Exhibit K Summer 2011 Bat Mist-Netting Report



Greenwich Wind Project Huron County, Ohio

Inventory of Bat Species within the Greenwich Wind Project Area with Focus on the Federally Endangered Indiana Bat (*Myotis sodalis*)

GREENWICH WIND PROJECT HURON COUNTY, OHIO

Executive Summary

WindLab Developments USA, Ltd. (WindLab) retained Stantec Consulting Services Inc. (Stantec) to complete bat surveys within its Huron County, Ohio project area. The goal of the survey was to document all bat species occurring within the project area with specific focus placed on attempting to identify the occurrence of the federally endangered Indiana bat (*Myotis sodalis*). Summer mist net surveys followed methodologies outlined by the USFWS's "Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision," dated April 2007, as well as the protocol for mist-netting outlined in the ODNR Cooperative Agreement document "On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind."

A total of 102 bats, representing five species, was captured during summer mist net surveys. Bats were captured at all 15 mist net sites. No federally endangered bats were captured during mist netting surveys. Two species were relatively abundant: big brown bat (n=52, 51%) and northern bat (n=25, 25%). These two species represented 75 percent of all bat captures (N=77; see Table 3). The remaining 25 percent was distributed among little brown bat (n=15, 15%), eastern red bat (n-8, 8%), and tri-colored bat (n=2, 2%). The complement of species captured during summer mist netting (5 species) and number of total bats captured (102 individuals) was typical for the geographic location and type of habitat sampled.

Although it is not possible to determine with absolute certainty the absence of the Indiana bat, the lack of Indiana bat captures at mist net site locations suggests their probable absence during the summer reproductive season in the project area. These results suggest that the project is not likely to adversely affect the Indiana bat during the summer maternity period.

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1.0 Introduction

WindLab Developments USA, Ltd. (WindLab) is evaluating the potential development of a wind project to be located in Greenwich Township, Huron County, Ohio (Appendix A – Figure 1). Turbine locations as well as a project layout of infrastructure and transmission alignments have not been identified at this time. As part of the Ohio Power Siting Board (OPSB) permitting process to receive a Certificate of Environmental Compatibility and Public Need, WindLab is required to consult with the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS).

As part of the project planning process, WindLab retained Stantec Consulting Services Inc. (Stantec) to complete bat surveys within the project area. The goal of the survey was to document all bat species occurring within the project area. Specific focus was placed on attempting to identify the occurrence of the federally endangered Indiana bat (*Myotis sodalis*). Summer mist net surveys followed methodologies outlined by the USFWS's "Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision," dated April 2007, as well as the protocol for mist-netting outlined in the ODNR Cooperative Agreement document "On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind."

1.1 PROJECT SETTING

The project is located in the Till Plains Physiographic Region. Elevations in this area range between 582 and 1,205 feet above sea level. The average rainfall for the area is 30.2 inches annually. The geologic strata of the Till Plains consist of two similar bedrock formations from the Devonian period. The Lower and Upper Devonian-age rock are generally fragmented sedimentary rocks that are mainly limestone and dolomite with some shale and some sandstone (Ohio Division of Geological Survey 1998).

Most of Ohio, including Huron County, is part of the Beech-Maple Forest Region (Braun 1950). The Beech-Maple Forest Region is dominated by beech (*Fagus grandifolia*) and sugar maple (*Acer saccharum*); however, extensive tracts of elm-ash-maple (*Ulmus* spp., *Fraxinus* spp., *Acer* spp.) type forests occur in depressions and areas between glacial moraine flats, reaching into the area of the Great Black Swamp in Northwestern Ohio. The bogs and prairies that are scattered throughout the area increase the vegetation diversity of the Beech-Maple Region (Braun 1961).

According to the US Geologic Survey soil survey for Huron County, the area has primarily hydric, slow draining soils (Ernst and Martin 1994). Additionally, these soils are considered prime farmland when drained. Small (<10 acres) to large (299 acres) woodlots occur throughout the study area in low lying areas. These woodlots are generally the slowest draining areas where water collects during spring rains.

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The majority of the landscape in the study area is cultivated land (5,668 acres; 62.8%). Deciduous forest comprise the next highest land use acreage with 1,725 acres (19.1%). Many of the forested areas are large (>50 acres) woodlots. Fragmented woodlots that have been difficult to drain throughout the study area also add to this acreage. Table 2 shows the breakdown in land uses and area within the project boundaries.

Table 1. Land use area and percent total for project area*

Land Use	Area (acres)	Percent of Project Area
Agriculture	5,668	62.8
Deciduous Forest	1,725	19.1
Evergreen Forest	7	0.1
Mixed Forest	1.5	>0.1
Wetlands	38	0.4
Open Water	12	0.1
Scrub/Shrub	22	0.2
Hay-Pasture	1,011	11.2
Developed	143	1.6
Developed - Open Space	404	4.5
Total	9,031.5	·

^{*}Information from 2011 Critical Issues Analysis for Greenwich Wind Project

1.2 REGULATORY SETTING

Wind power projects are permitted by the Ohio Power Siting Board (OPSB). The OPSB has jurisdiction for all wind-powered electric generation facilities consisting of wind turbines and associated facilities with a single interconnection to the electrical grid and designed for, or capable of, operation at an aggregate capacity of 5MW or more. Wind projects are required to receive a Certificate of Environmental Compatibility and Public Need. The OPSB consists of representatives from the Public Utilities Commission of Ohio (PUCO), Ohio Environmental Protection Agency (OEPA), Ohio Departments of Agriculture, Development, Health, and Natural Resources, and a public member. Rules for the wind facility certification process are outlined in the Ohio Administrative Code¹.

Coordination with both the ODNR and USFWS is necessary to ensure that no take of federally listed species occur as a result of the project. If take may occur, the USFWS may require additional consultation under the Endangered Species Act.

The federal Endangered Species Act (ESA) [16 U.S.C.1531 *et seq.*] became law in 1973 and provides for the listing, conservation, and recovery of endangered and threatened species. The

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¹ CHAPTER 4906-17 – Applications for Certificates for Electric Generating Wind Facilities (DOC)

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USFWS is the agency responsible for protecting and monitoring populations of listed endangered species. Section 7(a) (2) of ESA states that each federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species, or result in destruction or adverse modification of designated critical habitat. A federal action is defined as "...all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas" (USFWS and NMFS 1998).

Section 9 of ESA prohibits the take of listed species. Take is defined by ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." The definition of harm includes adverse habitat modification. Actions of federal agencies that do not result in jeopardy or adverse modification, but that could result in a take, must be addressed under Section 7 or 10 of the Endangered Species Act.

1.3 RESOURCE SETTING

The USFWS Ohio Field Office considers all 88 counties of Ohio to lie within the range of the Indiana bat. Most records of reproductive Indiana bats are from the western portion of the state; however, summer (nonreproductive) occurrences are more widely distributed (USFWS 2007) The known summer distribution (i.e. records exist) of the Indiana bat in Ohio does not include Huron County. However, recent survey efforts in the region have resulted in new records for neighboring Seneca and Crawford counties, which have land uses and forest distribution similar to those found in the project area (personal communication, Keith Lott, USFWS).

Based upon normal geographical range, nine species of bat may occur in Ohio; however, 11 have been documented (Brack et al. 2010). These are the big brown bat (*Eptesicus fuscus*), little brown bat (*Myotis lucifugus*), northern bat (*Myotis septentrionalis*), Indiana bat, tricolored bat (*Perimyotis subflavus*), hoary bat (*Lasiurus cinereus*), eastern red bat (*L. borealis*), silverhaired bat (*Lasionycteris noctivagans*), and evening bat (*Nycticeius humeralis*). These bats, in general, are considered tree bats, roosting in foliage, under sloughing bark, or tree cavities during the summer maternity season. During fall they generally migrate southward. Some hibernate in caves, mines, or other structures (i.e. hibernaculum) while others may migrate far enough south to continue roosting in trees. The closest known hibernaculum to the project area is the Lewisburg Mine in Preble County, Ohio. This mine is approximately 175 miles from the project area. In 2009, the mine supported approximately 25,000 bats representing five species including approximately 9,000 Indiana bats (Kudlu et al. 2009).

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2.0 Methodology

2.1 MIST NETTING GUIDELINES

Efforts to survey for endangered bats are difficult to standardize because of the great deal of variability that exists in a field situation. However, a number of practices used for summer surveys for Indiana bats have become relatively standardized through implementation of netting guidelines provided by USFWS in the most recent revision of the Indiana Bat Recovery Plan (USFWS 2007). Those guidelines, a summary of which follows, were employed for this survey as well as guidelines provided in the ODNR Cooperative Agreement Addendum (ODNR 2009). Protocols exceeding USFWS guidelines were also implemented. Great care was observed to ensure both USFWS and ODNR netting requirements were met during the study.

USFWS Netting Guidelines (2007 Agency Draft)

- 1. **Netting Season**: 15 May to 15 August, when Indiana bats occupy summer habitat.
- 2. **Equipment** (Mist Nets): constructed of the finest, lowest visibility mesh commercially available monofilament or black nylon with the mesh size approximately 1½ inch (1¼ –1¾) (38 mm).
- 3. **Net Placement**: mist nets extend approximately from water or ground level to tree canopy and are bounded by foliage on the sides. Net width and height are adjusted for the fullest coverage of the flight corridor at each site. A "typical" net set consists of nets "stacked" on top of one another with heights from up to 8 m (30 ft); width may vary up to 18 m (60 ft).
- 4. Net Site Spacing:
 - ♦ Streams one net site per 1 km (0.6 mi)
 - ◆ Land Tracts two net sites per 1 square km (250 acres)
- 5. Minimum Level of Effort Per Net Site:
 - Two net locations (sets) per net site, with locations (sets) at least 30 m (100 feet) apart
 - Two (calendar) nights of netting
 - At least four net–nights (1 net–night = 1 net set deployed for 1 night); typically, two net sets are deployed at one site for two nights, resulting in four net-nights
 - ♦ Sample Period: begin at dusk and net for 5 hours (approximately 0200h)
 - Nets are monitored at approximately 10-minute intervals
 - No disturbance near the nets between checks
- 6. **Weather Conditions**: net only if the following weather conditions are met:
 - No precipitation
 - ♦ Temperature > 10°C (50°F)
 - No strong winds
- 7. **Moonlight**: avoid net sets with direct exposure to a moon ½ -full or greater typically by utilizing forest canopy cover

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Protocols that were different or exceeded the USFWS guidelines included: netting season from June 15 to July 31; four net locations (sets) per net site, with at least one set being at least 7.5 m high; and two non-consecutive calendar nights of survey. Additionally, two netting sites are required for each square kilometer of forested area within the project area.

2.2 MIST NET SITE SELECTION

Site selection is based upon an expectation of greatest bat activity and an effort to provide survey coverage of the project area. Mist net site selection includes consideration of habitat characterizations described for the Indiana bat in the draft recovery plan (USFWS 2007) and other unpublished research and literature (Brack 1983, Gardner et al. 1991, Garner and Gardner 1992, Kitchell 2002, Schultes and Elliot 2002, and Kiser and MacGregor 2004). Net placement is based upon a variety of characteristics including canopy cover, presence of a flight corridor, water, and forest conditions near the site. General habitat types selected included the following characteristics:

- ➤ Large trees (>16 inches dbh) for maternity roosts
- > An open canopy, apparently important for warming roost sites
- An open, uncluttered understory, used for travel and forage

Nets were typically set to maximize coverage of flight paths used by Indiana bats along suitable travel corridors. Riparian corridors often provide successful mist net sites. However, upland corridors (e.g., trails or logging roads) also provide suitable sites (Brown and Brack 2002). In upland areas, road ruts or other areas of standing water frequently facilitate capture of bats, including the Indiana bat. The actual location and orientation of each net was determined in the field.

2.3 BAT CAPTURES

Bats were identified to species using a combination of morphological characteristics: ear and tragus, calcar, pelage, size/weight, length of right forearm, and overall appearance of the animal. The species, sex, reproductive condition, age, weight, length of right forearm, and time and location, and net site of capture were recorded for all bats. Age (adult or juvenile) of bats was determined by examining ephiphyseal-diaphyseal fusion (calcification) of long bones in the wing. Weight was measured to 0.1 grams using a Pesola spring scale. Length of the right forearm of each bat was measured to the nearest 1.0 mm using a dial caliper or ruler. The reproductive condition of captured bats was classified as non-descended male, descended male, non-reproductive female, pregnant female (based on gentle abdominal palpation), lactating female, or post-lactating female.

When available, bands provided by ODNR were placed on captured bats. Each band had a unique number to identify individual bats. Bands were placed on forearms of captured bats prior to their release at the mist net site. In general, bands were placed on the right forearm for males and left forearm for females. Bat processing and data collection was typically completed

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within 15 minutes of the time the bat was removed from the net. Bats were caught live and released unharmed near the point of capture after processing.

2.4 WEATHER CONDITIONS

Weather conditions were monitored each night of the survey. Conditions recorded include: temperature, wind speed (using the Beaufort scale), percent cloud cover, and moon phase (if visible). Electronic thermometers were used to record temperature, wind speed was determined by use of the Beaufort wind scale, cloud cover and moon phase was visually estimated.

2.5 WHITE-NOSE SYNDROME DECONTAMINATION

Due to concerns over White Nose Syndrome (WNS), equipment was decontaminated following USFWS protocols. Due to the potential spread of White Nose Syndrome (WNS), mist nets, poles, ropes, and morphometric measuring instruments used for this survey were either newly purchased or had not been used at locations where WNS is known to occur prior to the survey.

Mist nets, mist netting ropes, and cloth holding bags were submersed in a solution of Lysol® IC Quaternary Disinfectant Cleaner (Lysol® IC) for a period of time no shorter than 10 minutes and then rinsed between mist net sites. Mist net poles were sprayed with a Lysol® IC solution and left to sit for a period of no shorter than 10 minutes between mist net sites. After the 10 minute period they were spayed down a second time and wiped down to remove any remaining soil or debris.

Vehicles were periodically taken to a self-serve car wash where the entire exterior could be power-washed to remove any dust and soil from the vehicle. Tires, roof-racks, and the beds of trucks received the most attention while cleaning.

During mist netting, bats extracted from nets were placed in disposable paper bags. Bags were used for only one bat and then placed in a 2-gallon sealable Ziplock® bag after use. Cloth holding bags used at some locations were only used once per night and not used again until decontamination protocols mentioned above were taken.

Disposable Nitrile® gloves were worn for handing individual bats and changed between bats. Disposable gloves were placed over leather handling gloves and disposed of in a 2-gallon sealable Ziplock® bag after use. Bat handlers also used Germ-X® between bats for added precaution. Additionally, disposable sandwich bags were used to weigh bats in and disposed of after each bat.

Equipment such as rulers, calipers, and scales were wiped down after each bat with Lysol® wipes and discarded between uses. A new wipe was used after each bat to ensure cleanliness. All nightly disposable items were sealed up in a 2-gallon Ziplock® baggie and disposed of in an appropriate trash receptacle.

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3.0 Results

3.1 MIST NET LOCATIONS

The 15 mist net sites surveyed fell into two categories: upland forest fragments (n=12, 80%) and riparian/impoundment (n=3, 20%; Table 2). Upland mist net sites were generally surrounded by agricultural fields while the riparian areas generally consisted of a collection ditch in which the fields drained. One pond, mist net site 14 (MS14) was netted within the project area. Mist net sites were spread throughout the project area where landowner permissions were granted (Appendix A – Figure 1). All forested areas were scouted thoroughly; however, most provided little in the way of travel corridors (e.g., trails, roads, interior openings) in which net sites could be established. As such, many net sites focused on potential entrance and exit points to the woodlots.

Table 2. Mist net site identification, survey dates, surveyor, general habitat type, summary of bats captured and species diversity during summer mist netting in Huron County, Ohio.

Site Number	Survey Dates	Surveyor ^{1,2}	General Habitat Type	No. Bats Captured	No. Species Captured
MS-1	21 and 23 June	Adams	Upland	8	2
MS-2	26 and 30 June	O'Mahoney	Upland	3	1
MS-3	22 and 24 June	Adams	Upland	27	4
MS-4	26 and 30 June	Adams	Creek	16	4
MS-5	27 and 29 June	Adams	Upland	7	2
MS-6	27 and 29 June	O'Mahoney	Upland	3	3
MS-7	21 and 23 June	Schwierjohann	Upland	5	2
MS-8	22 and 24 June	Schwierjohann	Upland	4	2
MS-9	22 and 24 June	O'Mahoney	Upland	7	2
MS-10	21 and 23 June	O'Mahoney	Stream (branch of Vermillion River)	2	2
MS-11	25 and 27 June	Schwierjohann	Upland	2	1
MS-12	26 and 29 June	Schwierjohann	Upland	1	1
MS-13	28 and 30 June	Schwierjohann	Upland	8	2
MS-14	25 and 28 June	O'Mahoney	Pond	1	1
MS-15	25 and 28 June	Adams	Upland	8	1

^{1 -} Adams and O'Mahoney: Copperhead Consulting

Mist net site conditions were similar to those described by Braun (1950). Common species of trees include white ash, American elm, American beech, hickory spp., black walnut, red maple, silver maple, cottonwood, and black locust. Woodlots were generally densely vegetated with

² – Schwierjohann: Stantec Consulting Services Inc

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some opening where vernal pools persist in the spring (MS01, MS02, and MS03). Other woodlots were maintained by logging and allowed to mature provided the occasional subcanopy foraging opportunity for bats (MS11, MS12, and MS13). In general, mist net sites were located along suspected travel corridors where conditions were good for capturing bats (i.e. funnel effect, road ruts with water for drinking).

3.2 BAT CAPTURE

A total of 102 bats, representing five species, was captured during summer mist net surveys in southern Huron county, Ohio. No federally endangered bats were captured during mist netting surveys. Bats were captured at all 15 mist net sites. Two species were relatively abundant: big brown bat (n=52, 51%) and northern bat (n=25, 25%). These two species represented 75 percent of all bat captures (N=77; see Table 3). The remaining 25 percent was distributed among little brown bat (n=15, 15%), eastern red bat (n-8, 8%), and tri-colored bat (n=2, 2%).

Table 3. Total bats captured by species, sex, reproductive condition, and age during mist netting in Huron County, Ohio.

Onssiss	Adult	Adult Female ¹			Ju	Juvenile		Tatal	
Species	Male	Р	L	PL	NR	Male	Female	- Escape ²	Total
Big Brown Bat (Eptesicus fuscus)	18	3	29	0	1	0	0	1	52
Little Brown Bat (Myotis lucifugus)	9	1	5	0	0	0	0	0	15
Northern Bat (M. septentrionalis)	9	4	9	0	2	0	0	1	25
Eastern Red Bat (Lasiurus borealis)	3	2	2	0	0	0	0	1	8
Tri-colored Bat (Perinyotis subflavus)	0	1	1	0	0	0	0	0	2
Total	39	11	46	0	3	0	0	3	102

P = pregnant; L = lactating; PL = Post lactating; NR = non-reproductive

Sixty percent of all species captured were female while 39 percent were male (Table 3). Surveys were conducted during mid to late June and therefore no juveniles had become volant. Forty-six percent of captures were lactating females and 11 percent were pregnant. No post-lactating females were captured thus further indicating that young of the year were not yet volant. Three female bats (1 big brown and 2 northern bats) were found not to be reproductive (not pregnant, lactating, or post lactating) during field efforts. This condition is not uncommon as either mating was unsuccessful prior to hibernation or other environmental/ physical

² Escape = escaped from net or hand before processing was complete

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conditions may have caused the fetus to abort. Nightly Bat Survey Summary Forms and Bat Survey Forms are provided in Appendix B.

3.3 WEATHER CONDITIONS

In general, weather was typical of summer months in north-central Ohio. Days were usually warm, humid, and sometimes cloudy. Temperatures were within normal averages. Nighttime highs and lows varied and with approaching weather systems (Table 4). Weather conditions were favorable for surveying for Indiana bats during the entire survey period (June 21 to June 30). Site specific weather conditions including temperature, wind speed, and cloud cover are located on each mist net site Bat Capture Data Sheet in Appendix A.

Table 4. High, low, and average of local temperatures for summer mist netting in Huron County, Ohio.

	Ave	erage Temperature °F (°C)	
Survey Date 2011	High	Low	Average
June 21	78.6 (25.9)	68.0 (20.0)	73.3 (22.9)
June 22	75.2 (24.0)	65.4 (18.6)	70.3 (21.3)
June 23	74.1 (23.4)	63.3 (17.4)	68.7 (20.4)
June 24	63.1 (17.3)	59.6 (15.3)	61.4 (16.3)
June 25	70.7 (21.5)	55.4 (13.0)	63.1 (17.3)
June 26	74.1 (23.4)	56.2 (13.4)	65.2 (18.4)
June 27	77.0 (25.0)	66.3 (19.1)	71.7 (22.1)
June 28	79.0 (26.1)	56.5 (13.6)	67.8 (19.9)
June 29	74.4 (23.6)	54.2 (12.3)	64.3 (17.9)
June 30	74.0 (23.3)	62.8 (17.1)	68.4 (20.2)

4.0 Discussion

The objective of this survey was to inventory the bats occurring within the project area during the summer maternity season. A secondary objective was to assess the presence, or probable absence, of Indiana bats using summer habitat within the project area. To effectively investigate the project area, we used guidelines recommended by the USFWS in the most recent (2007 Agency Draft) revision of the Indiana Bat Recovery Plan as well as guidelines provided in the ODNR Cooperative Agreement Addendum (ODNR 2009). Mist netting was conducted during the Indiana bat maternity period, which may have helped reduce any seasonal bias. Weather restrictions were also followed, as well as conducting mist netting in areas with potentially suitable habitat for the Indiana bat.

The deciduous hardwood forests and riparian corridors within the project area provided potentially suitable habitat for Indiana bats. Mist net sites distributed within the project area could be divided into two habitat types: upland woodlots and riparian areas /impoundments. Both habitats were similar in form and generally provided some large trees (>16 inches dbh) for

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maternity roosts, moderate-to-high subcanopy clutter, and moderate-to-closed canopy closure. Although subcanopy clutter and canopy closure were not ideal (ideal = low subcanopy clutter and open canopy closure), the habitat was sufficient to support Indiana bats.

Indiana bats, including reproductive females, have been caught in previous years in neighboring counties, suggesting that they could be present within Huron County and the project area. Biologists selected areas most likely to be used by Indiana bats, as well as other species, in the best available areas in the project area. Areas to the east of the project along the Vermillion River may provide more suitable forest stands conducive for maternity sites, better foraging areas, located closer to permanent water sources, or any combination of these habitat parameters.

The complement of species captured during summer mist netting (5 species) and number of total bats captured (102 individuals) was typical for the geographic location and type of habitat sampled. The capture of two species, big brown bats and northern bats, were notably higher than other species.

5.0 Conclusion

No federally endangered Indiana bats were captured during mist net surveys at 15 sites at the Greenwich Wind Project. The mist-netting survey was designed in accordance with the ODNR and the USFWS guidelines to maximize the chances of capturing Indiana bats. A total of 15 mist net sites were located throughout the project area. The placement of mist net sites was relatively evenly distributed throughout the study area.

Despite the sampling effort, no Indiana bats were captured within project area. Although it is not possible to determine with absolute certainty the absence of Indiana bats within the project area, the lack of Indiana bat captures at mist net site locations suggests their probable absence during the summer reproductive season in the project area. This may be due to the differences in the availability of habitat for roosting and/or foraging activities (i.e., forest cover, water source, habitat connectivity, food sources). These results indicate that the project is not likely to adversely affect the Indiana bat during the summer maternity period.

GREENWICH WIND PROJECT HURON COUNTY, OHIO Literature Cited August 24, 2011

6.0 Literature Cited

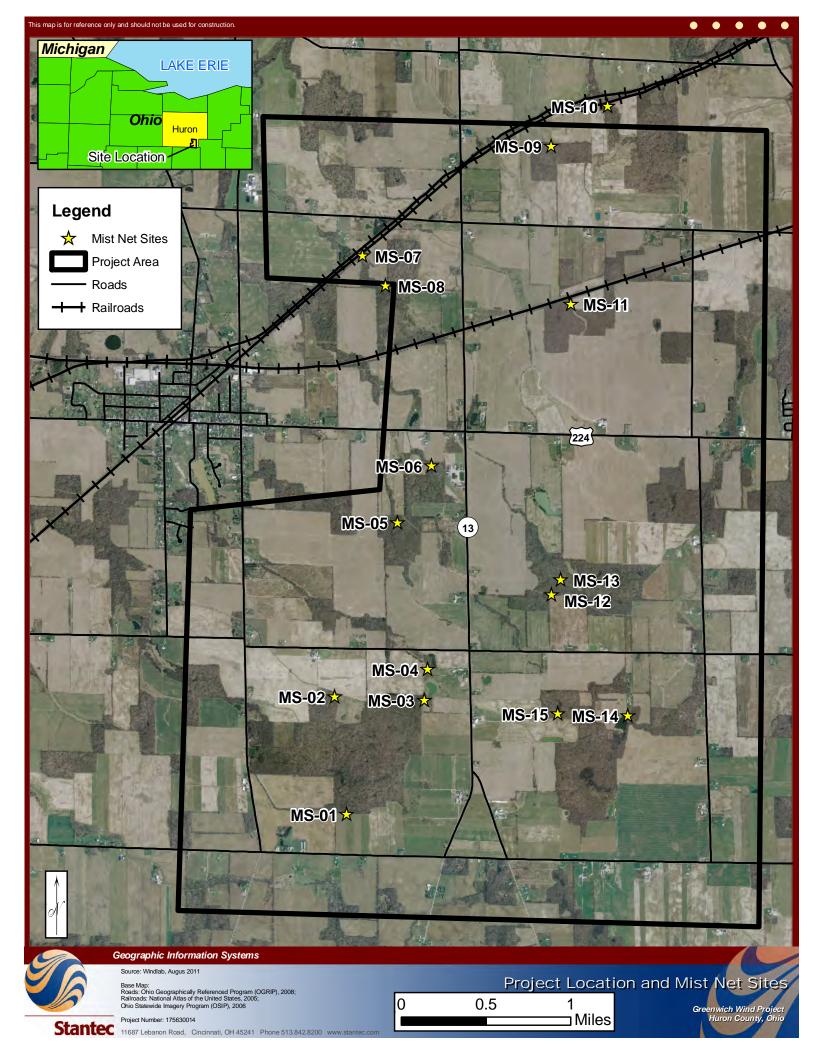
- Brack, V. Jr., D.W. Sparks, J.O Whitaker, Jr., B.L. Walters, and A. Boyer. 2010. Bats of Ohio. Publication Number 4, Indiana State University, Terra Haute, Indiana, 92 pp.
- Brack, V., Jr. 1983. The nonhibernating ecology of bats in Indiana with emphasis on the endangered Indiana bat, *Myotis sodalis*. Ph.D. dissertation, Purdue University, West Lafayette, Indiana.
- Braun, L. 1950. Deciduous Forests of Eastern North America. The Blackburn Press: New Jersey, 596 pp.
- Braun, L. 1961. The Woody Plants of Ohio. The Ohio State University Press: Ohio, 362 pp.
- Brown, R. J., and V. Brack, Jr. 2003. An unusually productive net site over an upland road used as a travel corridor. Bat Research News; 44(4): 187-188.
- Ernst, J. E., and N. H. Martin. 1994. Soil Survey of Huron County, Ohio. Ohio Department of Natural Resources, Division of Soil and Water Conservation and U.S. Department of Agriculture, Soil Conservation Service, 184 pp.
- Gardner, J. E., J. D. Garner, and J. E. Hofmann. 1991. Summer roost selection and roosting behavior of Myotis sodalis (Indiana bat) in Illinois. Unpublished report. Illinois Natural History Survey, Champaign, Illinois.
- Garner, J. D., and J. E. Gardner. 1992. Determination of Summer Distribution and habitat Utilization of the Indiana Bat (*Myotis sodalis*) in Illinois. Unpublished report. Illinois Natural History Survey, Champaign, Illinois.
- Kiser, J. D., and J.R. MacGregor. 2004. Indiana bat (*Myotis sodalis*) Mist net Surveys for Coal Mining Activities. Pp. 45 62 *in* The Indiana Bat and Coal Mining: A Technical Interacive Forum (K. Vories and A. Harrington, eds.). U.S. Department of Interior, Alton, Illinois. 224 pp.
- Kitchell, M. E. 2002. Roost Selection and Landscape Movements of Female Indiana Bats at the Great Swamp National Wildlife Refuge, New Jersey. Unpublished Master's Thesis, Virginia Polytechnic Institute and State University, Blacksburg, Virginia. 174 pp.
- Kudlu, P., A. Mann, J. Duffy, and V. Brack, Jr. 2009. A 2009 Winter Census of Bats of the Lewisburg Limestone Mine, Preble County, Ohio. Final report submitted to Ohio Department of Natural Resources, Division of Wildlife, Columbus, Ohio.

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Literature Cited August 24, 2011

- (ODGS) Ohio Division of Geological Survey. 1998. Physiographic regions of Ohio: Ohio Department of Natural Resources, Division of Geological Survey, page-size map with text, 2 p.
- (ODNR) Ohio Department of Natural Resources. 2009. On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind. 40 pp PDF available online at: http://www.dnr.state.oh.us/Home/wild_resourcessubhomepage/ResearchandSurveys/WildlifeWind/tabid/21467/Default.aspx.
- Schultes, K. L., and C. Elliott. 2002. Roost Tree Selection by Indiana Bats and Northern Bats on the Wayne National Forest, Ohio. Unpublished Master's Thesis, Eastern Kentucky University, Richmond, Kentucky. 105 pp.
- (USFWS) U.S. Fish and Wildlife Service. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Ft. Snelling, Minnesota, 258 pp.

Appendix A - Figure



Appendix B – Survey Data Sheets

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: <u>Cr</u>	connich Wind Pro	girct Wi	_M5-1	Date	23 Jun 2011
Surveyors: JJA	, CDS				
Survey Type:	Hibernacula	Summe			
Site description:	rield edge and	Wooded	access	rd	to matere
woodlot					

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	20.3	1.5	827,
End	1225	17.4	2	90.7

Notes: Lish+ rain started falling @ 2215 rets closed 5min, will add 5m to end of saivey

Trap type and location

	Trap type Size (note if stacked	Location (UTM NAD83 Zone 17N		
	mist nets)	Easting	Northing	
1	Mist Net	12m ×8m 3high	11134 18/80	4539454
2		6m x B m 2high	0373973	4539480
3			0373969	4539504
4	1	上	0373982	4539538
5				
6				
7				11

Total ne	t area: 201 m		
Notes:	MSOI		

FORM WD04 OF10 DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Project Name: Greenwich Wind	Project	Date:	23 Jun	2011

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotal
Big brown	2	2			4
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern		1			
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	5

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: Orcentich Wind Project

WLMS-1	WLMS-1	-		11701	-				
	Time)	Reproductive	Measurer	nents (mill	Measurements (millimeters and grams)	rams)	Net#	Recapture/Band #
Species	(military)	Sex	status	Forearm	Ear	Tragus	Weight		
MVCE	2227	TI	NR	38	4/	00 1	7.5	7	
COEIN	77 50	1	1	36	Ø	9	20	-	
	-	3 -	ò [s	5			ンナー		
MPTY	0000	3	27	-0		0	1		
HOPY	9118	3	マア	44		V	V, V		
DAG	0220	F	Lac	48	1)	5	195		
		Ī							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO) 1.2, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE) 1, and Indiana (MYSO) 1.2.

Radio-telemetry, and documentation photographs required 1. Banding required 2.

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OF NATURAL	DIVISION OF WILDLIFE
PARIMENT OF	DIVISION (

of

Reconfine/Rand #	recapialis Dans n										
Not #	ואכר ש										
rams)	Weight										
Measurements (millimeters and grams)	Tragus										
nents (milli	Ear										
Measurer	Forearm										
Reproductive	status										
Con	NOC.										
Time	(military)										
Chanian	openes										

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

		en wich Wind	Plujeet !	JE WLMS-1	Date	: 21 Jun 201
Survey	ors: JVA,	2135				
	• *	Hibernacula	Summ d woodlo		rodd	West of
R 13	North	of Bageline	Rd			

Time and Weather

Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
2100	237	4	100
A /F	20,3	Ц	85.N
	7100 2100 045	2100 23.2	2100 23.7 4

Notes: Rained until 2045

Trap type and location

	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Net	12m×8m (3high	0374008	4539454
2	(6m Abn (2hish)		4539480
3		1	Ø37-3969	4539584
4		1	0373982	4539538
5				
6	H .			
7				

Total net area: LB4 m2	
Notes: MSO	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Granhich Wind Project

Date: 21 Jun 2011

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
opecies.	Male	Female	Male	Female	Subtotal
Big brown	2	-	1-1	-	2
Evening				/	
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern	1	1	~	_	1
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	3

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: Granwhich wind Project

Date: 21 Jnn 20

200000000000000000000000000000000000000	7		Reproductive	Measure	ements (mill	Measurements (millimeters and grams)		NTo+ #	Recentive/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	ght	TACE	Transferration of the second
EPFU	774	3	NR	45	コ	8	0.8]	-	
DAG!	7231		R	74	=	0	155	-	
			NIO	ارد	4	٥	>>	2	
MYSE	2325	3	NK	55	-	-	C	-	

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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Species	TILLE		Keproductive	Measure	ments (mill	meters and g	rams)	NIA ##	Decomposed the
	(military)	Nex O	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	# 1241	Nevapiui er Banu m
								W	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:\	NLMS-2			Date:	26 June 20	1)
Surveyors: Jes	sica o' Mal	ony, will	iam a	arcia		
Survey Type:	Hibernacul	a Sun	nmer			
Site description:	Forested	wood lot	with	Frails.	Sprounded	
hickory, bird	Beans R chi beech.	eild and	Pasti	vre. Domi	nant veg-red i	naple

The Lot	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	8105	23.4	1	20010
End	0205	16.3)	0%

Notes:

Trap type and location

	Trap type	Size (note if stacked	Location (UTM	(NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Not	2h x 12m	03 73 894	45 40 576
2	mist net	2h x 6m	63 73 863	45 40 579
3	mist net	2hx6m	03 73 849	45 40 533
4	Mist net	3hx6m	03 73 820	45 40 504
5				
6				
7				

Total net area: 172,5 m²

Notes: Net 4 paross small stream whithe water except a few puddles, MSD2

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: WLMS - 2	Date: 26 June	2011	l
------------------------	---------------	------	---

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
species	Male	Female	Male	Female	Subtotal
Big brown	1				2
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
	1			Total:	2

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Project Name: WLMS - 2

BAT SURVEY FORM 205W Date: 26 June 2011

Measurements (minimeters and grains) Net # Forearm Ear Tragus Weight 48.0 17.0 7.0 10.0 1.0 47.0 16.0 8.0 19.0 1.0 1.0 47.0 19.0 1.0<										V
22:35 F PR 43.0 14.0 7.0 16.0 8.0 19.0 19.0	Species	Time	Sex	Reproductive	Measuren	ents (millin	Tragus	Weight	Net#	Recapture/Band #
22:35 F PR 47:0 16:0 8:0 19:0		(minimary)		Smins	4000	1	, ل _ا	- / > >	7	
22:35 F PR 47.0 16.0 8.0 19.0	たりたり	22:00	3	NR	70,0	17.0	7.0	1000	+	
	EPEU	22.25	η	PR	0.th	16.0	0.8	19.0	4	
										1
			1							
			1							1
			1							
										1

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

OHIO DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

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Decomposition 4	vapunctually #										
D											
Not #	ואפרע										
ams)	Weight										
neters and gr	orearm Ear Tragus Weight										
nents (millin	Ear										
Measuren	Forearm										
Reproductive	status										
Comme	SCA										
Time	(military)										
C	Species										

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: WLM5-2	Date: 30 June 2011
Surveyors: Jessica O'mahony & Wil	liam Garcia
Survey Type: Hibernacula Sumn	
Site description: Forested woodlot with	trails. surrounded by ourn a bean
fields, and pastures, borninant veg.	- red maple, butternut hichory,
Time and Weather	

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	21:05	21.90	3	ø%.
End	02:06	17.40	1	15%

Notes:

Trap type and location

Set #	Trap type	Size (note if stacked	Location (UTM	NAD83 Zone 17N)
	(harp trap or mist net)	mist nets)	Easting	Northing
1	mist net	3h × 12m	03 73 894	45 40 576
2	mist net	2n x lom	03 73 863	45 40 579
3	mist net	2h x lem	03 73 849	45 40 533
4	mier net	2h × 6m	03 73 820	45 40 506
.5				
6				
7				

Total net area: 172.5 m²

Notes: increased Net 1 height after observing bat plight heights on night 1.

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Project Name:	ULMS-2	Date:	30	June	2011
---------------	--------	-------	----	------	------

Capture summary

Species	A	dult	Ju	venile	Subtotal
бреска	Male	Female	Male	Female	Juniotal
Big brown	l				
Evening					
Silver-haired	TI CONTRACTOR OF THE PARTY OF T				
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	

16.3

Notes:	
1.1	135.0
	1 6
	1. 2
	-5.7
	4.5
	. 7
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BAT SURVEY FORM

Project Name: u)um5-2

MSOL

Date: 30 June 2011

	Time		Reproductive	Measure	nents (milli	meters and g	rams)	Net#	Recapture/Band #
Species	(military)	Sex	status	Forearm	Ear	orearm Ear Tragus Weight	Weight		1
U404	(Ma	33	NR	44.0	17.0	8.0	16.8	14	
		1							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

Page of

17 - T	Recapture/Band #											
Tr. A. III	# Joe											
ams)	Weight											
neters and gr	orearm Ear Tragus Weight											
ents (millir	Ear											
Measuren	Forearm											
Reproductive	status											
ć	Sex											
Time	(military)											
	Species											

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: G	reennish Wind Project	MLMS-3	Date: 22 Jun 2011
Surveyors: JJA			
Survey Type:	Hibernacula	immer	
Site description:_	Nood lot bordered lo	agriculture	2

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	24.0	2.5	801.
End	0710	19.1	۷(201

Notes: Brief Sharer around 2230, nets were dosed for Smin, extended night an entra Smin to make up for time nets were closed

Trap type and location

42.4	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Ne+	8×12 3 stocked	0374747	4540542
2		6×6 2 stacked	0374722	4540565
3		6x9 2 stricked	0374672	4540557
4	1	6x6 2 stacked		4540524
5				
6				
7				

	200)	
Total net area:	222	W	

Notes: MS03

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name:	Greenwich	Wird	President	Date: 22 Jan 2011
	WLMS-	3		

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotat
Big brown	0	9	0	0	9
Evening	R	2	6	0	7
Silver-haired					
Eastern red	Ø	2	0	0	2
Hoary					
Tri-colored bat					
Little brown	7	2	Q	0	9
Northern		1	Ø	0	2
Small-footed		37			a .
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	22

BAT SURVEY FORM

Project Name: Green wich wind project

Project Name:	200			Magazinar	MS03	meters and o	rams)	1	
Species	Time	Sex	Reproductive	Forearm	Ear	Measurements (millimeters and grains) rearm Ear Tragus We	Weight	Net#	Recapture/Band #
PPFU	2115	M	لدر	廿	12	4	175	N	
ASS	7//5	T	لعر	77		4	12.5	-	
PFW	2115	П	Lac	48	=	7	15.5	1	
I PEU	2/33	n	Lac	44	7	6	, C	ا ح	
TSAW.	7153	3	NR	34	7	220	4.5	7 1	
MYLLY	2153	M.	NX	36	7	6	29	, (
MYCH	2774	M	NR	4	=	20	100	1/2	
MPLU	4755	×	NR	36	=	U	6,5	10	
MYM	7230	2	NR	75	-	7	20.5	- 1	
MYSE	2235	T	lac	25	7	2	2	- 0	
EPFU	2240	T	L9(16	7	10	, \rac{1}{2}	1	
MYCH	12244	3	NR	56		5 5	\$	-	
FIRM	7257	T	[9(4c	C	,0	15.0		
EPFG	45-20	T	3	HY	19	0	77	-	
EPFLA	4525	T	lac	44	1	16	5.07	-	
MYLY	ts-1	3	NP	36		U	1.0	-	
NUS	6525	T	Lac	1-2-1	0	N	1.5	4	

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

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	STO															
Description Description	Necapture/Danu #										4	117				
Mark	ואכן #		7	Ч												
ams)	Weight	19.5	9.0	7.0	17.5	21.0										
Measurements (millimeters and grams)	Tragus	9	S	S	~	9										
nents (millin	Ear	12		.	6	(5)										
Measurer	Forearm	5h	38	37	43	48										
Reproductive	status	Lac	Lac	NR	ď	Lac							-			
C	Sex	17	П	٤	4	4										
Time	(military)	2337	5346	2349	SHAD	poord										
2	species	EPFU	MYLG	MYCH	1.APS	FPFW		4								

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:	Greenwich W.	ind Project	VLM5-3 Date:	24 Jun 2011
Surveyors: JJ	A, CUS			
Survey Type:	Hibernacu	la Sum	mer	
Site description:	. Mature wood	dlot boordore	ed by Ag. fiel	ds
Time and Wea	ther			
NAME OF STREET	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	17.0	2	557
End	0205	16.0		85.1

Notes:

Trap type and location

0 . 11	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist New	BKD 3 Stacked	0574747	4540542
2		6×6 2519ctd	0374722	4540565
3		6×9 2 Shiled	0374672	4590557
4	1	6x6 25194rd	0374703	4540524
5			/ -	
6				
7				

		222	2
Total	net area:	LLL	M

Notes: MSD3

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Greenwich Wind Project	Date: 24 Jun 2011
WILMS-3	

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotat
Big brown		1			2
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown)			2
Northern		1			1
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	S

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BAT SURVEY FORM

Reproductive Mea Status Forear Cac SI NR 48 NR 34 NR 37	Project Nan	ne: breenwich	2,5	Project Name: Orcewich Wind Project	M503	S				Date:
Sex Status Forearm Ear Tragus Weight Tragus Weight Tragus Weight Tragus Weight Tragus Tragus Weight Tragus Weight Tragus Weight Tragus Tragus Tragus Tragus Weight Tragus Tragus Tragus Tragus Weight Tragus Tragus Tragus Weight Tragus Tragus Tragus Weight Tragus Tragus		Time	·	Reproductive	Measure	nents (milli	meters and g	J	Net #	Recapture/Band #
17/08 F CC SI IT S 48 11 4 17 9 6.5 85 85 85 85 85 85 85 85 85 85 85 85 85	Species	(military)	Sex	status	Forearm	Ear	Tragus	ght	J	1
2145 M NR 48 11 4 17.8 2010 F L.c. 37 11 5 85 2151 M NR 37 11 5 7.5	FPFY	8012	1)	لدر	15	7	\v	19.5	1	
8/51 M NR 37 11 5 7.5 8/151 M NR 37 11 5 7.5 8/5	FOFG	7145	3	NR	2017	=	عــ	17.0	-	
1	NA V C F	2010	8	NR	74	4	_0	6,5	7	
8151 M NR 37 11 5 75	17/1/25	A A A	7		45		5	000	7	
MISI M NIS 3+ 11	MILLA	0000	1	5 5)	-	7	7	7	
	MHY	1510	3	NIC	5+	=	V	2		
			1							
			1							
			1							
			1							
			1							
			1							
			1							
			1							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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734		Г											
η	Necapulica Dang #												
TATA CIT	ואכו #												
ams)	Weight												
meters and gr	orearm Ear Tragus Weight	,											
nents (millin	Ear												
Measuren	Forearm												
Reproductive	status												
Com	SEA												
Time	(military)												
C. CO.	Sheeres						*						

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:	Greenwich W	ind Prairet	WLMS-4 Date:	26 Vun 2011
Surveyors: 00				
Survey Type: Site description	Hibernacu	la Sumi		
Time and Wea	ther	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2106	18.9		151
End	0206	14.5		Ø.

Notes:

Trap type and location

2	Trap type	Size (note if stacked	Location (UTA	1 NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Wist Net	Height Len Bhigh	0374781	4540836
2		6 × 6 24ia	0374818	454 0834
3		6 × 1) 24:54		454,6878
4		6×6 Zhak		4540878
5				
6				
7				

Total	net area:	21	6	WJ	
I cheer	not urous	-	_		۰

Notes: MS04

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Green wich Wind Project	Date:	26	Jag	204	
WLMS-4				1	

Capture summary

Species	A	dult	Ju	venile	Subtotal
opecies	Male	Female	Male	Female	Subiotal
Big brown	14	3			7
Evening					
Silver-haired					
Eastern red					1
Hoary					
Tri-colored bat		1			1
Little brown		1			7
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	11

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BAT SURVEY FORM

Project Name: Speakish Wind Project

Date: 26 Jun 20

010/03/03	7		Reproductive	Measure	Measurements (millimeters and grams)	meters and s	rams)	7 To+ #	Recantire/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	Weight	14000	
PFU	213	3	NR	44		5	15.5	-	
ER2	722	3	ND	44	نا	5	0.91		
FPFU	2222	77	Lac	36	-W	6	22.0		
FPFW	2,22	3	NR	199	13	5	215	-	
navi la	75 66	n	Lac	\rangle \rangle \rangle \rangle		4	10.0	,	
ARC	7211	3	N/R	42	D	7	12,5		
1393	7226	7	lac	44		5	20.5		
2000	A Co	Π.	100	94	12	5	19.5	1	
Or CC	1000	7	,0	٠,٠٠٠	Q	-5	0-	-	
LEDA	218	3	NA.	146	13	5	53		
ETT	(= \infty	, =	(C)	710		3	20	,	
M. K. C.	021V	3	21	45	-	V	C		
		1				7			

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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Reproductive Measurements (millimeters and grams)
status

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Surveyors: JJA				
urvey Type:	Hibernacu	ıla Sumr	ner	
ite description:_				
Fime and Weath	er			
Fime and Weath		Temp (°C)	Wind speed (m/s)	Cloud cover (%)
	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Time and Weath		Temp (°C)	Wind speed (m/s)	

Trap type and location

	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N
Set#		mist nets)	Easting	Northing
1	Mist Wet	82 x9 3high	0374781	4540836
2	1	and the second s	037 4810	454 0834
3		6×12 Zhish		4540878
4			0374828	454 0870
5				_4 = = =
6				
7				

Total net	area: 216 m2	_	
Notes:_	MSOY	2 - 2	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name:	Greennily	Vird	Date: 30) un	201
Charles and the second			-		

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Bubtotal
Big brown		2			2
Evening					
Silver-haired					
Eastern red	1	1			2
Hoary					
Tri-colored bat					
Little brown					1
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	5

BAT SURVEY FORM

Project Name: Greenich Wind Project Wens-4

Penroductive Measuren	3		Deproductive	Measurer	nents (millimete	Measurements (millimeters and grams)		Nine	Decembers/Rand
Species	Time	Sex	Reproductive status	Forearm	Ear	Tragus	ight	Net#	Recapture/Band #
IARO	2201	+0	Lac	£b	2	4	15.5	-	
MYC	2330	+0	Lac	35	13	6	00		
EPFU	2002	10	Lac	48	=	5	11.0		
PEG	302	10	لمر	49	تر	6	21.5	-	
FABO.	0121	9	NR	39	∞,	N. SI	11.0	-	
		1							
		1							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO) 1.2, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE) 1, and Indiana (MYSO) 1.2.

Radio-telemetry, and documentation photographs required 1. Banding required 2.

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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	0	_	-	_	_	_	_	_	_						
η r - ω	Necapture/Dailo #														
17 TO 1N.	ווכר #														
neters and gr	orearm Ear Tragus Weight														
ents (millir	Ear														
Measuren	Forearm														
Reproductive	status														
······································	254														
Time	(military)														
Ü	openes														

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Grands					
Surveyors:	1.0.0				
Survey Type:	Hibernacula	Summer	i)		
Site description:	Noodlot that	was logged w	ithin last	Syls Shillounded	
by as fields	Egnopy de	ominated by (3/ack Waln	n+, Cotonwood, W	hipe/

(6/5-1/3)	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2106	21.8	4	90%
End	0210			01

Notes:	

Trap type and location

	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	M:5+ Net	6m× 9m 2his	0374492	4542235
2	1	6m / 6m 22:5m		4542275
3		No.	0374504	4542298
4	1	6m x9m 2his	0374548	4542798
5	[h			
6				
7			9	

Total ne	et area: 122m	-	
Notes:	MS05		

FORM WD04	OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08	DIVISION OF WILDLIFE

Project N	lame:	Greenwich	Wind

Date: 27 Jan 2011

WLM 5-5

Capture summary

Species	A	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotal
Big brown		5			6
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern	1				
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	7

BAT SURVEY FORM

Project Name: Granwich Wind Project こころう

	Time		Reproductive	live Measurer	nents (milli	Measurements (millimeters and grams)		Not #	Recapture/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	ight	TACCE	
FPFG	7174	T	Lac	45	12	5	198	a	
EPF W	5516	7	لعن	49	=	7	2	5	
MYSC	MODE	3	N.P.	36	Ţ	0	52	W	
100	7 7 7	7		4	<u></u>	5	21. 5	W	
EALA	20018	1		1.51			77 27	ر	
EPFU	8100	+	Coc			0	17. 7	-	
EPFO	2500	7	PS	50		7	73.5	1 4	
FOFE	2110	-4-	رد ر ا	Lh	1,44	5	23.6	4	Recepture
EDEC	8510	3	NP	1.17	- ا	5	11.5	W	
		-							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

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Species					The second secon		-		
	(military)	Sex	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	ואכן #	Necapture/Danu #
								5	

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:	Greenwich W	ind Moject	Date:	27 Van 2011
Surveyors:	JA ; COS			
Survey Type:	Hibernacu	la Sumi	mer	
Site description	See 2	7 Van Del	5 Sheet	
Time and Wes	ither			
AND STATE	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2106	21.6	.5	0
End	0208	14.6	0	0

Notes:

Trap type and location

	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N)
Set#	(harp trap or mist net)	Heismist nets)	Easting	Northing
1	M:5+ Ne+	6×9 Zhigh	0374492	4542235
2		6 x 6 2 high	037 4484	4542275
3		8×12 3high	0374509	4542298
4		6x9 Zhigh	7	4542298
5			X	
6				
7				

Total net	area: 222 m		
Notes:	ms05		

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

Project Name: Greenwich Wind	Date: 29 Jun 2011
I of Mc C	

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
	,			Total:	0

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BAT SURVEY FORM

Project Name: Greenwich Wind Project Species (military) Time 52 Sex Reproductive status WEM5-5 Forearm Measurements (millimeters and grams) M505 Ear Tragus Weight Net# Date: 29 Jun 2011 Recapture/Band #

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

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Species (military)		status	Forearm Ear Tragus Weight	Far	Transfer	VITAIRLA	וורניי	Accapial Canal
				137	Iragus	Weigne		
	-							
	5.5							

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: W	ms-6	Date: 27 June 2011
		hony & william Garcia
Survey Type:	Hibernacula	Summer
Site description: F	prested train	is, stream, and edge. woodlot
gurrounded	by crop land	Dominant veg: Maple, Elm, Locos+

Time and Weather

College to Just	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	21:05	23.19	3.	65 %
End	02:05	20.10=	2	10%

N 1				
Notes:				
LIOLUS.				

Trap type and location

0.44	Trap type	Size (note if stacked	Location (UTM	NAD83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	mist net	2h x 9m	0374824	4542808
2	mist net	3h x 9m	0374807	45 42 782
3	mist net	2h × 6m	03 74853	45 42 768
4	mist net	2h × 6m	0374891	4542 771
5				
6				
7			1	

Total net area: 172.5 m²

Notes: Stream reg. too dense 3 canopy too law to net.

MSD6

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: 11116 - 4	Date:	27 June	2011

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtota
Big brown	1				1
Evening					
Silver-haired					
Eastern red	1				1
Hoary					
Tri-colored bat					
Little brown					
Northern	1				4
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	3

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BAT SURVEY FORM

Project Name: WIMS-4

MSOL

Data: 27 Tell

	Time	Species (military) Sex	72.00 M	1	00.10	EPPU 00:20 m							
	Reproductive	1-30	Z Z	610	1	NK							
=	Measurer	Forearm	40.0	0 42	π (0.10							
11000	nents (milli	Ear	12.0	0,4	2	0.0						- 1	
	Measurements (millimeters and grams)	Tragus	S	10.0	190	0.0							
	grams)	Weight	12.0	4.0	430 EV 30	10							
	Net#		1	12	12								
	Recapture/Band #	* 11 OF S											

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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(military)	status	Fоrearm (Ear	orearm Ear Tragus Weight	Weight	
,						

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:_	WLMS-6	Date: 29 June 2011
		hony & William Garcia
Survey Type:	Hibernacula	Summer
Site description:	Forested trail	s, stream, and edge. wood lut
Surrounded	by croplan	d. Dominant veg. Maple, Elm Locast

Time and Weather

M. Service Co.	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	21:05	19.30	1	Ø
End	02:05	12.40	Ø	8

Notes:

Trap type and location

~	Trap type	Size (note if stacked	Location (UTM	(NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Nets	2h x 9m	03 74 824	45 42 808
2	mist nets	3h x 9m	03 74 807	45 42 782
3	mist nets	2hx 6m	03 74 853	45 42 768
4	mist nets	ahx 6m	03 74 891	45 42 771
5				
6				
7				

Total net area: 192.5 m²

Notes: Stream vege too dense and canory too low for net

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: WLM 5 - 10	Date: 29 June 2011
--------------------------	--------------------

Capture summary

Species	A	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	Ø

BAT SURVEY FORM

Project Name: WLMS - 6

	Time		The same of	Measuren	ements (millir	neters and g	ams)	Not #
Species	(military)	Sex	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	Wer#
		3						
	JAN.	10						
	0							
1	000							

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

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Species (military)	ij	reproductive	Measure	HELLS (IIIII	micuto and g	rams)	Not#	Pacantina/Band #
	SCA	status	Forearm	Ear	orearm Ear Tragus Wei	Weight	Acres (Necaptule Dallo #

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Wind	LAB - Cheswo	cut, 014	Date: 21 June 2011
Surveyors: 5. S	hwierscham	Selle L. Johns	of (STANTEC)
Survey Type:	Hibernacula	Summer	
Site description:	STED Service	ROSS Alona	RR TRACKS; Numerous
WATER Files	ROM RUTS		

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2050	2000 Z3.1	1-3	100
End	0220	C2200	1-3	70

Notes: Lieut RAW Delayer oferic of NOTS

Trap type and location

Set#	Trap type	Size (note if stacked	Location (UTM NAD83 Zone 17N)		
Set #	(harp trap or mist net)	mist nets)	Easting	Northing	
1	MIST NET	9mxlm/2 Tien	410244.1	822947.7	
2		Cenzim/2Tia	410245.1	82 29 46.3	
3		Lemikan / stien		8229 43.8	
4		bm+lem/2Tin	410247.9	8229 42.	
5					
6					
7					

Total	net area:	Ni	30	mz	

Notes: MS07

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Wino LAB - GREWWich, OH

Date: 21 June 2011

Capture summary

Species	A	lult	Ju	venile	Subtotal
opecus	Male	Female	Male	Female	
Big brown		V			1
Evening					
Silver-haired					
Eastern red *	UNKN	rowal			
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
		/		Total:	2

Notes: Escales From Net. Assumina ADUIT AS NO JUVENILES Were CAPTURED YET THIS SEASON (REESONALLY).

BAT SURVEY FORM

Project Name: Charge Windlas-Caculada, Oit MSO7

Date: 21 Some Zoil

	Ime	8	Keproductive	Measurer	nents (milli	Measurements (millimeters and grams)	rams)	Not #	Pacelland #
Species	(military)	Sex		Forearm	Ear	Tragus	Weight	41001	necapitate/Daily #
EPFU	2200	T	7	48	11	9	20.5	3	MA
1480	2215	1						2	Escales from not
			/						
			/			/			/
						/			
						\			
		1							/
					>			$\hat{}$	
		_			<			/	
	/	/						/	
							/		
			/				/		_
			/				7		
				/					•
1			,						

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO) ^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE) ¹, and Indiana (MYSO) ^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE



Species	Time	Sex	Reproductive	Measurer	nents (mill	Measurements (millimeters and grams)	gams)	Net#	Recapture/Band #
Species	(military)	DVA	status	Forearm	Ear	Tragus	Weight	TACK III	Nevapanier
									,
/									

NIGHTLY BAT SURVEY SUMMARY FORM

Surveyors: J.	Schwi	catchans	& L. Juliuson	(STANTEL)
Survey Type:		rnacula	Summer	
Site description:	See	21 June	DATA SHEET	

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2030	21.3	1-3	70%
End	0215	18.3	1-3	90%

Notes:	
INCHES.	
TIOTOD.	

Trap type and location Sec 21 June DATA SHEET

Set #	Trap type	Size (note if stacked	Location (UTM N	4D83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1		14		
2				
3				
4				
5				
6				
7				

Total n	et area: ~/80,~~	
Notes:	ms07	

Project Name: Wholas: Greenwich, of

Date: 23 June 2011

Capture summary

Species	A	lult	Ju	venile	Subtotal
opeus	Male	Female	Male	Female	Bubiotai
Big brown		2			2
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern	1				- 1
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	3

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: Windlas; Garanwith, 614

4.05W Date: 23 Jime 2011

					_	/	/				0510 354W	opecies (military)	
	/	X	1	/					7	5	MO	אסט (ערוו	O.
								\	7	i	→	100	Keproductive
									1	4le	22	Forearm	Measure
	X		/						(10	م	Ear	nents (mill
							/	_	1	N	کی	Tragus	Measurements (minimeters and grams)
										19.5	6	Weight	To leave
		X	/						W	1	_		Net#
									Releases QUET. Breaking Dew)	NIA	NIA		Recapture/Band #

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

1500				_	1	_						_
December (Dead #	necapulie/ Danu #											
Mat 11	INCL #											
ams)	Weight											
meters and gr	Forearm Ear Tragus Wei											
nents (milli	Ear											
Measurer	Forearm											
Reproductive	status											
Com	Sex	IJ										
	(military)											
Canalina	Species											

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: W.A.	DLAB: Granwhich	01+	Date: 223wc 211
Surveyors: J. 5	chwier John V	& L. Johnson	
Survey Type:	Hibernacula	Summer	STREAM
Site description:	SW Portion of	PROJECT AREA; Field	& WOODLIT JUST
SOUTH OF WI			

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2040	23.8	8-12	45%
End	0220	186	0	20%

Notes: Closed NOTS From 2230-2239 Due To LIGHT RAIN

Trap type and location

Set #	Trap type	Size (note if stacked	Location (UTM	NAD83 Zone 17N)
SCI #	(harp trap or mist net)	mist nets)	Easting	Northing
1	MIST NET	9mx9m/3Tier	410231.0	82 29 40.6
2	1	baxlon/2Tien	4102289	82 29 42.3
3		bonxbon/zTien	4102 28.7	82 29 40.3
4	1	lanx3m/1Tien	4102 28.9	822938.8
5				
6				
7				

Total net as	rea: ~ / // / /		
Notes:	m508		

Project Name: Windas Greenwith, OH

Date: 225me 2011

Capture summary

Species	A	dult	Ju	venile	Subtotal
opecies	Male	Female	Male	Female	Subiotai
Big brown	1+0	M12-			2
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern	l				ı
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	3

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: Wirolas Gazes of 014

W208

Date: 22 June 211

						MYSE :	EPFU	EPFU	Species	410	
						2250	2210	2210	(military)	Time	
						3	1	3	Sex	Cau	
						>		→	status	Reproductive	
						34	4	1	Forearm	Measure	
	7					12	DCHED	1	Ear	ments (milli	
						6	00	2,0	Tragus	Measurements (millimeters and grams)	
						6			Weight	rams)	
						7	12	И		Net#	
						NA	NIA	NIA	The state of the state of	Recapture/Band #	

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required¹. Banding required².

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

(miltary) Sex status Forearm Ear Tragus Weight Net#	0	Time	t	Reproductive	Measure	ments (mill	imeters and g	rams)	Maria	# F C)
	ecies	(military)	Residence of the	status	Forearm	Ear	Tragus	Weight	# iner	Kecapture/Band #

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Winglas Green in	ich, OH	Date: 24 Place 2011
Surveyors: J. Schward	m & L. Dollwiso	7
Survey Type: Hibernacul		
Site description: See 22-32	un Zoil PATA SIENT	

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2030	16.4	Ð	30 %
End	0200	15.4	1-3	100%

Notes:		
NOIES-		

Trap type and location
See 22 Int Zoil En NET Cours.

Set#	Trap type	Size (note if stacked	Location (UTM)	NAD83 Zone 17N)
561#	(harp trap or mist net)	mist nets)	Easting	Northing
1				
2				
3				
4				
5				
6				
7				

Total ne	et area: ~17/m ²	
Notes:	M508	

Project Name: Windo Green wish, OH

Date: 24JTre 211

Capture summary

Species	A	lult	Ju	venile	Subtotal
opecies	Male	Female	Male	Female	Subtotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern		l l			t
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	1

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: Win LAB; Gazenwick, OH

MS08

Date: 2450me 2011

000	Time		Reproductive	Measuren	ents (milli	meters and g	rams)	Net #
Species	(military)	Sex	status	Forearm Ear Tragus Wei	Ear	Tragus	Weight	INCL#
35 NW	2335	*	7	34.5	11	7	7.5	4
		Ĭ						
							7 I	

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

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OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Change	Con	Keproductive	Measure	nents (mill	meters and g	rams)	Mot #	Doodstand #
(military)	200	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	ואכר ש	necapture Dailu #
					ì			

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:_U	ULMS-X9*		Date: 22 June 2011
	•	3 William Garcia	
Survey Type:	Hibernacula	Summer	
Site description:	Forested trails	through wood lot	bardered by corn fields.
_pominant ve	g- rea maple ;	eim, beech	

Time and Weather

11	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	23.4°	2	40%
End	0215	19.99	1	100/0

20-21-03			
Notes:			
1,0,000			

Trap type and location

	Trap type	Size (note if stacked	Location (UTM N	AD83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1	mist net	3h × 9m	03 75 957	45 45 819
2	mist net	2h x lem	03 75 932	45 45 788
3	mist Net	2h × lem	03 75 859	45 45 782
4	mist Net	2h x 6m	103 75 838	45 45 822
5		11		
6				
7				

Total	net	area:	1	57.	5	m^2
7 00000	****			-	-	,

Notes: MS09

4.5.

* corrected mist not site by stantec

Project Name: WLM5-X9*

Date: 22 June 2011

Capture summary

Species	A	dult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Gubiotai
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat	Ħ.				
Little brown					
Northern	1	1//			4
Small-footed					
Indiana		100			
Rafinesque's big-eared					
Other:	Š.				
			+4	Total:	4

Notes: Small rain passing through, close nets at a 2240 and apenphyeur at 22501 2300.

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BAT SURVEY FORM

Project Name: WLMS-XX9*

	Time		Reproductive	Measureme	nents (milli	Measurements (millimeters and grams)	grams)	Not#	Recapture/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	Weight	TACLE	
がかれ	on or	η	NR - A	37.0	17.0	11.0	T,	4	\
MACK	0000	3	N)R - A	35.0	16.0	9.5	6.5	4	
N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2205	77	PR - A	38.0	18.0	10.0	8.0	4	1
35 kl.	000	,		,	A. D		× .	Z	1
35KW	2020	T	PR - A	50.0	9	2.	(
-									

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

* corrected mist net site by starter

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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	nco.	r	-					 _		_			_
# Proof on the Day	Necapidic Dand #												
Mac #	ואבר #												
ams)	Weight												
neters and gr	orearm Ear Tragus Weight												
nents (millin	Ear												
Measuren	Forearm												
Reproductive	status												
0	965.69												
Time	(millitary)			35									
0-000	Species												

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: b	ULMS-X	9*		D	ate: 24 June 8	10/
Surveyors: Tes			, Willian	m Garci	CL.	
Survey Type:	Hibernac	ula	Summer			
Site description:	Forested	trails	through	wood lo	+ bordered	
by corn Feel						

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2106	17.30	0	90%
End	0206	15.90		100%

Notes:	_
NOIS.	_

Trap type and location

~ "	Trap type	Size (note if stacked	Location (UTM N	AD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	mist net	3 h x 9 M	03 75 957	45 45 819
2	mist net	2 h x 6 m	03 75 932	45 45 788
3	mist net	2 h x 6 m	03 75 859	45 45 782
4	mist net	2hx6m	03 75 838	2.45.45.822
5				
6				
7				

Total	net area: 457.	5 m2					
Notes	:_MS09						
*	corrected	mist	net	site	PY	stantec	

Project Name: WLMS-X 9 *

Date: 24 June 2011

Capture summary

Species	A	dult	Ju	venile	Subtotal		
Species	Male	Female	Male	Female	ENDIONAL PROPERTY.		
Big brown	1				1		
Evening							
Silver-haired							
Eastern red							
Hoary	1						
Tri-colored bat							
Little brown		11			2		
Northern							
Small-footed							
Indiana	3						
Rafinesque's big-eared							
Other:	W.						
				Total:	3		

Notes:

* corrected mist not site by stantee

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BAT SURVEY FORM

Project Name: WLM5 - N9*

Date: 24 June 2011

	71		Reproductive	Measuren	ents (millir	Measurements (millimeters and grams)		Not #	Recanture/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	ight	14001	
	217	3	10	O. + P	0.4	0	188	9	1
T T S	2000	1	pr	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0.00	0.0	0,	4	}
MACC		7		00.0		3	6	_	
35NW	8:0	71	Pr	37.0	17.0	0,8	é	1	
	· ·						ř.		
	-								

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

* corrected mist net site by stantec

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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-	76.7	1	1	_	1									_
# F - Q	Necapulity Dano #													
T. L. A. II.	ואכו #													
ams)	Weight													
neters and gr	orearm Ear Tragus Wei													
nents (millin	Ear													
Measurer	Forearm													
Reproductive	status													
j	SCA	2											,	
Time	(military)													
	Species													

NIGHTLY BAT SURVEY SUMMARY FORM

	Date: 21st June 201
Project Name: WLMS-10	

Surveyors: Jessica omatony, William Carcia

Survey Type:

Hibernacula

Summer

Site description: Boad corridor (old rail bed) & small forested stream.

cominant veg - Birch, Elm, cottonwod

Time and Weather

With public 18	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2115	25.90	2	100%
End	0215	19.30	1	40%

Notes: pelayed start due to storm wheavy lightening, rain and wind.

Trap type and location

	Trap type	Size (note if stacked	Location (UTA	NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist net	3h x 6m	4546307	17 0376564
2	Mist net	anx9m	4546248	0376537
3	mist net	2h x 6m	4546314	0376433
4	mist net	anxom	45.46325	0376413
5				
6				
7				

Total net area: 150.0 m2

Notes: Stream on far side of rr trachs not netable - too cluttered,

Project Name:	WLM5-10	Date: 21st June 20	1
7		-	_

Capture summary

Species	Ac	lult	Ju	venile	Subtotal		
Species	Male	Female	Male	Female	Subtotal		
Big brown							
Evening							
Silver-haired							
Eastern red							
Hoary							
Tri-colored bat							
Little brown							
Northern							
Small-footed							
Indiana							
Rafinesque's big-eared							
Other:							
				Total:	Ø		

Notes: Lats of noise from trains going through roil road. Also open nets at 2115 due to very big storm passing through. STill some lightning when open

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Project Name: WLM5-10

aisw

Date: 21st June 201

	Species		7	2)0 6	/	١					
	(military)	S	つかかん								
Cav	Sex		,								
Reproductive	status										
Measuren	Forearm										
ents (milli	Ear										
Measurements (millimeters and grams)	Tragus										
rams)	Weight										
→ Net#											
Recapture/Band #	Þ										

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-lelemetry, and documentation photographs required ¹. Banding required ².

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

	litor	1	T	1	T					-				
Docomment Donnal #	necapture/Dailu #													
Nio+#	ואכר #													
rams)	Weight	0												
Measurements (millimeters and grams)	Tragus	0												
nents (millir	Ear													
Measuren	Forearm													
Reproductive	status													
Č	Sex					Ē					E			
Time	(military)										1			
C	opecies													

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: WLMS - 10	Date: 23 June 2011
Surveyors: Jess, ica o Mattony, William Go	orci a
Survey Type: Hibernacula Summer	
Site description: Road Corridor Gold rail bed) a forested stream. Dominant veg - Birch	

Time and Weather

TENNES I	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	23.4°		80%
End	0205	17.40		200/0

Notes:	_

Trap type and location

22.0	Trap type	Size (note if stacked	Location (UTM N	AD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Net	3h x 6m	4546307	0376564
2	Mist Net	2hx9m	4546248	0376537
3	mist net	2h x 6 m.	4546314	0376433
4	Mist net	2h x 6m	4546325	0376413
5				
6				
7				

Total net area: 150.0 m2

Notes: Stream on four side of 17 trachs not retable -too cluttered.

Project Name: WLMS-10 Date: 23 June 20/1

Capture summary

Species	A	dult	Ju	venile	Subtotal
species	Male	Female	Male	Female	Subtotal
Big brown	1				1
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat	1				
Little brown		P .			Ŧ
Northern					
Small-footed			•		
Indiana					
Rafinesque's big-eared					
Other:	N				
				Total:	2

Notes:

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BAT SURVEY FORM

Date: 23 June 20/1

Project Name: WLMS-/0

MSIU

			Measurements (millimeters and grams) Forearm Ear Tragus Weight 93.0 /4.0 8.0 /2.0 33.0 //.0 7.0 8.5	Species Time Sex Re	0030	2 2000	MYCH DIGO F								
Measure Foreamm 47.0	Measurements (milling Forearm Ear 41.0 /4.0	Measurements (millimeters and g Forearm Ear Tragus 43.0 /4.6 8.0 33.0 //.0 3.0	rements (millimeters and grams) Ear Tragus Weight 14.6 8.0 17.0 11.0 7.0 8.5	Reproductive	NR	0	7								
	ments (milling Ear 14.0	ments (millimeters and g Ear Tragus /4.0 8.0 //.0 7.0	N o ght	Measure Forearm	47.6	37.0									
neters and grams) Tragus Weight Weight \$\circ \gamma_1 \cdot \gamma_2 \cdot \gamma_1 \cdot \gamma_2 \cdot \gam	\(\sqrt{\text{o}} \) o ght	P Net#		Recapture/Band #		1									

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO) 1,2, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE) 1, and Indiana (MYSO) 1,2.

Radio-lelemetry, and documentation photographs required 1. Banding required 2.

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	21	-	_	-	-	 -	-			,	 			_
The state of the s	Necapiure/Danu #													
Mach	ואכו #													
ams)	Weight	ol .												
Measurements (millimeters and grams)	Tragus	0												
nents (millin	Ear													
Measuren	Forearm													
Reproductive	status													
Con	Sex													
Time	(military)													
Change	Species													

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Wyo	LAB Grewwest DH	Date: 25 June 2011
Surveyors: 5. 3	Schwienzohans	
Survey Type:	Hibernacula	Summer
Site description: Var	Ly Nice MATURE B	Sceanfinatic Forest. & Few Rooms Trees AND
NETTING CERTIFO	N. North Centr	of Portion of PROJECT ARES
Time and Weather		

	- Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	@ 2030	18.4	0	50%
End		123	0	01

Notes:

Trap type and location

Set #	Trap type	Size (note if stacked	Location (UTM	NAD83 Zone 17N)
SCI #	(harp trap or mist net)	mist nets)	Easting	Northing
1	MISTNOT	12mx9m / STick	4102 26.3	82 28 24.9
2		9mxbm/2nia	4102 27.0	82 28 26.6
3		9mxbm/27ica	4102 26.6	82 28 28.2
4		lemakin / Line	4102 26.1	ez 28 30.1
5				
6				
7				

Total net a	area: ~ 252 m	-		
Notes:	MSII			

Project Name: Winglas Greneritt, of

Date: 25 Dive 211

Capture summary

Species	A	dult	Ĵu	venile	Subtotal
opecies	Male	Female	Male	Female	Subtotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern		2			2
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	2

Notes:

CAPTURED & Releases LUNG MOTH

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BAT SURVEY FORM

Project Name: Wooles; Gasumment, OH

Date: 25 June 2011

Project Name: Wwoles; Guess west, OH	ne:Wwolas	Com	Wiest-DH	MS 11	=				Date: Ly John Cell
Charles	Time	Cav	Reproductive	Measurer	nents (mill	Measurements (millimeters and grams)	rams)	Net#	Recapture/Band #
Species	(military)		status	Forearm	Ear	Tragus	Weight	1404.0	.comprene
JA KW	2210	'n	1	36	12	7.5	7	2	
25hW	2240	D	1	35	12	6.0	7	W	

Species code: Big brown (EPFU), Silver-haired (LANO), Red (LABO), Hoary (LACI), Tri-colored (PESU), Rafinesque's bigeared (CORO)^{1,2}, Little brown (MYLU), Northern (MYSE), Small-footed (MYLE)¹, and Indiana (MYSO)^{1,2}.

Radio-telemetry, and documentation photographs required ¹. Banding required ².

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Constitution of	Time	 Reproductive	Measure	ments (mill	imeters and g	rams)	NILL II	D A
Species	(military)	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	# 1201	Recapinite/ Band #
					0			

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Windows Grawwith, 6H	Date: 27 June 2011
Surveyors: J. Schwindhad	
Survey Type: Hibernacula Summer	
Site description: See 25 Day ONTO SHEET	
Time and Woodhan	
Time and Weather	

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2100	25	4-7	70%
End	0220	19.1	1-3	01.

Notes: LATE SAINT DUE TO THIS PARILY UN RR THANKS; Blickes Access TO SITE

Trap type and location Con 25 Three ONTA SHORT

Set #	Trap type	Size (note if stacked	Location (UTM NAD83 Zone 17N)			
Set #	(harp trap or mist net)	mist nets)	Easting	Northing		
1						
2						
3						
4						
5						
6						
7						

Total net area: ~ 2	52 m2			
Notes: MSI)				

Project Name: Wirola G. Greenwith NI

Date: 21 June 211

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
species	Male	Female	Male	Female	Subiotal
Big brown					
Evening					
Silver-haired				/	
Eastern red	8			6	
Hoary	10	Ŧ	1	(
Tri-colored bat			(1)		
Little brown		1	11-		
Northern		1			
Small-footed	N				
Indiana	11	1			
Rafinesque's big-eared		2			
Other:	1				
4 =				Total:	

Notes:

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BAT SURVEY FORM

Project Name: Wholes Garanich, 14

351

Date: 27 June 2011

								Species	
_					>			(military)	Time
		1	_					Sex)
)				status	Reproductive
								Forearm	Measurer
		(Ear	ments (milli
								orearm Ear Tragus Weight	meters and g
				/	1			Weight	rams)
								Net#	п
								Recapture/Band #	# k

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

195	18		T	1	T			Т	T						
E	Kecapture/Dand #														
M. J. IX	# 1921														
ams)	Weight	0													
Measurements (millimeters and grams)	Tragus														
nents (milli	Ear														
Measurer	Forearm														
Reproductive	status														
0	SCA														
Time	(military)														
0.00.00	species														

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Win	stas; Greenwich of	Ł	Date: 26 DNL 2011
Surveyors: J.	Schwichtohand		
Survey Type:	Hibernacula	Summer	
Site description: For	Rester Let With	TRAILS; STREAM TO	Entrof Netsite.
CENTANI PORTIO	w of fowser Al	Lea	

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2035	20.3	0	0
End	0210	13.4	0	0

Notes:		

Trap type and location

Set #	Trap type	Size (note if stacked	Location (UTM NAD83 Zone 17N)						
Sct #	(harp trap or mist net)	mist nets)	Easting	Northing					
1	MISTNET	Cemx lm/zien	41 00 56.6	82 28 30.8					
2		bonxlem/25in	41 00 57.8	82 28 24.7					
3		6mx3m/1Tien	41 00 59.0	82 28 30.0					
4	上	9mx9m/3/1in	4101000	82 28 31.1					
5									
6									
7									

Total net area: ~/ //m	
Notes: MS12	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Wwolab; Gewwith, olf

Date: Zle Jime 2011

Capture summary

Species	A	dult	Ju	venile	Subtotal	
species .	Male	Female	Male	Female	Subtotal	
Big brown	1				- (
Evening						
Silver-haired						
Eastern red						
Hoary						
Tri-colored bat						
Little brown						
Northern						
Small-footed						
Indiana						
Rafinesque's big-eared						
Other:						
				Total:	1	

age t of (

BAT SURVEY FORM

Project Name: Windas Gramwith olt

NSIN

Date: Zle June Zul 1

Species Time S	(military)									
Sex Re		3								
Reproductive	status	7								
Measuremen	Forearm	45.0								
nents (mill	Ear	14								
Measurements (millimeters and grams)	Iragus	e								
(rams)	Weight	17								
Net#		2								
Recapture/Band #	一 日 一 間 一 年 日 山水	pola								

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1200	-	-	-	1	-	1	_		-			_	_		_		
	Necapulie/Band #																
MINT	# 130							1	Į.								
rams)	Weight																
Measurements (millimeters and grams)	Tragus																
nents (millin	Ear																
Measuren	Forearm																
Reproductive	status																
	Sex																
Time	(military)																
Constitut	openies																

NIGHTLY BAT SURVEY SUMMARY FORM

	F. Schwerz Hibernacu		mer	
urvey Type:	: See 21e D			
ite description	: See ou s	NE USTIFS GE	-1	
ime and Wea	ther			
	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2030	23,6	0	0
	0210	16.1	0	0
End				

Frap type and location			
	71. 1	Owins	~

Set #	Trap type	Size (note if stacked	Location (UTM)	NAD83 Zone 17N)
Set #	(harp trap or mist net)	mist nets)	Easting	Northing
1				
2				
3				
4				
5				
6				
7				

Total net a	rea: ~/7/m		
Notes: M	512		

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Windlas; Greenwick, OH

Date: 29 June 2011

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
opedes	Male	Female	Male	Female	Subidiai
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary			100	1)	
Tri-colored bat			15/1		
Little brown			1		
Northern			1		
Small-footed		0			
Indiana	V				
Rafinesque's big-eared	10				
Other:	1				
				Total:	

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BAT SURVEY FORM

Project Name: Winolas Gammaion Off

M512

Date: 29 Ine 20

Time ?	Species (military) Sex)		
Reproductive	status								
Measureme	Forearm Ear Tragus Weight				7				
ents (millim	Ear		1						
eters and g	Tragus								
rams)	Weight								
Not #	INCLIF								
Recenture/Rand #	wecapian chamic m								

Page

Cassissa			Reproductive	Measure	ments (mill	imeters and g	rams)	W. T. T.	, T
becies	(military)	Sex	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	# Net #	Kecapture/Band #

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: V	Molas Greww	ich, OH	Date:	Wilmelow
Surveyors:	I. Schwin	Johns		
Survey Type:	Hibernacul	a Sum	mer	
Site description:	Woodlot W/S	MAN STRUM	m. Carme Poris	2 of Project Area
Time and Weat	her			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2030	26.1	0	0
End	0200	16.1	0	0

Trap type and location

Set #	Trap type	Size (note if s	A STATE OF THE RESERVE OF THE PARTY OF THE P	Location (UTM	NAD83 Zone 17N)
301#	(harp trap or mist net)	mist n		Easting	Northing
1	MIST NET	lenx9m/	3Tin	410101.1	82 28 27.2
2		9in xlm/		410102.7	82 28 27.3
3		lenzelm 1	zna	410103.7	82 28 26.8
4	1	len xlen	Villen	410104.4	82 28 28.7
5					
6					
7					

Total net area: ~ 180 m	
Notes: MS 13	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Winolas; Grenweit, OH

Date: Z& Rue Zoil

Capture summary

Species	A	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Subtotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern	UNIC-1	3			4
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	4

age of

BAT SURVEY FORM

Project Name: Wise Lys housest, OH

515W

Date: 28.31 211

Species	Time (military)	V005	Reproductive status		Measurer Forearm	Measurements (milli Forearm Ear	Measurements (millimeters and greatm Ear Tragus	urements (millimeters and gra Ear Tragus 7
MYSE	2235	4	2	335.5	2 2	12	12	12
MYSE	2250	7	7	34.	4	4 11	2 11 6	11
MYSE	2320							
ŀ								

FORM WD05 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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	7	C	Reproductive		ments (mill	imeters and	rams)	11	
obecies	(military)	SCA	status	-	Ear	orearm Ear Tragus Weight	Weight	# ion	Kecapture/Band #
						0	0		

NIGHTLY BAT SURVEY SUMMARY FORM

urvey Type:	Hibernacu See 28.	DWE DATA SA		
ime and Weat	her	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	7030	23.3	0	401
End	0200	19.3	٥	0

Set#	Trap type	Size (note if stacked	Location (UTM NAD83 Zone 17N)				
Set #	(harp trap or mist net)	mist nets)	Easting	Northing			
1							
2							
3							
4							
5							
6							
7							

Total net	area: ~ 180 m		
Notes:	ms 13		

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Wirds hawwin, off

Date: 30 Dwe Zoll

Capture summary

Species	A	dult	Ju	venile	Subtotal
opecus	Male	Female	Male	Female	Subiotal
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat		1			
Little brown					
Northern	1	2			3
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	4

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BAT SURVEY FORM

Project Name: Windub Granwich Of

MS13

Date: 30 June 244

7221S F L 3 7235 F L 3 7235 F L 3 7235 F L 3		(BC)	Mar	Reproductive	Measure	ments (milli	Measurements (millimeters and grams)	rams)	Not#	Recapture/Rand #
2210 M L L L L L L L L L L L L L L L L L L	Species (n	- 1	Sex	status	Forearm	Ear	Tragus	Weight	TACE #	Necapidity 24
2350 M T		2122	7	٢	35.5	17	2.0	7	W	NA
2350 F L		2210	3	→	35.0	12.5	6.0	٦	-	_
00838 F L		essa	P	7	34.0	125	5.9	le	-	
		0000	F	7	31.5	œ	4.5	7.5	2	

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OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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Dangatum / Dang #	capture/Danu #											
D	NG	l	L			h						
Mat #	# INCI #											
ams)	Weight											
Measurements (millimeters and grams)	Tragus											
nents (millin	Ear											
Measurer	Forearm											
Reproductive	status											
Corr	SCA											
Time	(military)											
Constant	Species											

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: WLM5-14	Date: 25 June 2011
Surveyors: Jessica O'matony & William	Garcia
Survey Type: Hibernacula Summer	
Site description: Large pond and forested ava-	Il along edge of
pond leading to wood lot on Rukal Pices. Cominant veg-willow, Locust 3 ash.	n Hunters int property

1 - April - 10	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	21.50	1	20%.
End	0205	15.6		20%

Notes:			
INUICS.			

Trap type and location

Set #	Trap type	Size (note if stacked	Location (UTM NAD83 Zone 17N)				
Set #	(harp trap or mist net)	mist nets)	Easting	Northing			
1	mist net	3h x 9m	03 76 688	95 40 TAG			
2	mist net	2h x lem	03 76 685	45 40 340			
3	mist net	2h x bm	03 76 655	45 40 248			
4	mist net	2h x lom	03 75 383	45 41 516			
5							
6							
7							

photo

135

136/37

138

Total	net	area:	157.	5	m2

Notes: M514

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FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Project Name: WLMS-14	Date: 25 June 2011
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Capture summary

Species	Ac	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	
Big brown					
Evening					
Silver-haired					
Eastern red					1
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	1

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BAT SURVEY FORM

Project Name: WLMS-14

Date: 25 June 2011

	7		Daniedintina	Measurements	ents (milli	neters and g	rams)	NI_+ H	Decanture/Rand #
Species	(military)	Sex	status	Forearm Ear Tragus Wei	Ear	Tragus	Weight	7400T	
		7		43_O	25.5	9,0	15.0	1	1
CH 60	2/10/2	1	T.K.	3					

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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196	4.0								1			-
Daniel Daniel H	necapiuici Banu #											
NIGHT.	ואכו #											
ams)	Weight											
neters and gr	orearm Ear Tragus Wei											
nents (millin	Ear											
Measuren	Forearm											
Reproductive	status											
,	Sex	1L										
Time	(military)	2015										
C	Species	1,480										

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: WLM 5 - 14	Date: 28 June 2011
Surveyors: Jessica O'Mahony, William Gar	cra
Survey Type: Hibernacula Summer	
Site description: Lorge Pond and Rores ted	tail along edge
of Pond leading to woodlot on Rural	coon hunters int proporty
Dominant veg - Willow, Locust & ash. Time and Weather	

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2105	20.90	2	Ø%
End	21:06	13.6°	16	Ø

Makani		
Notes:		

Trap type and location

0 . 11	Trap type	Size (note if stacked	Location (UTA	1 NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	mist nets	3h x 9m	03 76 688	45 40 396
2	mist nets	24 x 6m	0376685	45 40 340
3	mist nets	2h x 6m	03 76 655	45 40 248
4	mist nets	2 h x 6 m	03 75 383	45 41 516
5				
6				
7				

Total net	area: 5	7.5 m ²		
Notes:	MSIY			

Project Name:	WLMS-1	1	Date:	28	June	2011
TOTOGET THEIR	11.00	,				

Capture summary

Species	A	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Suprous
Big brown					
Evening					
Silver-haired					
Eastern red					
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	Ø

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BAT SURVEY FORM

Project Name: WLMS - 14

HISM

Date: 28 June 2011

No Capping &	Species (m	Time (military)	Sex	Reproductive status	For	Measurem Forearm	Measurements (millir rearm Ear	Measurements (millimeters and grearm Ear Tragus	rements (mill Ear
No Caparies									
No Car.		Mes							
	ep of	2							

31			T	T	T									
Becantine/Rand #	avecapraise Daily													
Niat #	# 13/1													
ams)	Weight													
Measurements (millimeters and grams)	Tragus	0												
nents (millin	Ear													
Measuren	Forearm													
Reproductive	status													
THE	Sex													
Time	(military)													
	Species													

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name: Creenwich Wind Project WLMS-15 Surveyors: JNA, CD3	Date:	25 Jun	-
Surveyors: JVA, CD3		_	
Survey Type: Hibernacula Summer			
Site description: Fage of coin field and alon	ng wet	dian	leading
into mature wood lot dominated by col			

Time and Weather

	Time	Temp (°C)	Wind speed (m/s)	Cloud cover (%)
Start	2106	20.5	,5	60%
End	0206	13.6	. 5	03

A STATE OF THE STA		
Notes:		
NOICS:		_

Trap type and location

~ "	Trap type	Size (note if stacked	Location (UT	M NAD83 Zone 17N)
Set#	(harp trap or mist net)	mist nets)	Easting	Northing
1	Mist Net	6x6 2 stack	037602)	4540413
2		6x6 251904		4540383
3		-	037604)	4540354
4	1		0376003	4540362
5		/		
6		7		
7				

Total net area: 98 M	
Notes: MS 15	

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Greenwich Wind Project

Date: 25Jun 2011

WLMS-15

Capture summary

Species	A	lult	Ju	venile	Subtotal
Species	Male	Female	Male	Female	Justy
Big brown		5			5
Evening					
Silver-haired					
Eastern red	4				
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana	VI				
Rafinesque's big-eared					
Other:					
				Total:	5

Notes: All bats captured within 2.5 his of sunget

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BAT SURVEY FORM

Project Name: Openwich Wind Project 51-5WNM

Date: 25 Jan 2011

0.000	71		Reproductive	Measurements (millimeters and grams)	ents (milli	meters and g	rams)	Net #	Recanture/Band #
Species	(military)	Sex	status	Forearm	Ear	Tragus	Weight		
ריטבוי	Ohic	0	لهد	31,	12	S	2).5	N	
EPEN.	DICC	10	NR	94	-	6	26.5		
7 -	200	>		24	17	5	21.0	N	
TYPA	BALL	4	120		.	7	77	7	
EPFU	2230	10	Lac	36	تر ا	V	10.0) /	
E PCM	22%	40	Lac	F	5	0	23.5	j	
		Ī							
		1							
		1							

Jo

Chaniar T	ime	Cov	Keproductive	Measure	nents (milli	meters and g	(dilb)	Niot #	Decembras/Bond #
	(military)	SCA	status	Forearm	Ear	orearm Ear Tragus Weight	Weight	ואכר #	Necapulie/Dam #
			0						

6/27/08

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

NIGHTLY BAT SURVEY SUMMARY FORM

Project Name:				28 Jun 2011
Surveyors: TV	4,005			_
Survey Type:	Hibernacu	la Sumi	mer	
Site description:				
Site description				
Site description:				
		Temp (°C)	Wind speed (m/s)	Cloud cover (%)
	ther	Temp (°C)	Wind speed (m/s)	Cloud cover (%)

Trap type and location

~ "	Trap type	Siz (note if		Location (UT)	M NAD83 Zone 17N
Set#	(harp trap or mist net)	mist		Easting	Northing
1	Mist Net	6×6	Thish	0376021	4546413
2	13177			0376023	4540383
3			3 high	0376041	454 0354
4		916	2 hish	0376663	4548832
5		1			
6					
7					

Total net area: 198 M	
Notes: MS15	_

FORM WD04 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: Greenwich Wind

Date: 28 Jun 2011

WLM5-15

Capture summary

Species	Ac	lult	Ju	venile	Subtotal
species	Male	Female	Male	Female	Subtotal
Big brown	1	2			3
Evening					
Silver-haired					
Eastern red		A.			
Hoary					
Tri-colored bat					
Little brown					
Northern					
Small-footed					
Indiana					
Rafinesque's big-eared					
Other:					
				Total:	3

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BAT SURVEY FORM

Project Name: Exermich wind Project wars-15 MS15

Date: 28 Jan 201

	Time		Renroductive	Measuren	nents (milli	Measurements (millimeters and grams)	ALC:	No+#	Decembers/Rand #
Species	(military)	Sex	status	Forearm	Ear	Tragus	ight	1,000	
FAFU	2/37	77	(در	rlq	17	5	19.5	W	
EDFW	2700	71	Lac	7,4	13	(20.5		
EPPEN	2340	3	NR	44	12	3	16.5		
									4-
	- 1								
		1							
		1							

of

Recapture/Band # Net# Weight Measurements (millimeters and grams) Tragus Ear Forearm Reproductive status Sex Time (millitary) Species

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/24/2013 11:01:30 AM

in

Case No(s). 13-0990-EL-BGN

Summary: Application Of 6011 Greenwich Windpark, LLC - Exhibit K electronically filed by Teresa Orahood on behalf of Sally Bloomfield