was used for calculating bias correction factors (searcher efficiency, carcass persistence).

Results

A total of 3,803 standardized searches were conducted between May 15 and August 15.

Bat Fatalities

Of the 163 bat carcasses found, 157 individual bat carcasses were found during standardized carcass searches, and 6 bats were found incidentally (i.e., not during a standardized search or outside of the search plot; Table 2).

All but one carcass was identified to the species level (the one unknown bat was determined to not be a *Myotis* based on the forearm length, and therefore was not genetically tested). Species found included 57 evening bats (*Nycticeius humeralis*), 37 hoary bats (*Lasiurus cinereus*; SOCC), 21 big brown bats (*Eptesicus fuscus*), 19 eastern red bats (*Lasiurus borealis*), 19 silver-haired bats (*Lasionycteris noctivagans*; SOCC), 7 Indiana bats (state and federally listed, as well as SOCC), 1 little brown bat (SOCC), and 1 tricolored bat (*Perimyotis subflavus*; SOCC). The raw data for all bats found is summarized in Attachment 1 and Attachment 2 at the end of this memo.

Table 2. Summary of all bat carcasses found incidentally and during standardized carcass searches during summer 2021 post-construction monitoring at the High Prairie Renewable Energy Center, Schuyler and Adair Counties, Missouri.

Species	Number found during standardized searches	Number found incidentally	Total found (percent of total)
Evening Bat	54	3	57 (35.0%)
Hoary Bat	36	1	37 (22.7%)
Big Brown Bat	20	1	21 (12.9%)
Eastern Red Bat	19	0	19 (11.7%)
Silver-haired Bat	19	0	19 (11.7%)
Indiana Bat	6	1	7 (4.3%)
Little Brown Bat	1	0	1 (0.6%)

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Species	Number found during standardized searches	Number found incidentally	Total found (percent of total)
Tricolored Bat	1	0	1 (0.6%)
Unknown (not-Myotis)	1	0	1 (0.6%)
Total	157	6	163

For the Covered Species (Indiana bats, little brown bats, and northern long-eared bats), 7 Indiana bats were found, and 1 little brown bat was found. No northern long-eared bats were found. One Indiana bat had previously been found in April 2021. The locations of these 8 Indiana bat fatalities and 1 little brown bat fatality are shown in Figure 2, along with corresponding adaptive management buffers for female fatalities. The sex of one Indiana bat fatality is awaiting results of genetic testing.

The changes in cut-in speeds outlined in Table 1 were in response to the Indiana bats found during post-construction monitoring. The Covered Species found, and related adaptive management responses, are summarized in Table 3 below.

Table 3. Summary of Covered Species found during summer 2021 post-construction monitoring at the High Prairie Renewable Energy Center in Schuyler and Adair Counties, Missouri and related adaptive management.

"Bat in hand"	Required Adaptive Management	Date found	Species	Sex	Notes/Voluntary Measures Implemented
Indiana bat #2*	None triggered	6/2/2021	Indiana Bat	Male	Initially identified as a female, but later confirmed male via genetics
Indiana bat #3	0.5 m/s cut-in speed increase required (5.5 m/s)	6/3/2021	Indiana Bat	Male	Ameren voluntarily increased cut-in speed by 1.0 m/s to 6.0 m/s
Indiana bat #4	0.5 m/s cut-in speed increase required (6.0 m/s) Second female found in southern part of project; no adaptive management triggered but 2.5-mile buffer added to map (Figure 2)	6/8/2021	Indiana Bat	Female	Ameren was already operating at the required 6.0 m/s, but voluntarily increased cut-in speeds by another 1.0 m/s the following night (6/9/2021) to 7.0 m/s site-wide
Indiana bat #5	0.5 m/s cut-in speed increase required (6.5 m/s)	6/14/2021	Indiana Bat	Male	Ameren was already voluntarily operating at 7.0 m/s; Ameren voluntarily shutdown operations site-wide for one night (6/14/2021), then resumed operations at 7.0 m/s in the northern part of the

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"Bat in hand"	Required Adaptive Management	Date found	Species	Sex	Notes/Voluntary Measures Implemented
					project and left the southern part of the project shutdown at night starting 6/15/2021
Indiana bat #6	0.5 m/s cut-in speed increase required (7.0 m/s) Sex unknown; 2.5-mile buffer around the fatality added to map while awaiting genetic results (Figure 2)	6/21/2021	Indiana Bat	Unknown	Ameren was already voluntarily operating at 7.0 m/s in the northern part of the project; Ameren voluntarily shut-down night-time operations at all turbines starting 6/21/2021 Awaiting sex and species confirmation from genetic testing
Indiana bat #7	0.5 m/s cut-in speed increase required (7.5 m/s) Third female found in southern part of project; no adaptive management triggered but 2.5-mile buffer added to map (Figure 2)	6/2/2021	Indiana Bat	Female	Initially determined to be an unknown Myotis, species determined via genetics on 7/15/2021. Project already voluntarily not operating at night when species determination was made.
Indiana bat #8	0.5 m/s cut-in speed increase required (8.0 m/s)	6/14/2021	Indiana Bat	Male	Initially determined to be an unknown Myotis, species determined via genetics on 7/15/2021. Project already voluntarily not operating at night when species determination was made.
Little brown bat #1	None triggered	6/11/2021	Little Brown Bat	Male	Initially determined to be an unknown Myotis (suspected little brown based on the lack of a visible keel and the toe hairs), species confirmed via genetics on 7/15/2021

*An Indiana bat found on April 15, 2021, is the first "bat in hand" for the 2021 adaptive management triggers, and is disclosed in the 2021 Spring Post-Construction Monitoring Report (Stantec 2021) that was submitted to USFWS and MDC on June 15, 2021.

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Searcher Efficiency Trials

Searcher efficiency trials were conducted for six searchers during the summer season on both full plots and roads and pads, and a total of 122 mouse carcasses were placed for the searcher efficiency trials. Trials took place in June and August.

GenEst models indicated that searcher efficiency was best modeled based on plot type, and did not vary by searcher. Searcher efficiency was estimated at 48.4% within full plots and 91.4% on turbine roads and pads (Table 4).

Table 4. Searcher efficiency during summer 2021 post-construction monitoring at the High Prairie Renewable Energy Center, Schuyler and Adair Counties, Missouri.

Parameter	Roads and Pads	Full Plots
Number of Carcasses Placed	58	64
Number of Carcasses Found	53	31
(p) Searcher Efficiency Mean (90% CI)	0.914 (0.831, 0.958)	0.484 (0.384, 0.586)

Carcass Persistence Trials

Carcass persistence trials began in June, and included 41 mouse carcasses. Carcasses were checked daily for the first 8 days, and then again on day 12 or 13. No carcasses remained after 13 days.

GenEst models indicated that carcass persistence was best modeled using a constant exponential distribution, and that the location and scale parameters did not vary by plot type. Carcass persistence averaged 2.3 days (90% CI: 1.797 to 3.024).

Summary

A total of 163 bat fatalities were found during the summer post-construction monitoring, including 7 Indiana bats and 1 little brown bat. In accordance with the adaptive management outlined in the HCP, the Project would currently be required to operate at a minimum cut-in speed of 8.0 m/s; however, the Project continues to voluntarily not operate at night to avoid impacts to the Covered Species. Adaptive management for maternity colonies has not been triggered, though all female fatalities of the Covered Species are tracked (Figure 2).

Post-construction monitoring continues to be conducted twice weekly at 60 full plots and 115 roads and pads. Based on the results of searcher efficiency trials on full plots, Stantec has altered the mowing schedule and mowing equipment in an effort to increase searcher efficiency on full plots.

A summary of the fall post-construction monitoring will be provided to USFWS and MDC by November 31, 2021. A final report summarizing the 2021 post-construction monitoring will be



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provided by December 15, 2021. The final report will include data summaries, Evidence of Absence parameters and analysis for the Covered Species, bat fatality estimates, Evidence of Absence estimates for the Covered Species, and a discussion of monitoring results and their implications.

Regards,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink that reads "Molly Stephenson".

Molly Stephenson
Wildlife Biologist, Associate
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A handwritten signature in blue ink that reads "Terry VanDeWalle".

Terry VanDeWalle
Senior Ecologist, Principal
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Attachments:

Attachment 1. Preliminary data from bats found during standardized searches

Attachment 2. Preliminary data from incidental bats found

Figure 1. Post-construction Monitoring Plots

Figure 2. Covered Species Fatality Tracking



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Attachment 1. Preliminary data from bats found during standardized searches at the High Prairie Renewable Energy Center in Schuyler and Adair Counties, Missouri between May 15 and August 15, 2021.

Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
1070	B11	Full	5/17/2021	Evening Bat	HM	15	280	35	Adult	Female	Fresh/Whole
1076	G09	Full	5/17/2021	Evening Bat	TS	51	330	35	Adult	Female	Fresh/Whole
1107	E01	Full	5/17/2021	Big Brown Bat	MW	55	195	45	Adult	Unknown	Decomposed/Most of Body, Some Missing
1119	D06	Full	5/17/2021	Big Brown Bat	MW	15	180	50	Adult	Female	Fresh/Whole
1131	A10	Full	5/17/2021	Evening Bat	HM	27	225	41	Adult	Female	Fresh/Whole
1159	N01	Full	5/18/2021	Evening Bat	MW	35	180	36	Juvenile	Unknown	Decomposed/Most of Body, Some Missing
1187	J06	Full	5/19/2021	Evening Bat	HM	44	60	37	Adult	Unknown	Decomposed/Most of Body, Some Missing
1199	M12	Full	5/19/2021	Evening Bat	MW	25	200	35	Juvenile	Female	Fresh/Whole
1201	N09	Full	5/19/2021	Big Brown Bat	MW	30	50	50	Adult	Female	Decomposed/Most of Body, Some Missing
1209	M01	RP	5/19/2021	Evening Bat	MW	15	110	36	Adult	Female	Decomposed/Whole
1222	J12	RP	5/19/2021	Evening Bat	BK	5	195	36	Adult	Female	Fresh/Most of Body, Some Missing
1226	J11	RP	5/19/2021	Evening Bat	BK	10	186	37	Unknown	Unknown	Fresh/Most of Body, Some Missing
1232	P01	Full	5/19/2021	Hoary Bat	BK	10	144	51	Adult	Male	Fresh/Most of Body, Some Missing
1251	P04	Full	5/19/2021	Evening Bat	EN	0	27	38	Adult	Unknown	Fresh/Whole
1255	F03	Full	5/20/2021	Silver-haired Bat	TS	29	265	41	Adult	Unknown	Decomposed/Whole
1257	F02	Full	5/20/2021	Evening Bat	TS	59	270	35	Adult	Unknown	Fresh/Whole
1264	C07	Full	5/20/2021	Silver-haired Bat	TS	52	350	41	Adult	Male	Fresh/Whole
1269	E02	RP	5/20/2021	Evening Bat	MW	5	190	37	Adult	Male	Fresh/Whole
1274	D03	RP	5/20/2021	Big Brown Bat	MW	5	195	43	Juvenile	Male	Decomposed/Whole
1308	G07	RP	5/20/2021	Hoary Bat	BK	35	87	56	Adult	Female	Fresh/Whole



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Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
1333	A08	Full	5/20/2021	Evening Bat	HM	47	350	36	Adult	Female	Fresh/Whole
1334	A08	Full	5/20/2021	Eastern Red Bat	HM	32	300	40	Adult	Female	Fresh/Whole
1366	N07	Full	5/21/2021	Eastern Red Bat	MW	55	190	42	Adult	Female	Fresh/Whole
1375	N09	Full	5/21/2021	Evening Bat	MW	50	160	36	Juvenile	Female	Decomposed/Whole
1405	K09	Full	5/21/2021	Big Brown Bat	HM	26	135	39	Adult	Male	Fresh/Whole
1412	J09	RP	5/21/2021	Hoary Bat	HM	16	260	55	Adult	Unknown	Decomposed/Most of Body, Some Missing
1414	P04	Full	5/21/2021	Unknown - Not Myotis	EN	60	290	43	Unknown	Unknown	Decomposed/Pieces
1426	J10	RP	5/21/2021	Eastern Red Bat	HM	9	320	39	Unknown	Unknown	Decomposed/Most of Body, Some Missing
1436	C01	Full	5/24/2021	Silver-haired Bat	HM	39	320	41	Adult	Female	Fresh/Whole
1437	C01	Full	5/24/2021	Eastern Red Bat	HM	48	290	42	Adult	Female	Fresh/Whole
1473	B07	Full	5/24/2021	Hoary Bat	BK	35	115	53	Adult	Female	Fresh/Whole
1474	B07	Full	5/24/2021	Evening Bat	BK	25	80	39	Unknown	Unknown	Decomposed/Pieces
1492	H07	Full	5/24/2021	Silver-haired Bat	EN	10	45	42	Adult	Male	Fresh/Whole
1493	A06	RP	5/24/2021	Eastern Red Bat	EN	90	10	36	Unknown	Unknown	Decomposed/Most of Body, Some Missing
1513	E05	Full	5/24/2021	Evening Bat	TS	18	90	37	Adult	Female	Fresh/Whole
1534	M07	Full	5/25/2021	Evening Bat	BK	10	109	35	Adult	Unknown	Fresh/Most of Body, Some Missing
1542	N09	Full	5/25/2021	Silver-haired Bat	BK	50	197	40	Adult	Male	Fresh/Whole
1543	N09	Full	5/25/2021	Evening Bat	BK	30	200	40	Adult	Unknown	Fresh/Most of Body, Some Missing
1544	N09	Full	5/25/2021	Eastern Red Bat	BK	25	271	40	Adult	Unknown	Decomposed/Most of Body, Some Missing
1547	M04	RP	5/25/2021	Evening Bat	BK	1	171	37	Juvenile	Female	Fresh/Whole
1555	L07	Full	5/25/2021	Evening Bat	MW	40	160	37	Adult	Unknown	Decomposed/Whole
1556	L07	Full	5/25/2021	Big Brown Bat	MW	15	210	46	Adult	Male	Fresh/Whole



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Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
1560	L11	Full	5/25/2021	Evening Bat	MW	5	200	37	Unknown	Unknown	Decomposed/Pieces
1565	P04	Full	5/25/2021	Evening Bat	TS	21	255	37	Adult	Unknown	Decomposed/Whole
1568	J02	RP	5/25/2021	Evening Bat	TS	1	180	35	Adult	Female	Fresh/Whole
1577	J06	Full	5/25/2021	Hoary Bat	EN	50	40	54	Adult	Unknown	Fresh/Whole
1582	J11	RP	5/25/2021	Big Brown Bat	EN	50	5	45	Unknown	Unknown	Decomposed/Most of Body, Some Missing
1585	R01	RP	5/25/2021	Eastern Red Bat	EN	20	95	42	Adult	Male	Fresh/Whole
1586	P11	Full	5/25/2021	Big Brown Bat	HM	34	340	49	Adult	Female	Fresh/Whole
1587	P11	Full	5/25/2021	Hoary Bat	HM	41	320	52	Adult	Female	Fresh/Whole
1590	P07	Full	5/25/2021	Silver-haired Bat	HM	50	50	39	Adult	Male	Fresh/Most of Body, Some Missing
1597	Q08	RP	5/25/2021	Hoary Bat	HM	43	80	52	Unknown	Male	Decomposed/Most of Body, Some Missing
1598	Q07	RP	5/25/2021	Evening Bat	HM	1	0	35	Unknown	Unknown	Decomposed/Pieces
1599	N12	RP	5/25/2021	Hoary Bat	HM	21	70	53	Adult	Unknown	Fresh/Most of Body, Some Missing
1603	P11	Full	5/25/2021	Big Brown Bat	HM	7	5	46	Adult	Male	Fresh/Whole
1604	L02	Full	5/25/2021	Evening Bat	MW	5	110	36	Adult	Female	Fresh/Whole
1605	L02	Full	5/25/2021	Big Brown Bat	MW	40	160	43	Adult	Male	Decomposed/Whole
1606	L02	Full	5/25/2021	Silver-haired Bat	MW	25	195	40	Juvenile	Unknown	Decomposed/Most of Body, Some Missing
1618	A10	Full	5/26/2021	Hoary Bat	EN	40	80	54	Adult	Male	Fresh/Whole
1632	E02	RP	5/26/2021	Eastern Red Bat	TS	42	80	39	Adult	Female	Fresh/Whole
1645	B06	Full	5/26/2021	Evening Bat	HM	13	100	35	Unknown	Unknown	Fresh/Most of Body, Some Missing
1646	B05	Full	5/26/2021	Evening Bat	HM	20	45	36	Unknown	Female	Fresh/Whole
1675	G07	RP	5/26/2021	Evening Bat	MW	1	180	37	Unknown	Unknown	Decomposed/Most of Body, Some Missing
1702	M12	Full	5/27/2021	Evening Bat	TS	40	350	37	Adult	Unknown	Fresh/Whole



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Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
1703	M03	Full	5/27/2021	Big Brown Bat	TS	25	30	45	Adult	Male	Decomposed/Whole
1720	H07	Full	5/27/2021	Evening Bat	EN	15	50	36	Adult	Unknown	Decomposed/Whole
1744	K11	RP	5/28/2021	Silver-haired Bat	MW	50	30	41	Unknown	Unknown	Decomposed/Most of Body, Some Missing
1748	M07	Full	5/28/2021	Silver-haired Bat	TS	25	315	39	Adult	Unknown	Decomposed/Whole
1779	P04	Full	5/28/2021	Evening Bat	HM	17	315	37	Unknown	Unknown	Fresh/Most of Body, Some Missing
1780	Q07	RP	5/28/2021	Evening Bat	MW	3	110	37	Unknown	Unknown	Decomposed/Pieces
1781	P04	Full	5/28/2021	Tricolored Bat	HM	48	80	34	Unknown	Unknown	Fresh/Most of Body, Some Missing
1824	C09	RP	6/1/2021	Evening Bat	MW	3	110	0	Unknown	Unknown	Decomposed/Pieces
1854	G11	RP	6/1/2021	Eastern Red Bat	HM	12	350	40	Adult	Male	Fresh/Most of Body, Some Missing
1874	J03	Full	5/28/2021	Hoary Bat	EN	10	275	57	Adult	Unknown	Decomposed/Whole
1875	D06	Full	6/1/2021	Hoary Bat	EN	45	5	57	Adult	Unknown	Fresh/Whole
1881	M07	Full	6/2/2021	Indiana Bat	EN	30	350	39	Adult	Male	Fresh/Whole
1888	M12	Full	6/2/2021	Indiana Bat	EN	25	280	39	Adult	Female	Fresh/Whole
1905	P06	Full	6/2/2021	Evening Bat	MW	10	220	32	Adult	Unknown	Fresh/Most of Body, Some Missing
1908	P08	Full	6/2/2021	Hoary Bat	MW	60	270	52	Juvenile	Unknown	Decomposed/Whole
1920	P11	Full	6/2/2021	Eastern Red Bat	MW	20	195	42	Adult	Unknown	Fresh/Most of Body, Some Missing
1927	R02	Full	6/2/2021	Silver-haired Bat	TS	50	45	41	Adult	Female	Fresh/Whole
1936	J01	Full	6/2/2021	Eastern Red Bat	TS	1	45	41	Adult	Female	Decomposed/Whole
1939	J08	RP	6/2/2021	Eastern Red Bat	TS	1	45	40	Adult	Female	Fresh/Whole
1950	L10	Full	6/2/2021	Hoary Bat	HM	10	100	53	Adult	Female	Fresh/Whole
1955	R06	RP	6/2/2021	Evening Bat	HM	13	340	36	Unknown	Unknown	Decomposed/Pieces
1972	E08	Full	6/3/2021	Indiana Bat	TS	33	50	38	Adult	Male	Decomposed/Whole



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Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
2014	D07	RP	6/3/2021	Hoary Bat	EN	20	0	57	Adult	Female	Fresh/Whole
2032	F04	RP	6/3/2021	Evening Bat	HM	18	185	38	Adult	Male	Fresh/Whole
2059	P11	Full	6/4/2021	Hoary Bat	MW	40	160	56	Unknown	Female	Decomposed/Most of Body, Some Missing
2075	R02	Full	6/4/2021	Hoary Bat	TS	28	320	50	Adult	Male	Decomposed/Whole
2130	F07	Full	6/7/2021	Evening Bat	MW	20	300	38	Adult	Female	Fresh/Whole
2137	B05	Full	6/7/2021	Evening Bat	EN	20	25	37	Adult	Unknown	Decomposed/Most of Body, Some Missing
2138	B05	Full	6/7/2021	Hoary Bat	EN	23	110	54	Adult	Unknown	Fresh/Whole
2139	E08	Full	6/7/2021	Evening Bat	EN	24	350	41	Adult	Unknown	Decomposed/Whole
2144	H06	RP	6/7/2021	Silver-haired Bat	HM	58	20	38	Juvenile	Unknown	Fresh/Whole
2146	B06	Full	6/7/2021	Eastern Red Bat	HM	40	330	42	Adult	Unknown	Decomposed/Most of Body, Some Missing
2148	B05	Full	6/7/2021	Hoary Bat	HM	15	135	51	Adult	Male	Fresh/Whole
2150	E02	Full	6/7/2021	Big Brown Bat	BK	1	184	47	Adult	Unknown	Fresh/Whole
2169	P07	Full	6/8/2021	Indiana Bat	RR	37	5	38	Unknown	Female	Decomposed/Whole
2186	H01	RP	6/8/2021	Evening Bat	MW	5	185	36	Unknown	Female	Decomposed/Most of Body, Some Missing
2187	G09	Full	6/8/2021	Eastern Red Bat	MW	35	340	39	Adult	Male	Decomposed/Whole
2192	J06	Full	6/8/2021	Evening Bat	MW	25	160	40	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2193	J06	Full	6/8/2021	Evening Bat	MW	10	325	36	Juvenile	Female	Decomposed/Whole
2202	D06	Full	6/8/2021	Silver-haired Bat	BK	50	220	41	Adult	Male	Fresh/Whole
2219	A08	Full	6/8/2021	Hoary Bat	EN	50	80	52	Adult	Unknown	Decomposed/Pieces
2233	B07	Full	6/8/2021	Big Brown Bat	HM	20	50	48	Adult	Unknown	Fresh/Most of Body, Some Missing
2234	B07	Full	6/8/2021	Hoary Bat	HM	31	315	55	Unknown	Unknown	Decomposed/Pieces
2246	B07	Full	6/8/2021	Evening Bat	HM	35	45	34	Juvenile	Unknown	Decomposed/Pieces



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Reference: Summer 2021 ITP Post-Construction Monitoring Seasonal Summary High Prairie Renewable Energy Center Schuyler and Adair Counties, Missouri

Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
2257	M10	Full	6/9/2021	Big Brown Bat	EN	23	30	39	Unknown	Unknown	Decomposed/Pieces
2286	J05	RP	6/9/2021	Big Brown Bat	MW	4	180	45	Adult	Male	Fresh/Pieces
2289	J01	Full	6/9/2021	Evening Bat	MW	10	60	37	Unknown	Female	Decomposed/Whole
2312	Q08	RP	6/9/2021	Hoary Bat	HM	37	330	54	Adult	Unknown	Decomposed/Pieces
2396	M02	RP	6/11/2021	Little Brown Bat	EN	30	10	36	Unknown	Male	Fresh/Most of Body, Some Missing
2464	M08	RP	6/11/2021	Evening Bat	EN	55	0	37	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2469	K07	Full	6/11/2021	Silver-haired Bat	BK	30	222	40	Unknown	Unknown	Decomposed/Whole
2474	K07	Full	6/14/2021	Big Brown Bat	EN	25	200	0	Adult	Unknown	Fresh/Pieces
2475	K07	Full	6/14/2021	Indiana Bat	EN	28	100	39	Adult	Male	Fresh/Whole
2476	G04	Full	6/14/2021	Hoary Bat	EN	46	310	57	Adult	Unknown	Fresh/Most of Body, Some Missing
2503	E09	RP	6/14/2021	Silver-haired Bat	MW	40	340	42	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2515	B06	Full	6/14/2021	Hoary Bat	TS	57	100	55	Adult	Unknown	Fresh/Whole
2523	C01	Full	6/14/2021	Eastern Red Bat	TS	12	315	40	Adult	Unknown	Decomposed/Whole
2563	P08	Full	6/15/2021	Evening Bat	TS	32	185	34	Adult	Unknown	Decomposed/Whole
2589	M03	Full	6/15/2021	Eastern Red Bat	RO	59	205	43	Adult	Unknown	Decomposed/Most of Body, Some Missing
2656	G04	Full	6/16/2021	Big Brown Bat	EN	36	200	47	Adult	Unknown	Decomposed/Whole
2667	G09	Full	6/16/2021	Eastern Red Bat	EN	50	190	42	Adult	Unknown	Fresh/Whole
2729	D06	Full	6/17/2021	Hoary Bat	HM	23	45	0	Unknown	Unknown	Decomposed/Pieces
2730	E02	Full	6/17/2021	Hoary Bat	HM	55	350	50	Adult	Unknown	Decomposed/Pieces
2741	F07	Full	6/17/2021	Hoary Bat	EN	50	270	54	Adult	Unknown	Fresh/Whole
2776	M10	Full	6/18/2021	Hoary Bat	RO	30	145	46	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2777	M10	Full	6/18/2021	Hoary Bat	RO	53	205	46	Unknown	Unknown	Fresh/Pieces



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Reference: Summer 2021 ITP Post-Construction Monitoring Seasonal Summary High Prairie Renewable Energy Center Schuyler and Adair Counties, Missouri

Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
2840	B07	Full	6/21/2021	Hoary Bat	RO	12	21	52	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2861	B11	Full	6/21/2021	Indiana Bat	HM	60	220	39	Adult	Unknown	Decomposed/Most of Body, Some Missing
2865	E11	RP	6/21/2021	Evening Bat	HM	4	80	36	Adult	Unknown	Decomposed/Most of Body, Some Missing
2877	G08	Full	6/21/2021	Silver-haired Bat	BK	20	57	42	Unknown	Unknown	Decomposed/Whole
3199	C05	RP	6/30/2021	Eastern Red Bat	HM	15	30	39	Adult	Unknown	Decomposed/Most of Body, Some Missing
3595	H07	Full	7/9/2021	Eastern Red Bat	RO	38	180	39	Adult	Male	Fresh/Whole
3826	G09	Full	7/14/2021	Silver-haired Bat	HM	35	250	40	Juvenile	Female	Fresh/Whole
3833	E05	Full	7/14/2021	Evening Bat	TS	0	225	0	Unknown	Unknown	Fresh/Whole
3845	B01	Full	7/14/2021	Hoary Bat	RO	1	265	55	Adult	Female	Fresh/Whole
3850	B07	Full	7/14/2021	Silver-haired Bat	RO	3	230	41	Adult	Male	Fresh/Whole
3854	C07	Full	7/14/2021	Silver-haired Bat	RO	5	140	41	Adult	Male	Fresh/Whole
3856	B09	RP	7/14/2021	Silver-haired Bat	RO	1	235	42	Adult	Female	Fresh/Whole
3911	C03	RP	7/15/2021	Evening Bat	RO	0	284	38	Juvenile	Male	Fresh/Whole
3912	C02	RP	7/16/2021	Hoary Bat	RO	2	200	53	Adult	Unknown	Decomposed/Whole
3917	E07	Full	7/15/2021	Hoary Bat	EN	5	163	0	Juvenile	Female	Fresh/Whole
4106	A08	Full	7/21/2021	Hoary Bat	TS	40	45	53	Unknown	Unknown	Decomposed/Whole
4171	M11	RP	7/22/2021	Hoary Bat	TS	28	350	52	Juvenile	Male	Fresh/Whole
4178	M03	Full	7/22/2021	Evening Bat	TS	14	355	33	Juvenile	Male	Fresh/Whole
4193	K09	Full	7/22/2021	Evening Bat	EN	47	5	37	Adult	Unknown	Fresh/Whole
4247	N09	Full	7/23/2021	Big Brown Bat	TS	30	5	46	Adult	Male	Decomposed/Whole
4291	L01	RP	7/23/2021	Hoary Bat	HM	39	275	54	Adult	Male	Fresh/Whole
4405	L02	Full	7/27/2021	Evening Bat	EN	0	190	35	Unknown	Unknown	Decomposed/Whole



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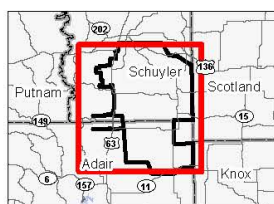
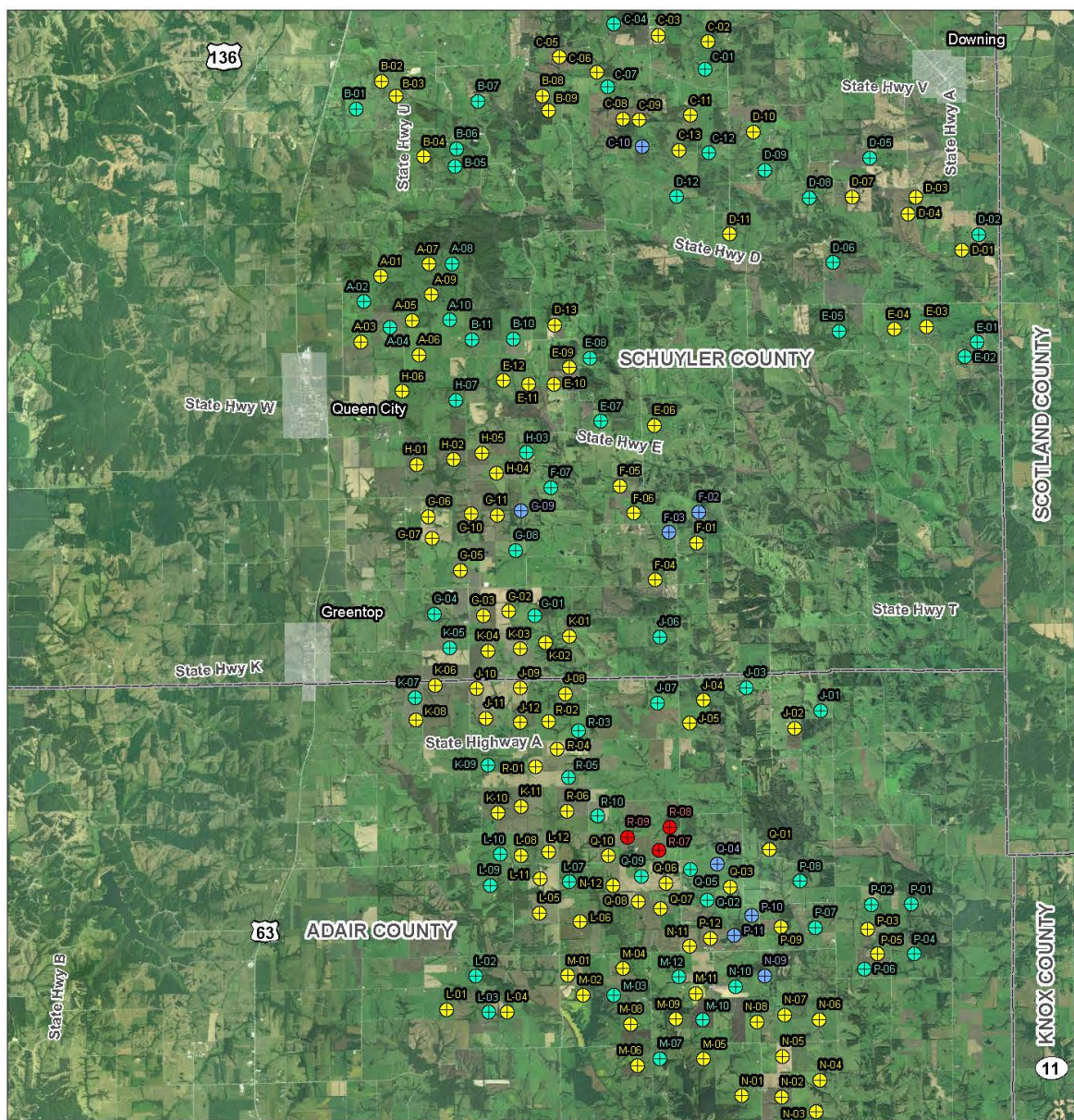
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Reference: Summer 2021 ITP Post-Construction Monitoring Seasonal Summary High Prairie Renewable Energy Center Schuyler and Adair Counties, Missouri

Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
4409	L07	Full	7/27/2021	Evening Bat	EN	14	300	34	Juvenile	Unknown	Decomposed/Whole
4412	L10	Full	7/27/2021	Big Brown Bat	EN	45	315	48	Juvenile	Unknown	Fresh/Whole
4449	N09	Full	7/27/2021	Hoary Bat	HM	43	340	52	Adult	Male	Fresh/Whole
4737	P06	Full	8/4/2021	Evening Bat	HM	26	10	34	Unknown	Unknown	Decomposed/Whole
4945	D09	Full	8/9/2021	Big Brown Bat	HM	47	50	46	Unknown	Unknown	Decomposed/Most of Body, Some Missing

Attachment 2. Preliminary data from incidental bats found at the High Prairie Renewable Energy Center in Schuyler and Adair Counties, Missouri between May 15 and August 15, 2021.

Survey123 ID	Turbine	Plot Type	Date Found	Species	Found By	Distance	Azimuth	Forearm	Age	Sex	Condition
1637	D07	RP	5/26/2021	Evening Bat	TS	22	340	36	Adult	Female	Fresh/Whole
2136	M03	Full	6/7/2021	Big Brown Bat	MW	50	195	45	Unknown	Unknown	Decomposed/Most of Body, Some Missing
2177	K09	Full	6/8/2021	Evening Bat	MW	5	15	38	Juvenile	Female	Fresh/Whole
2209	L03	Full	6/8/2021	Evening Bat	BK	10	155	40	Adult	Unknown	Fresh/Whole
2214	A04	Full	6/8/2021	Hoary Bat	EN	61	340	56	Adult	Female	Decomposed/Most of Body, Some Missing
2473	K08	RP	6/14/2021	Indiana Bat	EN	20	330	36	Adult	Male	Decomposed/Most of Body, Some Missing



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Legend

-  Turbine - Roads and Pads
-  Turbine - Full Plot
-  Turbine - Full Plot Through 7/31,
Then Roads and Pads
-  Turbine - Not Searched After
5/21/2021 Due to Landowner Issues

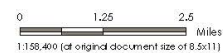
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Post-Construction Monitoring Plots (May 15 - August 15, 2021)

Client/Project
Ameren
High Prairie Wind Energy Facility

Project Location	193708256
Schuyler and Adair Counties, Missouri	Prepared by JM on 2021-09-02 Technical Review by JH on 2021-09-03 Independent Review by XX on 2021-XX-XX



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