

# **Summer-Fall 2006 Bat Detector Survey and Two-year Summary at the Proposed Deerfield Wind Project in Searsburg and Readsboro, Vermont**

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## Executive Summary

During summer and fall 2006, Woodlot Alternatives, Inc. (Woodlot) conducted field surveys of bat migration activity at the Deerfield Wind Project areas in Searsburg and Readsboro, Vermont. The surveys are part of the planning process by PPM Energy Inc. (PPM) for a proposed wind project, which will include the erection of 15 to 24 wind turbines along two ridgeline areas. Field investigations included nighttime surveys of bats using echolocation detectors. These surveys represent the latest of five seasons of bird or bat migration surveys undertaken at the Deerfield Wind Project area over a three year period. The overall goal of the investigation was to document the presence of bats in the area, including the rate of occurrence and, when possible, species present during the summer and fall migration period.

The results of the field surveys provide useful information about site-specific migration activity and patterns in the vicinity of the Deerfield Wind Project area, especially when reviewed with the results of previous surveys conducted in 2004, 2005 and spring 2006. This analysis is a valuable tool for the assessment of risk to bats during migration through the area.

Two detectors were deployed at different heights in a meteorological measurement tower (met tower), located in the Eastern Project Area from June 13 to October 27, yielding a total of 205 detector-nights of recordings. An additional two detectors were deployed at different heights in the met tower located in the Western Project Area from the June 13 to October 27, yielding a total of 151 detector-nights of recordings. A fifth detector was deployed in a tree along the ridgeline of the Western Project Area. The tree detector was deployed from June 13 through October 10 and recorded a total of 62 detector-nights of data.

A total of 380 bat call sequences were recorded during the summer and fall sampling. The mean detection rate of all detectors, combined, was 0.9 call sequences per detector-night. The detection rate was slightly lower than other recent fall studies conducted in the Northeast during the past few years. Habitat, landscape, location, and survey timing probably account for the observed differences between sites.

Bat call sequences were identified to the lowest possible taxonomic level. These were then grouped into four guilds based on similarity in call characteristics between some species and the limited ability of the detectors to adequately provide information for this differentiation. A large proportion (54%) of the call sequences were identified simply as 'unknown' due to poor file quality or too few call pulses on which to base identification. Approximately 28 percent of the recorded call sequence were identified as myotis in origin; 13 percent were identified as a guild of bat call sequences that includes the big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus cinereus*); and only 5 percent were that of the eastern red bat (*Lasiurus borealis*) or eastern pipistrelle (*Pipistrellus subflavus*). In general, bat activity was highest during periods with warm nightly temperatures and low wind speeds. The species composition was generally similar to other bat detector surveys conducted in the region recently.

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## 1.0 Introduction

### 1.1 Project Context

PPM Energy, Inc. has proposed the construction of a wind project, located in the towns of Searsburg and Readsboro in Bennington County, Vermont (Figure 1-1). The Deerfield Wind Project would comprise approximately 80 acres of land in the Manchester District of the Green Mountain National Forest adjacent to the Green Mountain Power Corporation's (GMP) existing Searsburg Wind Facility. The proposed project would occur in two areas. The Eastern Project Area is located east of Vermont State Route 8, south of the existing 11 turbine, 6-megawatt (MW) facility. The Western Project Area is located on the west side of Route 8. The proposed project layout includes approximately 15 to 24 wind turbines up to 125 m (410') tall, access roads to and along the ridgelines, and a power collection system.

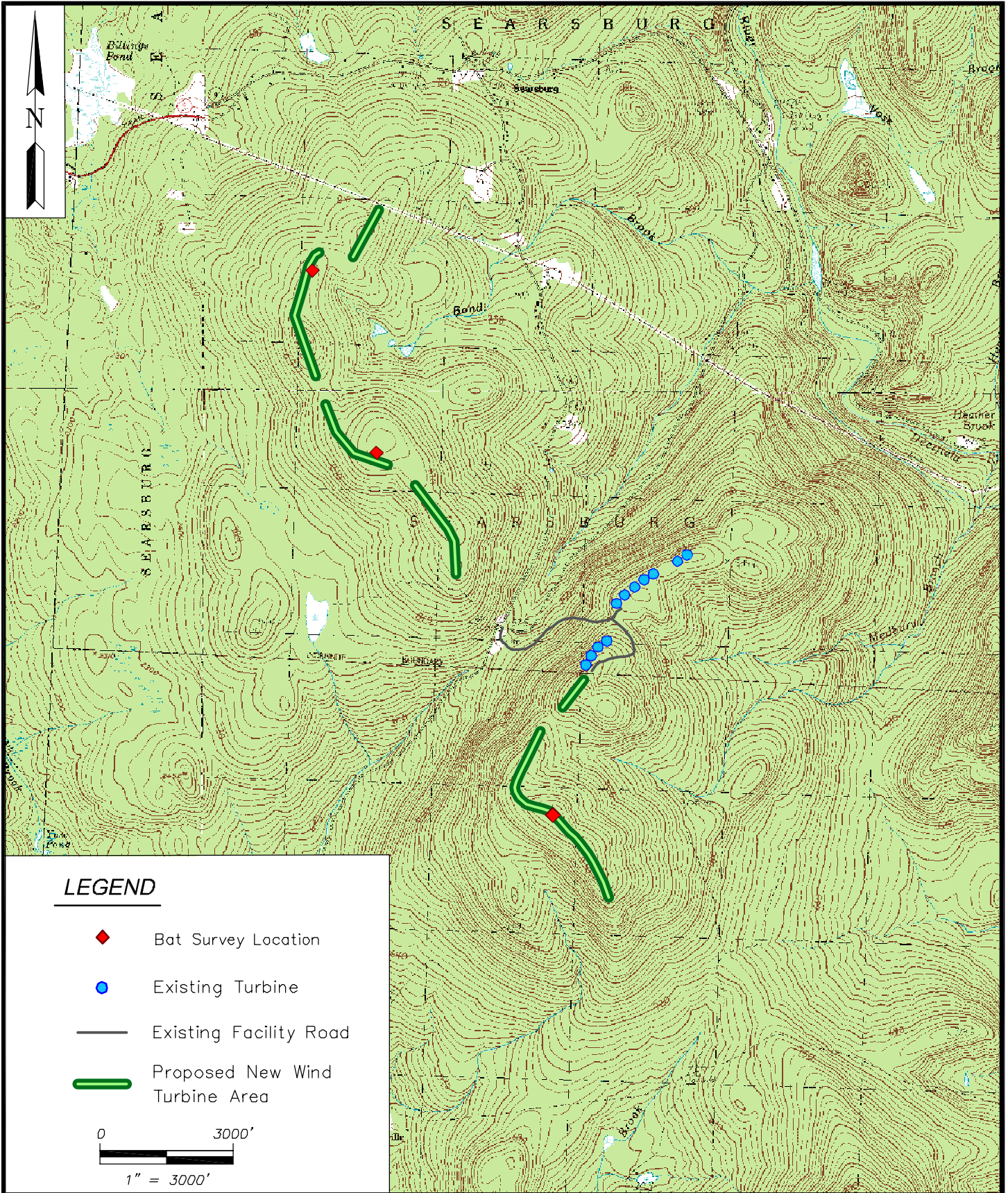
### 1.2 Project Area Description

The project area is located in Searsburg and Readsboro, Vermont, approximately 15 miles north of the Massachusetts border. It is within the Southern Green Mountains Biophysical Region of Vermont. This region is an area of varied topography, with high peaks, plateaus, steep sided valleys, and foothills. Mountaintops in this region are somewhat randomly located, in sharp contrast to the long, linear parallel arrangement of the highlands of northern Vermont. The mountaintops are characterized by thin soils and abundant, exposed, acidic bedrock, while lower slopes and valleys in this region contain deep glacial till soils.

The climate of the region is generally cool. Higher elevations are typically colder than lower elevation valleys, with average July temperatures in the mid-60 °Fs (15.5 °C). The growing season is short, approximately 90 days, and the average winter temperature is around 17 °F (-8.3 °C). Clouds and fog are common and the area receives relatively frequent precipitation. Combined, 127 to 178 centimeters (50" to 70") of rain and snow fall in the region annually (Thompson and Sorenson 2000).

Northern hardwoods and boreal woodland species dominate the forests of the ecoregion. Higher elevation slopes exhibit typical mountain forest zonation, with northern hardwood forests ascending into yellow birch (*Betula alleghaniensis*) and red spruce (*Picea rubens*) forests, grading then into higher altitude forests dominated by spruce and balsam fir (*Abies balsamea*). Valleys are predominantly forested with northern hardwoods and varying components of white pine (*Pinus strobus*) and hemlock (*Tsuga canadensis*). Low, south-facing slopes typically support a red oak (*Quercus rubra*) community.

Nine species of bats occur in Vermont, based upon their normal geographic range. These are the little brown bat (*Myotis lucifugus*), northern long-eared bat, (*M. septentrionalis*), Indiana bat (*M. sodalis*), Eastern small-footed bat (*M. leibii*), silver-haired bat, eastern pipistrelle, big brown bat, eastern red bat, and hoary bat (Whitaker and Hamilton 1998). Of these, the Indiana bat is listed as endangered both federally and in the state of Vermont, and the small-footed bat is a state-listed threatened species. The silver-haired bat, eastern pipistrelle, and northern long-eared bat (northern myotis) are rare in Vermont.



PREPARED BY:



106065-F101-BatSurvey.dwg

SHEET TITLE:

### Bat Survey Location Map

PROJECT:

Deerfield Wind Project  
Searsburg, Vermont

DATE: October 2006

SCALE: 1"=3000'

PROJ. NO.: 106065

FIGURE:

1-1

## 2.0 Methods

### 2.1 Field Surveys

Anabat detectors are frequency-division detectors that divide the frequency of ultrasonic call sequences made by bats so that they are audible to humans. A factor of 16 was used in these studies. Frequency division detectors were selected based upon their widespread use for this type of survey, their ability to be deployed for long periods of time, and their ability to detect a broad frequency range, which allows detection of all species of bats that could occur in Vermont. Data from the Anabat detectors were logged onto compact flash media using a CF ZCAIM (Titley Electronics Pty Ltd.) and downloaded to a computer for analysis.

A pair of detectors was deployed within the guy wire arrays at each of the two meteorological measurement towers (met tower); two detectors at the Eastern Project Area and two detectors at the Western Project Area (see Figures 1 and 2). A fifth detector was deployed in an American Beech (*Fagus grandifolia*) at the edge of a harvested area northwest of the Western Project Area met tower. These were passive surveys, as the detectors were placed at each site and left there for the duration of the study.

At each met tower, the microphone of the first detector was attached to cables and raised as high as possible and the microphone of the second detector was deployed at approximately half the height of the first. Deployment in this fashion allowed sampling at different heights. In the Eastern Project Area, the detectors were deployed at heights of approximately 10 m (33') and 20 m (67') at the southernmost of the two met towers. In the Western Project Area, the detectors were deployed at heights of approximately 15 m (50') and 35 m (115'). At the request of Vermont Agency of Natural Resources (VANR), the fifth detector was deployed along a tree line in the northern third of the Western Project Area to obtain bat echolocation data from a broader geographic area within the project site. The microphone was located at a height of approximately 7 m (23') and was above a low, dense canopy of regenerating saplings, primarily composed of beech and maple. Detectors were deployed on June 13 and retrieved on October 27, 2006. All detectors were programmed to record nightly from 7:00 pm to 7:00 am.

### 2.2 Data Analysis

Potential call files were extracted from data files using CFCread<sup>®</sup> software. The default settings for CFCread<sup>®</sup> were used during this file extraction process, as these settings are recommended for the call sequences that are characteristic of northeastern bats. This software screens all data recorded by the bat detector and extracts call files using a filter. The filter simply removes files created by noises other than bat call sequences based on the characteristics of the call file and the established characteristics of northeastern bat call sequences. Using the default settings for this initial screen also ensures comparability between data sets. Settings used by the filter include a maximum time between call sequences (TBC) of 5 seconds, a minimum line length of 5 milliseconds, and a smoothing factor of 50. The smoothing factor refers to whether or not adjacent pixels can be connected with a smooth line. The higher the smoothing factor, the less restrictive the filter is and the more noise files and poor quality call sequences are retained within the data set. A call is a single pulse of sound produced by a bat. A call sequence is a combination of two or more pulses recorded in a call file.

Following the initial screening, each file was visually inspected to ensure that files created by static or some other form of interference that were still within the frequency range of northeastern bats were not included in the data set. Call sequences were identified based on visual comparison of call sequences with reference libraries, including known call sequences recorded by Woodlot during mist netting surveys

in 2006 in New York and Pennsylvania, and reference call sequences from 2002 to 2005 provided by nationally-recognized bat experts Lynn Robbins and Chris Corben. Mr. Corben is also the developer of the Anabat software. Bat call sequences typically include a series of pulses characteristic of normal flight or prey location and capture periods (feeding ‘buzzes’) and visually look very different than static, which typically forms a solid line at either a constant frequency or with great frequency variation. Using these characteristics, bat call files are easily distinguished from non-bat files.

Qualitative visual comparison of recorded call sequences of sufficient length to reference libraries of bat call sequences allows for relatively accurate identification of bat species (O’Farrell *et al.* 1999, O’Farrell and Gannon 1999). A call sequence was considered of suitable quality and duration if the individual call pulses were clean (i.e., consisting of sharp, distinct lines) and consisted of at least seven pulses if it was suspected of being a myotid or at least five pulses if non-myotid (all pulses less than 35-40 kHz). Call sequences were classified to species whenever possible, using the reference call sequences described above. However, due to similarity of call signatures between several species, all classified call sequences have been categorized into four guilds for presentation in this report. This classification scheme follows that of Gannon *et al.* (2003) and is as follows:

- Big brown/silver-haired/hoary bat (BBSHHB) – This guild will also be referred to as the big brown guild. These species’ call signatures commonly overlap and have therefore been included as one guild in this report;
- Red bat/pipistrelle (RBEP) – Eastern red bats and eastern pipistrelles. Like so many of the other northeastern bats, these two species can produce call sequences distinctive only to each species. However, significant overlap in the call pulse shape, frequency range, and slope can also occur;
- Myotid (MYSP) – All bats of the genus *Myotis*. While there are some general characteristics believed to be distinctive for several of the species in this genus, these characteristics do not occur consistently enough for any one species to be relied upon at all times when using Anabat recordings; and
- Unknown (UNKN) – All call sequences with too few pulses (i.e., less than seven) or of poor quality such as indistinct pulse characteristics or background static.

This guilding represents a very conservative approach to bat call identification. However, since some species do sometimes produce call sequences unique only to that species, all call sequences were identified to the lowest possible taxonomic level before being grouped into the listed guilds. Tables and figures in the body of this report will reflect those guilds. However, since species-specific identification did occur in some cases, each guild will also be briefly discussed with respect to potential species composition of recorded call sequences.

Once the call files were identified and placed into the appropriate guilds, nightly tallies of detected call sequences were compiled. Mean detection rates (number of call sequences/detector-night) for the entire sampling period were calculated for each detector and for all detectors combined. It is important to note that detection rates indicate only the number of call sequences detected and do not necessarily reflect the number of individual bats in an area. For example, a single individual can produce one or many call files recorded by the bat detector, but the bat detector cannot differentiate between individuals of the same species producing those call sequences. Consequently, detections recorded by the bat detector system likely over-represent the actual number of animals that produced the recorded call sequences.

## **2.3 Weather Data**

Nightly wind speed (meters per second [m/s]), direction (degrees from true North), and temperature (Celsius [C]) between 7:00 pm and 7:00 am were calculated for each night of the survey period. These

weather measurements were obtained from the Wastewater/Compost Facility in Wilmington, Vermont (<http://www.weatherunderground.com>), which is approximately 8.1 km (5 miles) to the proposed Deerfield Wind Project area.

### 3.0 Results

Detectors were deployed at the proposed Deerfield Wind Project area on June 13 and retrieved on October 27, 2006, for a total survey period of 136 nights. There were occasional time periods when individual detectors powered down, animals damaged a detector, or inclement weather interrupted detector operations. Combined, 421 detector-nights of bat echolocation data were recorded during the deployment period.

A total of 380 bat call sequences were recorded during the sampling period (Table 1). The number of call sequences recorded at the Eastern Project Area detectors, on any individual night, ranged from 0 to 9 (August 3) at the high detector and 0 to 10 (August 3) at the low detector. The number of call sequences recorded at the Western Project Area detectors, on any individual night, ranged from 0 to 2 (August 23) at the high detector and 0 to 10 (July 14) at the low detector. The mean detection rate for all detectors was 0.9 call sequences/detector-night. The detection rate at the Eastern Project Area detectors (1.2 call sequences/detector-night) was greater than at the Western Project Area detectors (0.7 call sequences/detector-night).

<b>Table 1.</b> Summary of bat detector field survey effort and results at the proposed Deerfield Wind Project during summer and fall 2006.					
<b>Location</b>	<b>Dates</b>	<b># Detector-Nights*</b>	<b># Recorded sequences</b>	<b>Detection Rate **</b>	<b>Maximum # call sequences recorded ***</b>
Eastern MET tower high	6/13-8/9, 8/25-9/26, 10/9-10/26	111	125	1.1	9
Eastern MET tower low	7/12-8/9, 8/23-10/26	94	112	1.2	10
Western MET tower high	6/29-7/15, 7/27-8/7, 8/23-9/7, 10/9-10/11	49	9	0.2	2
Western MET tower low	6/13-7/1, 7/13-8/2, 8/23-10/27	105	134	1.3	5
Western tree detector	6/13-8/1, 8/3, 8/23-8/26, 9/1-9/5, 10/9-10/10	62	0	0.0	4
<b>Overall Results</b>	<b>6/13-10/27</b>	<b>421</b>	<b>380</b>	<b>0.9</b>	<b>--</b>
* Detector-night is a sampling unit during which a single detector is deployed overnight. On nights when two detectors are deployed, the sampling effort equals two detector-nights, etc.					
** Number of bat passes recorded per detector-night.					
*** Maximum number of bat passes recorded from any <b>single</b> detector for a 12-hour sampling period.					

Appendix A provides a series of tables with more specific information on the nightly timing, number, and species composition of recorded bat call sequences. Specifically, Appendix A Tables 1-5 provide



information on the number of call sequences, by guild and suspected species, recorded at each detector each night and the weather conditions for that night. Appendix A Table 6 provides the actual data file information for each of the detectors. Included is the Analook file name for each of the 380 recorded call sequences, the night during which the call sequence was recorded, the time of night of the recording, and the species code that the call was given during analysis.

A total of 193 of the 380 (54%) recorded call sequences were labeled as unknown due to very short call sequences (i.e., less than seven pulses); poor call signature formation, likely due to a bat flying at the edge of the detection zone of the detector or flying away from the microphone; or static interference (Table 2). Of the call sequences that were identified to species or guild, myotids were the most common (28% of all call sequences), followed by the species within the big brown guild (13% of all call sequences). Fewer red bat/eastern pipistrelle call sequences (5% of all call sequences) were identified.

Within each guild, some individual call sequences were identified to species (Appendix A Tables 1-5). Call sequences within the guild of “unknown” were identified as such due to too few pulses included within the recorded call sequences. A majority of these call sequences (roughly 60%), however, had pulses that were steep and above 35-40 kilohertz (kHz). Most of these call sequences were probably those of *Myotis* sp. However, the frequency of feeding buzzes emitted by several other northeastern bats extend into this range, and therefore preclude making definitive identification of call sequences to guild using call files with few pulses.

**Table 2.** Summary of the composition of recorded bat call sequences at the proposed Deerfield Wind Project during summer and fall 2006.

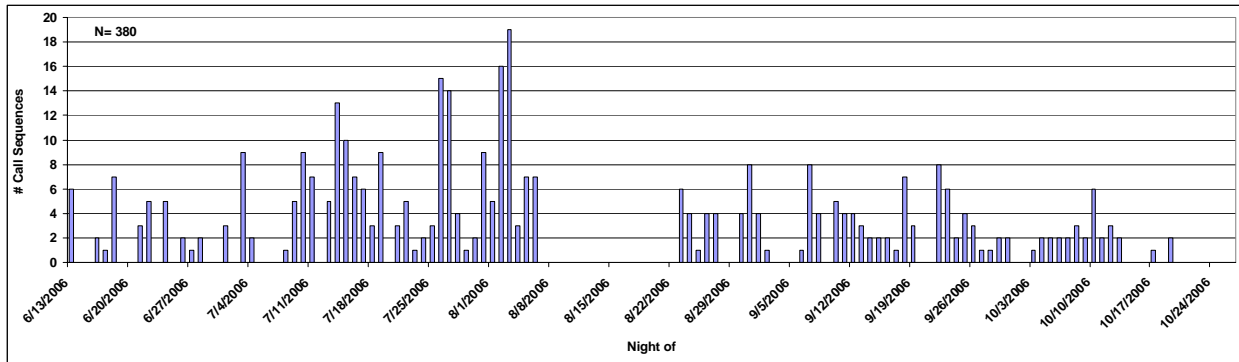
Detector	Guild				Total
	Big brown guild	Red bat/ E. pipistrelle	Myotis	Unknown	
Eastern MET tower high	19	5	32	69	125
Eastern MET tower low	11	6	31	64	112
Western MET tower high	3	1	1	4	9
Western MET tower low	25	4	49	56	134
Western tree detector	0	0	0	0	0
<b>Total</b>	<b>58</b>	<b>16</b>	<b>113</b>	<b>193</b>	<b>380</b>

Of the 113 call sequences in the myotid group, 74 (85.8%) were identified simply as *Myotis* because the pulses in the call sequences were too indistinct. Of the remaining *Myotis* calls approximately 12 percent was identified as likely little brown bat calls sequences, 2 percent were northern myotis, and less than 1 percent as possibly that of the northern small-footed myotis. It must be stressed, however, that identification of *Myotis* call sequences to species level is very difficult and may not be entirely accurate. Call sequence characteristics between *Myotis* species are often very similar, with overlapping identification parameters. Therefore, the specific identifications provided here are made with caution.

Within the red bat/eastern pipistrelle guild, 81 percent of call sequences were probably those of the red bat, 13 percent were eastern pipistrelle and the remainder were either red bat or eastern pipistrelle.

Finally, of the 58 sequences in the big brown guild, 7 (12%) appeared to be distinctly that of the big brown bat, 5 (9%) the silver-haired bat, and 13 (22%) the hoary bat. The remaining sequences in the big brown guild were either that of the big brown bat or silver-haired bat and not hoary bat (Appendix A Tables 1-5).

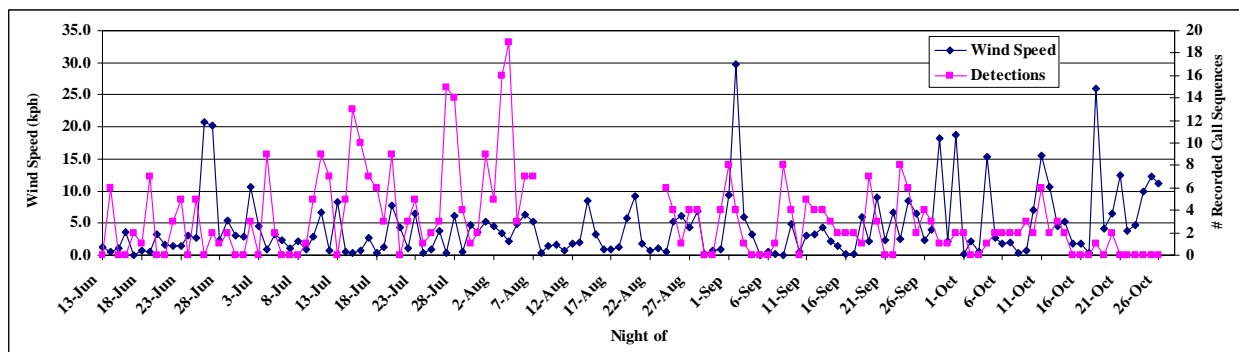
Although the nightly number of recorded call sequences varied considerably from night to night, some general trends were observed (Figure 2). Nightly call volume was low (i.e., only one or no recorded sequences) during June but began increasing in the latter half of July, peaked in early August (12-19 call sequences)<sup>1</sup>, and then remained consistently low (2 to 8 calls per night) through the first half of October.



**Figure 2.** Nightly volume of recorded bat call sequences at all detectors at the proposed Deerfield Wind Project during summer and fall 2006.

*Weather Data*

Mean nightly wind speeds in the vicinity of the Deerfield Project site varied between 0 and 29 kph (Figure 3). Mean nightly temperatures varied between 0.25 °C and 26.3° C (Figure 4). There appeared to be no strong relationship between either of these weather variables and bat call sequence detections. However, in general, fewer call sequences were recorded on nights with the highest wind speeds (> 10 kph) and nights with greater numbers of recorded call sequences were generally warmer (> 10 °C).



**Figure 3.** Nightly mean wind speed and nightly call sequence volume- summer and fall 2006 at the proposed Deerfield Wind Project during summer and fall 2006.

<sup>1</sup> Off-site vandalism resulted in the loss of approximately two weeks of data from all detectors in mid- to late-August.

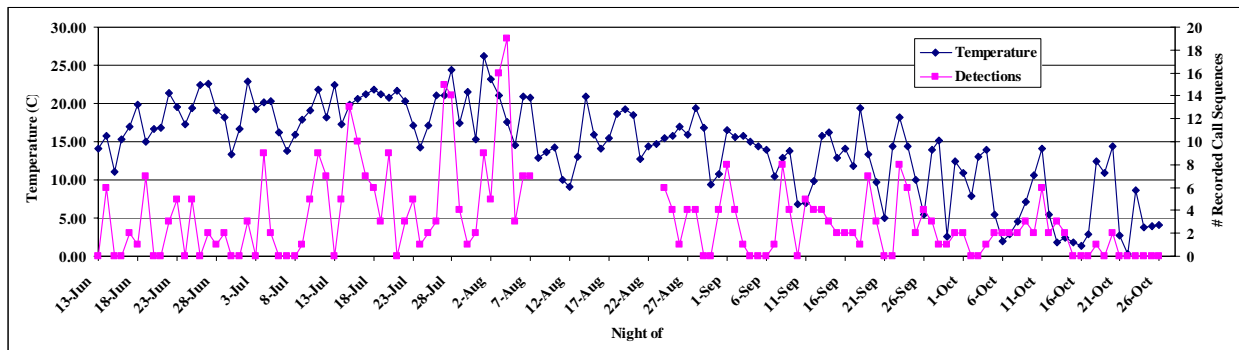


Figure 4. Nightly mean temperature and nightly call sequence volume at the proposed Deerfield Wind Project during summer and fall 2006

## 4.0 Discussion

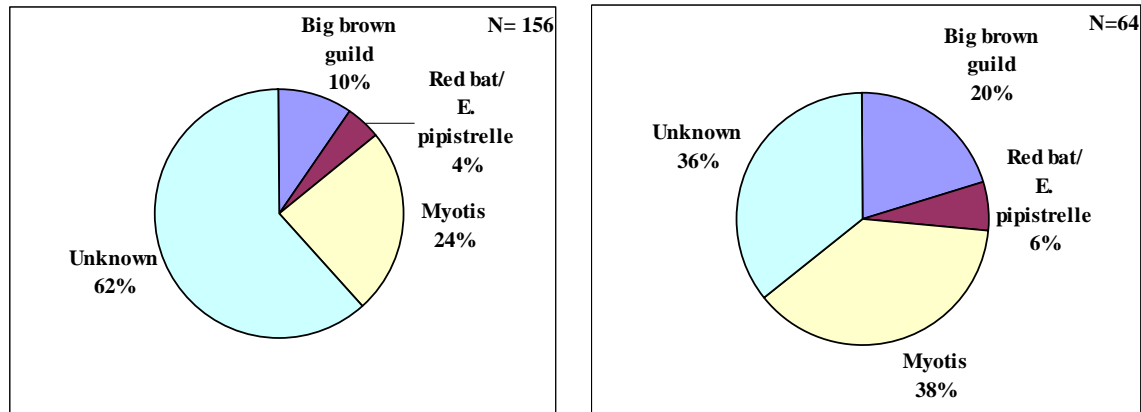
Bat echolocation surveys conducted during summer and fall 2006 at the proposed Deerfield Wind Project have provided insight into bat activity patterns, species composition, and abundance in the area. Detection rates did not differ greatly between the Eastern Project and Western Project met tower detectors during the sampling period. The data collected indicate that species composition of the recorded bat community changed little over the course of the sampling period.

The bat detectors deployed at the Deerfield project area generally operated well throughout the 136-night sampling period, yielding an overall detection rate of 0.9 call sequences per detector night. This activity level was lower than rates documented at other sites across the northeast in the fall of 2004 and 2005 (Table 3). Differences could be attributed to several factors, including habitat conditions or landscape-based concentrations in bat migration activity. Sampling effort, including both the number of deployed detectors and the duration of deployment can also affect the overall results of individual studies.

Table 3. Summary of other available bat detector survey results.

Location	Landscape	Season	Calls Per Detector Night	Reference
Cohocton, NY	Agric. Plateau	Fall 2004	2.00	Woodlot, 2006a
Franklin, WV	Forested ridge	Fall 2004	9.24	Woodlot, 2004a
Prattsburgh, NY	Agric. Plateau	Fall 2004	2.22	Woodlot, 2004b
Sheffield, VT	Forested ridge	Fall 2004	1.76	Woodlot, 2006b
Churubusco, NY	Agric. plateau / ADK foothills	Fall 2005	5.56	Woodlot, 2005a
Cohocton, NY	Agric. Plateau	Fall 2005	1.57	Woodlot, 2006a
Fairfield, NY	Agric. plateau / ADK foothills	Fall 2005	1.70	Woodlot, 2005b
Jordanville, NY	Agric. plateau / ADK foothills	Fall 2005	4.79	Woodlot, 2005c
Mars Hill, ME	Forested ridge / Agric. plateau	Fall 2005	0.83	Woodlot, 2005d
Redington, ME	Forested ridge	Fall 2005	4.20	Woodlot, 2005e
Sheffield, VT	Forested ridge	Fall 2005	1.18	Woodlot, 2006b
Deerfield, VT	Forested ridge	Summer-Fall 2005	0.52	Woodlot, 2005g
Sheldon, NY	Agric. Plateau	Fall 2005	34.92	Woodlot, 2005f
Deerfield, VT	Forested ridge	Summer-Fall 2006	0.9	this report

The species composition of the bat community at the two projects areas was relatively similar, which would be expected based on habitat. The greatest percentage of call sequences recorded at the Eastern Project Area detectors were classified as “unknown” followed by *Myotis* spp. (25% of all calls). A smaller percentage of calls from the Western Project Area were classified as unknown (36%) and more were classified as myotid (38%). Following these two classification guilds, call sequences of the big brown bat guild were the next most common with the red bat/pipistrelle guild being the least common. This overall trend in species composition, particularly with red bats and pipistrelles being the least common, is typical of most detector surveys in the region.



**Figure 5.** Comparison of species composition of bats at the Eastern Project Area (left) and Western Project Area (right) detectors during summer and fall 2006.

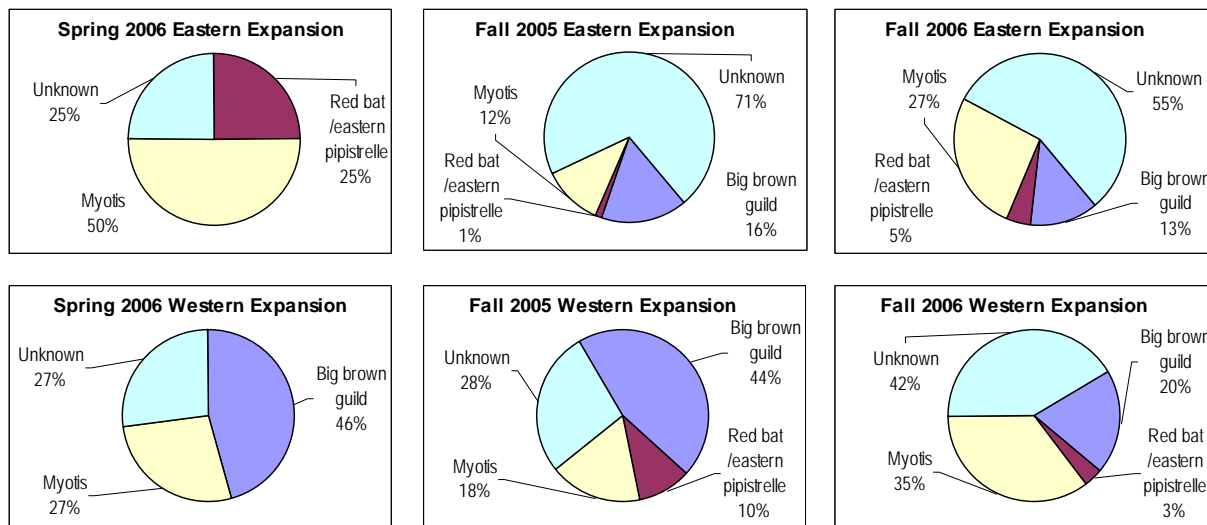
Results of acoustic surveys must be interpreted with caution. Room for error does exist in identification of bats based upon acoustic call sequences alone. This is especially true if a site-or regionally-specific library of recorded reference call sequences is not available. Also, detection rates are not necessarily correlated with the actual numbers of bats in an area because it is not possible to differentiate between individual bats. To the extent practicable, the uncertainty of identification has been reduced by guilding the call sequences into larger, more encompassing groups. Appendix Table 6 provides the time that each call file was recorded to help shed light on the nightly timing of bat activity and to identify potential repeat detections of individual bats at each detector on specific nights, should that information be desired.

#### *Comparison with Past Survey Results*

The summer-fall 2006 survey documented relatively low levels of bat activity that, overall, were slightly greater than previous seasons of surveys (Table 4). In fact, each season of survey conducted since the spring of 2005 has resulted in increasingly larger detection rates. However, those detection rates are still quite low. Previous surveys in the fall of 2005 did include documented detection rates at the Eastern Project Area that were greater than in the fall of 2006, but still did not exceed 1 call sequences/detector-night. Interestingly, in both fall seasons when both the Eastern and Western Project Areas were sampled, detection rates at the Eastern Project Area were greater than the Western Project Area. This relationship between the two Project Areas was reversed, however, during the spring 2006 survey.

<b>Table 4.</b> Comparison of results from all acoustic bat surveys at the proposed Deerfield Wind Project.							
<b>Year:</b>	<b>2005</b>			<b>2006</b>			
<b>Season:</b>	<b>Spring</b>	<b>Summer-Fall</b>		<b>Spring</b>		<b>Summer-Fall</b>	
<b>Site:</b>	<b>Eastern Project Area</b>	<b>Western Project Area</b>	<b>Eastern Project Area</b>	<b>Western Project Area</b>	<b>Eastern Project Area</b>	<b>Western Project Area</b>	<b>Eastern Project Area</b>
Big brown guild	0	18	14	5	0	28	30
Red bat/eastern pipistrelle	0	4	1		1	5	11
<i>Myotis</i>	4	7	10	3	2	50	63
Unknown	0	11	14	3	1	60	133
Total by location	4	40	39	11	4	143	237
# Detector-Nights	55	119	34	87	107	216	205
<b>Detection rate/site</b>	<b>0.07</b>	<b>0.34</b>	<b>1.14</b>	<b>0.13</b>	<b>0.04</b>	<b>0.66</b>	<b>1.16</b>
<b>Detection rate/season</b>	<b>0.07</b>	<b>0.5</b>		<b>0.7</b>		<b>0.9</b>	

With respect to the species composition of documented bat activity at the Project over the last three seasons, some general trends occur. Typically, calls identified as unknown represent a significant proportion, if not a majority, of the recorded call sequences. After this, call sequences of the myotids and the big brown bat guild are the next most common guilds, although the dominance of one of these guilds over the others varied from site to site and season to season. Calls sequences attributable to the red bat/eastern pipistrelle guild typically represent a small proportion of the recorded sequences and often less than 3 percent.



**Figure 6.** Comparison of species composition for spring and fall surveys conducted at Eastern Expansion and Western Expansion in 2005 and 2006 at the proposed Deerfield Wind Project.

## 5.0 Conclusions

Detector surveys during the summer and fall of 2006 have provided information on bat activity in the vicinity of the proposed Deerfield Wind Project. The surveys documented the species that would be expected in the area based on the species' range and abundance, as well as the habitats in the project area. The general similarity in detection rates, call volume, and species composition between the Eastern and Western Project Areas likely reflects their proximity to one another and their predominant habitats and land uses. The results were generally consistent with other recent studies in the northeast, indicating that bat migration activity in the area wasn't particularly unique with respect to the level of bat activity or the species present.

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**Appendix A**

**Bat Detector Survey Data Tables – 1-6**

Appendix A Table 1. Summary of species and weather, Deerfield Eastern Expansion High Detector – Fall 2006														
Night of	Detector Nights	BIG BROWN GUILD				RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
13-Jun	1				1				1			2	14.1	1.2
14-Jun	1											0	15.8	0.5
15-Jun	1											0	11.1	1.1
16-Jun	1		1									1	15.4	3.6
17-Jun	1											0	17.0	0.0
18-Jun	1								1			2	19.8	0.8
19-Jun	1											0	15.1	0.5
20-Jun	1											0	16.7	3.2
21-Jun	1							1	2			3	16.8	1.6
22-Jun	1								2			4	21.4	1.4
23-Jun	1											0	19.5	1.4
24-Jun	1						1	1				5	17.2	3.1
25-Jun	1											0	19.4	2.7
26-Jun	1											0	22.5	20.7
27-Jun	1											0	22.5	20.2
28-Jun	1											0	19.1	2.3
29-Jun	1											0	18.2	5.5
30-Jun	1											0	13.4	3.0
1-Jul	1		1						1			3	16.7	3.0
2-Jul	1											0	22.9	10.6
3-Jul	1							2	3			9	19.3	4.5
4-Jul	1											2	20.1	0.9
5-Jul	1											0	20.4	3.3
6-Jul	1											0	16.2	2.3
7-Jul	1											0	13.8	1.2
8-Jul	1	1										1	15.9	2.1
9-Jul	1								1			5	17.8	0.9
10-Jul	1				3			2	1			8	19.0	2.8
11-Jul	1								2			7	21.8	6.7
12-Jul	1											0	18.2	0.8
13-Jul	1	1										1	22.4	8.3
14-Jul	1											0	17.3	0.5
15-Jul	1				1							3	19.9	0.4
16-Jul	1											0	20.6	0.7
17-Jul	1							1				1	21.2	2.7
18-Jul	1											0	21.8	0.4
19-Jul	1				2			1				3	21.3	1.3

(continued)

**Appendix A Table 1.** Summary of species and weather, Deerfield Eastern Expansion High Detector – Fall 2006  
(continued)

Night of	Detector Nights	BIG BROWN GUILD				RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis				unknown
20-Jul	1											0	20.8	7.7	
21-Jul	1											0	21.7	4.3	
22-Jul	1		1				1					1	3	20.3	1.0
23-Jul	1											0	17.2	6.5	
24-Jul	1											0	14.2	0.4	
25-Jul	1											0	17.1	0.9	
26-Jul	1								1			4	5	21.0	3.7
27-Jul	1				1				1			1	3	21.1	0.4
28-Jul	1											1	1	24.4	6.2
29-Jul	1											0	17.5	0.5	
30-Jul	1											0	21.5	4.7	
31-Jul	1											1	1	15.3	3.6
1-Aug	1											2	2	26.3	5.3
2-Aug	1		1									3	4	23.2	4.6
3-Aug	1						2					7	9	21.1	3.5
4-Aug	1											1	1	17.5	2.2
5-Aug	1					1			1			2	2	14.5	4.9
6-Aug	1		1		1							2	4	21.0	6.2
7-Aug	1											0	20.8	5.3	
8-Aug	1											0	13.0	0.4	
9-Aug	1											0	13.6	1.4	
10-Aug	0											n/o	14.2	1.6	
11-Aug	0											n/o	10.0	0.7	
12-Aug	0											n/o	9.1	1.9	
13-Aug	0											n/o	13.0	2.0	
14-Aug	0											n/o	21.0	8.5	
15-Aug	0											n/o	15.9	3.3	
16-Aug	0											n/o	14.1	0.9	
17-Aug	0											n/o	15.5	0.9	
18-Aug	0											n/o	18.7	1.3	
19-Aug	0											n/o	19.3	5.8	
20-Aug	0											n/o	18.5	9.2	
21-Aug	0											n/o	12.8	1.9	
22-Aug	0											n/o	14.4	0.8	
23-Aug	1				1							1	2	14.8	1.2

(continued)

<b>Appendix A Table 1. Summary of species and weather, Deerfield Eastern Expansion High Detector – Fall 2006</b>														
<i>(continued)</i>														
Night of	Detector Nights	BIG BROWN GUILD				RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
24-Aug	1											0	15.5	0.6
25-Aug	1										1	1	15.8	5.2
26-Aug	1										2	2	17.0	6.1
27-Aug	1											0	15.9	4.4
28-Aug	1											0	19.3	6.9
29-Aug	1											0	16.8	0.2
30-Aug	1										2	2	9.3	0.8
31-Aug	1				1							1	10.8	0.9
1-Sep	1										1	1	16.6	9.4
2-Sep	1											0	15.6	29.7
3-Sep	1											0	15.8	6.0
4-Sep	1											0	15.0	3.2
5-Sep	1											0	14.4	0.0
6-Sep	1											0	14.0	0.6
7-Sep	1								1		3	4	10.5	0.2
8-Sep	1											0	12.9	0.0
9-Sep	1											0	13.8	4.9
10-Sep	1										3	3	6.8	0.6
11-Sep	1											0	7.0	3.2
12-Sep	1											0	9.8	3.3
13-Sep	1											0	15.8	4.3
14-Sep	1											0	16.3	2.2
15-Sep	1										1	1	12.8	1.5
16-Sep	1			1					1			2	14.0	0.2
17-Sep	1											0	11.9	0.1
18-Sep	1										1	1	19.4	6.0
19-Sep	1											0	13.4	2.2
20-Sep	1											0	9.7	9.0
21-Sep	1											0	5.0	2.4
22-Sep	1								2		4	6	14.4	6.6
23-Sep	1											0	18.2	2.6
24-Sep	1											0	14.4	8.5
25-Sep	1								1			1	9.9	6.5
26-Sep	1											0	5.4	2.3
27-Sep	0											n/o	14.0	4.0

*(continued)*

Appendix A Table 1. Summary of species and weather, Deerfield Eastern Expansion High Detector – Fall 2006 (continued)														
Night of	Detector Nights	BIG BROWN GUILD				RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
28-Sep	0											n/o	15.2	18.3
29-Sep	0											n/o	2.6	2.2
30-Sep	0											n/o	12.5	18.7
1-Oct	0											n/o	10.9	0.2
2-Oct	0											n/o	7.9	2.2
3-Oct	0											n/o	13.0	0.6
4-Oct	0											n/o	13.9	15.3
5-Oct	0											n/o	5.5	2.7
6-Oct	0											n/o	2.0	1.7
7-Oct	0											n/o	2.9	2.0
8-Oct	0											n/o	4.6	0.4
9-Oct	1											0	7.1	0.8
10-Oct	1								1			1	10.7	7.0
11-Oct	1											0	14.0	15.6
12-Oct	1								1			2	5.5	10.6
13-Oct	1										1	0	1.8	4.6
14-Oct	1											0	2.4	5.1
15-Oct	1											0	1.9	1.7
16-Oct	1											0	1.3	1.7
17-Oct	1											0	2.9	0.4
18-Oct	1											0	12.5	25.9
19-Oct	1											0	11.0	4.2
20-Oct	1											0	14.5	6.5
21-Oct	1											0	2.7	12.5
22-Oct	1											0	0.3	3.9
23-Oct	1											0	8.6	4.7
24-Oct	1											0	3.8	9.9
25-Oct	1											0	4.0	12.3
26-Oct	1											0	4.1	11.2
By Species		2	5	1	11	1	4	8	23	1	0	69	125	
By Guild		19				5		32			69			
		BIG BROWN GUILD				RBEP		MYSP			UNKN		Total	

n/o - indicates that detector was not operating on that night

<b>Appendix A Table 2. Summary of species and weather, Deerfield Eastern Expansion Low Detector – Fall 2006</b>															
Night of	Detector Nights	BIG BROWN GUILD			RBEP			MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis				unknown
13-Jun	0											n/o	14.1	1.2	
14-Jun	0											n/o	15.8	0.5	
15-Jun	0											n/o	11.1	1.1	
16-Jun	0											n/o	15.4	3.6	
17-Jun	0											n/o	17.0	0.0	
18-Jun	0											n/o	19.8	0.8	
19-Jun	0											n/o	15.1	0.5	
20-Jun	0											n/o	16.7	3.2	
21-Jun	0											n/o	16.8	1.6	
22-Jun	0											n/o	21.4	1.4	
23-Jun	0											n/o	19.5	1.4	
24-Jun	0											n/o	17.2	3.1	
25-Jun	0											n/o	19.4	2.7	
26-Jun	0											n/o	22.5	20.7	
27-Jun	0											n/o	22.5	20.2	
28-Jun	0											n/o	19.1	2.3	
29-Jun	0											n/o	18.2	5.5	
30-Jun	0											n/o	13.4	3.0	
1-Jul	0											n/o	16.7	3.0	
2-Jul	0											n/o	22.9	10.6	
3-Jul	0											n/o	19.3	4.5	
4-Jul	0											n/o	20.1	0.9	
5-Jul	0											n/o	20.4	3.3	
6-Jul	0											n/o	16.2	2.3	
7-Jul	0											n/o	13.8	1.2	
8-Jul	0											n/o	15.9	2.1	
9-Jul	0											n/o	17.8	0.9	
10-Jul	0											n/o	19.0	2.8	
11-Jul	0											n/o	21.8	6.7	
12-Jul	1											0	18.2	0.8	
13-Jul	1	1										1	2	22.4	8.3
14-Jul	1							1				2	3	17.3	0.5
15-Jul	1				1		1	1					3	19.9	0.4
16-Jul	1											1	1	20.6	0.7
17-Jul	1							1				2	3	21.2	2.7
18-Jul	1											0	21.8	0.4	
19-Jul	1				1							2	3	21.3	1.3

(continued)

Appendix A Table 2. Summary of species and weather, Deerfield Eastern Expansion Low Detector – Fall 2006 (continued)															
Night of	Detector Nights	BIG BROWN GUILD				RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	Myotis spp.	northern myotis	small-footed myotis				unknown
20-Jul	1											0	20.8	7.7	
21-Jul	1											1	1	21.7	4.3
22-Jul	1						1					1	1	20.3	1.0
23-Jul	1											0	17.2	6.5	
24-Jul	1											0	14.2	0.4	
25-Jul	1											1	1	17.1	0.9
26-Jul	1								1			6	7	21.0	3.7
27-Jul	1				1				1			2	4	21.1	0.4
28-Jul	1											3	3	24.4	6.2
29-Jul	1											1	1	17.5	0.5
30-Jul	1											0	21.5	4.7	
31-Jul	1											4	4	15.3	3.6
1-Aug	1				1							1	1	26.3	5.3
2-Aug	1		1		1				1			4	7	23.2	4.6
3-Aug	1					1	2		1			6	10	21.1	3.5
4-Aug	1						1					1	2	17.5	2.2
5-Aug	1				1				3			1	5	14.5	4.9
6-Aug	1								1			2	3	21.0	6.2
7-Aug	1											0	20.8	5.3	
8-Aug	1											0	13.0	0.4	
9-Aug	1											0	13.6	1.4	
10-Aug	0											n/o	14.2	1.6	
11-Aug	0											n/o	10.0	0.7	
12-Aug	0											n/o	9.1	1.9	
13-Aug	0											n/o	13.0	2.0	
14-Aug	0											n/o	21.0	8.5	
15-Aug	0											n/o	15.9	3.3	
16-Aug	0											n/o	14.1	0.9	
17-Aug	0											n/o	15.5	0.9	
18-Aug	0											n/o	18.7	1.3	
19-Aug	0											n/o	19.3	5.8	
20-Aug	0											n/o	18.5	9.2	
21-Aug	0											n/o	12.8	1.9	
22-Aug	0											n/o	14.4	0.8	
23-Aug	1											0	14.8	1.2	
24-Aug	1				1							1	2	15.5	0.6

(continued)

**Appendix A Table 2. Summary of species and weather, Deerfield Eastern Expansion Low Detector – Fall 2006**  
(continued)

Night of	Detector Nights	BIG BROWN GUILD			RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis			
25-Aug	1										0	15.8	5.2
26-Aug	1										1	17.0	6.1
27-Aug	1							1			3	15.9	4.4
28-Aug	1										0	19.3	6.9
29-Aug	1										0	16.8	0.2
30-Aug	1										1	9.3	0.8
31-Aug	1							1			1	10.8	0.9
1-Sep	1				1						1	16.6	9.4
2-Sep	1							1			1	15.6	29.7
3-Sep	1										0	15.8	6.0
4-Sep	1										0	15.0	3.2
5-Sep	1										0	14.4	0.0
6-Sep	1										0	14.0	0.6
7-Sep	1										0	10.5	0.2
8-Sep	1										0	12.9	0.0
9-Sep	1										0	13.8	4.9
10-Sep	1										1	6.8	0.6
11-Sep	1										2	7.0	3.2
12-Sep	1										1	9.8	3.3
13-Sep	1							1			1	15.8	4.3
14-Sep	1							2			2	16.3	2.2
15-Sep	1										0	12.8	1.5
16-Sep	1										0	14.0	0.2
17-Sep	1										0	11.9	0.1
18-Sep	1							1			1	19.4	6.0
19-Sep	1							2			1	13.4	2.2
20-Sep	1										0	9.7	9.0
21-Sep	1										0	5.0	2.4
22-Sep	1										0	14.4	6.6
23-Sep	1		1					2			2	18.2	2.6
24-Sep	1										0	14.4	8.5
25-Sep	1										0	9.9	6.5
26-Sep	1							1			2	5.4	2.3
27-Sep	1										0	14.0	4.0
28-Sep	1										0	15.2	18.3
29-Sep	1							2			2	2.6	2.2

(continued)



<b>Appendix A Table 2. Summary of species and weather, Deerfield Eastern Expansion Low Detector – Fall 2006</b> (continued)														
Night of	Detector Nights	BIG BROWN GUILD			RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis				small-footed myotis
30-Sep	1								1			1	12.5	18.7
1-Oct	1											0	10.9	0.2
2-Oct	1											0	7.9	2.2
3-Oct	1											0	13.0	0.6
4-Oct	1											0	13.9	15.3
5-Oct	1								1			1	5.5	2.7
6-Oct	1								1			1	2.0	1.7
7-Oct	1								1			1	2.9	2.0
8-Oct	1											1	4.6	0.4
9-Oct	1											0	7.1	0.8
10-Oct	1											0	10.7	7.0
11-Oct	1								1			1	14.0	15.6
12-Oct	1											0	5.5	10.6
13-Oct	1								1			1	1.8	4.6
14-Oct	1											0	2.4	5.1
15-Oct	1											0	1.9	1.7
16-Oct	1											0	1.3	1.7
17-Oct	1											1	2.9	0.4
18-Oct	1											0	12.5	25.9
19-Oct	1											0	11.0	4.2
20-Oct	1											0	14.5	6.5
21-Oct	1											0	2.7	12.5
22-Oct	1											0	0.3	3.9
23-Oct	1											0	8.6	4.7
24-Oct	1											0	3.8	9.9
25-Oct	1											0	4.0	12.3
26-Oct	1											0	4.1	11.2
<b>By Species</b>		1	2	0	8	1	5	0	31	0	0	64	112	
<b>By Guild</b>		11			6	31			64					
		<b>BIG BROWN GUILD</b>			<b>RBEP</b>	<b>MYSP</b>			<b>UNKN</b>	<b>Total</b>				

n/o - indicates that detector was not operating on that night

**Appendix A Table 3.** Summary of species and weather, Deerfield Western Expansion High Detector – Fall 2006

Night of	Detector Nights	BIG BROWN GUILD					RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis	unknown			
13-Jun	0												n/o	14.1	1.2
14-Jun	0												n/o	15.8	0.5
15-Jun	0												n/o	11.1	1.1
16-Jun	0												n/o	15.4	3.6
17-Jun	0												n/o	17.0	0.0
18-Jun	0												n/o	19.8	0.8
19-Jun	0												n/o	15.1	0.5
20-Jun	0												n/o	16.7	3.2
21-Jun	0												n/o	16.8	1.6
22-Jun	0												n/o	21.4	1.4
23-Jun	0												n/o	19.5	1.4
24-Jun	0												n/o	17.2	3.1
25-Jun	0												n/o	19.4	2.7
26-Jun	0												n/o	22.5	20.7
27-Jun	0												n/o	22.5	20.2
28-Jun	0												n/o	19.1	2.3
29-Jun	1												0	18.2	5.5
30-Jun	1												0	13.4	3.0
1-Jul	1												0	16.7	3.0
2-Jul	1												0	22.9	10.6
3-Jul	1												0	19.3	4.5
4-Jul	1												0	20.1	0.9
5-Jul	1												0	20.4	3.3
6-Jul	1												0	16.2	2.3
7-Jul	1												0	13.8	1.2
8-Jul	1												0	15.9	2.1
9-Jul	1												0	17.8	0.9
10-Jul	1								1				1	19.0	2.8
11-Jul	1												0	21.8	6.7
12-Jul	1												0	18.2	0.8
13-Jul	1												0	22.4	8.3
14-Jul	1												0	17.3	0.5
15-Jul	1												0	19.9	0.4
16-Jul	0												n/o	20.6	0.7
17-Jul	0												n/o	21.2	2.7
18-Jul	0												n/o	21.8	0.4
19-Jul	0												n/o	21.3	1.3

(continued)

**Appendix A Table 3.** Summary of species and weather, Deerfield Western Expansion High Detector – Fall 2006 (*continued*)

Night of	Detector Nights	BIG BROWN GUILD					RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis	unknown			
20-Jul	0												n/o	20.8	7.7
21-Jul	0												n/o	21.7	4.3
22-Jul	0												n/o	20.3	1.0
23-Jul	0												n/o	17.2	6.5
24-Jul	0												n/o	14.2	0.4
25-Jul	0												n/o	17.1	0.9
26-Jul	1												0	21.0	3.7
27-Jul	1		1										1	21.1	0.4
28-Jul	1												0	24.4	6.2
29-Jul	1												0	17.5	0.5
30-Jul	1	1											1	21.5	4.7
31-Jul	1											1	1	15.3	3.6
1-Aug	1												0	26.3	5.3
2-Aug	1											1	1	23.2	4.6
3-Aug	1												0	21.1	3.5
4-Aug	1												0	17.5	2.2
5-Aug	1												0	14.5	4.9
6-Aug	1												0	21.0	6.2
7-Aug	1												0	20.8	5.3
8-Aug	0												n/o	13.0	0.4
9-Aug	0												n/o	13.6	1.4
10-Aug	0												n/o	14.2	1.6
11-Aug	0												n/o	10.0	0.7
12-Aug	0												n/o	9.1	1.9
13-Aug	0												n/o	13.0	2.0
14-Aug	0												n/o	21.0	8.5
15-Aug	0												n/o	15.9	3.3
16-Aug	0												n/o	14.1	0.9
17-Aug	0												n/o	15.5	0.9
18-Aug	0												n/o	18.7	1.3
19-Aug	0												n/o	19.3	5.8
20-Aug	0												n/o	18.5	9.2
21-Aug	0												n/o	12.8	1.9
22-Aug	0												n/o	14.4	0.8
23-Aug	1											2	2	14.8	1.2
24-Aug	1												0	15.5	0.6
25-Aug	1												0	15.8	5.2

*(continued)*

**Appendix A Table 3.** Summary of species and weather, Deerfield Western Expansion High Detector – Fall 2006 (*continued*)

Night of	Detector Nights	BIG BROWN GUILD					RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis	unknown			
26-Aug	1												0	17.0	6.1
27-Aug	1												0	15.9	4.4
28-Aug	1												0	19.3	6.9
29-Aug	1												0	16.8	0.2
30-Aug	1												0	9.3	0.8
31-Aug	1				1								1	10.8	0.9
1-Sep	1												0	16.6	9.4
2-Sep	1												0	15.6	29.7
3-Sep	1												0	15.8	6.0
4-Sep	1												0	15.0	3.2
5-Sep	1												0	14.4	0.0
6-Sep	1												0	14.0	0.6
7-Sep	1						1						1	10.5	0.2
8-Sep	0												n/o	12.9	0.0
9-Sep	0												n/o	13.8	4.9
10-Sep	0												n/o	6.8	0.6
11-Sep	0												n/o	7.0	3.2
12-Sep	0												n/o	9.8	3.3
13-Sep	0												n/o	15.8	4.3
14-Sep	0												n/o	16.3	2.2
15-Sep	0												n/o	12.8	1.5
16-Sep	0												n/o	14.0	0.2
17-Sep	0												n/o	11.9	0.1
18-Sep	0												n/o	19.4	6.0
19-Sep	0												n/o	13.4	2.2
20-Sep	0												n/o	9.7	9.0
21-Sep	0												n/o	5.0	2.4
22-Sep	0												n/o	14.4	6.6
23-Sep	0												n/o	18.2	2.6
24-Sep	0												n/o	14.4	8.5
25-Sep	0												n/o	9.9	6.5
26-Sep	0												n/o	5.4	2.3
27-Sep	0												n/o	14.0	4.0
28-Sep	0												n/o	15.2	18.3
29-Sep	0												n/o	2.6	2.2
30-Sep	0												n/o	12.5	18.7
1-Oct	0												n/o	10.9	0.2

*(continued)*

**Appendix A Table 3.** Summary of species and weather, Deerfield Western Expansion High Detector – Fall 2006 (*continued*)

Night of	Detector Nights	BIG BROWN GUILD					RBEP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis	unknown			
2-Oct	0												n/o	7.9	2.2
3-Oct	0												n/o	13.0	0.6
4-Oct	0												n/o	13.9	15.3
5-Oct	0												n/o	5.5	2.7
6-Oct	0												n/o	2.0	1.7
7-Oct	0												n/o	2.9	2.0
8-Oct	0												n/o	4.6	0.4
9-Oct	1												0	7.1	0.8
10-Oct	1												0	10.7	7.0
11-Oct	1												0	14.0	15.6
12-Oct	0												n/o	5.5	10.6
13-Oct	0												n/o	1.8	4.6
14-Oct	0												n/o	2.4	5.1
15-Oct	0												n/o	1.9	1.7
16-Oct	0												n/o	1.3	1.7
17-Oct	0												n/o	2.9	0.4
18-Oct	0												n/o	12.5	25.9
19-Oct	0												n/o	11.0	4.2
20-Oct	0												n/o	14.5	6.5
21-Oct	0												n/o	2.7	12.5
22-Oct	0												n/o	0.3	3.9
23-Oct	0												n/o	8.6	4.7
24-Oct	0												n/o	3.8	9.9
25-Oct	0												n/o	4.0	12.3
26-Oct	0												n/o	4.1	11.2
<b>By Species</b>		1	1	0	1	0	1	0	1	0	0	4	9		
<b>By Guild</b>		3			1	1			4						
		<b>BIG BROWN GUILD</b>			<b>RBEP</b>	<b>MYSP</b>			<b>UNKN</b>	<b>Total</b>					

n/o - indicates that detector was not operating on that night

**Appendix A Table 4. Summary of species and weather, Deerfield Western Expansion Low Detector – Fall 2006**

Night of	Detector Nights	BIG BROWN GUILD				RBEP			MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	red bat/eastern pipistrelle	eastern red bat	little brown bat	Myotis spp.	northern myotis	small-footed myotis				unknown
13-Jun	1				1					1			2	4	14.1	1.2
14-Jun	1													0	15.8	0.5
15-Jun	1													0	11.1	1.1
16-Jun	1								1					1	15.4	3.6
17-Jun	1		1											1	17.0	0.0
18-Jun	1								5					5	19.8	0.8
19-Jun	1													0	15.1	0.5
20-Jun	1													0	16.7	3.2
21-Jun	1													0	16.8	1.6
22-Jun	1								1					1	21.4	1.4
23-Jun	1													0	19.5	1.4
24-Jun	1													0	17.2	3.1
25-Jun	1													0	19.4	2.7
26-Jun	1		1		1									2	22.5	20.7
27-Jun	1											1	1	1	22.5	20.2
28-Jun	1											2	2	2	19.1	2.3
29-Jun	1													0	18.2	5.5
30-Jun	1													0	13.4	3.0
1-Jul	1													0	16.7	3.0
2-Jul	0													n/o	22.9	10.6
3-Jul	0													n/o	19.3	4.5
4-Jul	0													n/o	20.1	0.9
5-Jul	0													n/o	20.4	3.3
6-Jul	0													n/o	16.2	2.3
7-Jul	0													n/o	13.8	1.2
8-Jul	0													n/o	15.9	2.1
9-Jul	0													n/o	17.8	0.9
10-Jul	0													n/o	19.0	2.8
11-Jul	0													n/o	21.8	6.7
12-Jul	0													n/o	18.2	0.8
13-Jul	1				1				1					2	22.4	8.3
14-Jul	1				3				2			5	10	17.3	0.5	
15-Jul	1				2							2	4	19.9	0.4	
16-Jul	1								1	1		4	6	20.6	0.7	
17-Jul	1								1			1	2	21.2	2.7	

(continued)

**Appendix A Table 4.** Summary of species and weather, Deerfield Western Expansion Low Detector – Fall 2006 (continued)

Night of	Detector Nights	BIG BROWN GUILD				RBEP			MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	red bat/eastern pipistrelle	eastern red bat	little brown bat	Myotis spp.	northern myotis	small-footed myotis			
18-Jul	1											3	3	21.8	0.4
19-Jul	1								1	2			3	21.3	1.3
20-Jul	1												0	20.8	7.7
21-Jul	1							1	1				2	21.7	4.3
22-Jul	1											1	1	20.3	1.0
23-Jul	1				1								1	17.2	6.5
24-Jul	1								1			1	2	14.2	0.4
25-Jul	1											2	2	17.1	0.9
26-Jul	1								2	1			3	21.0	3.7
27-Jul	1								1			5	6	21.1	0.4
28-Jul	1												0	24.4	6.2
29-Jul	1												0	17.5	0.5
30-Jul	1		1										1	21.5	4.7
31-Jul	1		1									2	3	15.3	3.6
1-Aug	1											2	2	26.3	5.3
2-Aug	1							1	1			2	4	23.2	4.6
3-Aug	0												n/o	21.1	3.5
4-Aug	0												n/o	17.5	2.2
5-Aug	0												n/o	14.5	4.9
6-Aug	0												n/o	21.0	6.2
7-Aug	0												n/o	20.8	5.3
8-Aug	0												n/o	13.0	0.4
9-Aug	0												n/o	13.6	1.4
10-Aug	0												n/o	14.2	1.6
11-Aug	0												n/o	10.0	0.7
12-Aug	0												n/o	9.1	1.9
13-Aug	0												n/o	13.0	2.0
14-Aug	0												n/o	21.0	8.5
15-Aug	0												n/o	15.9	3.3
16-Aug	0												n/o	14.1	0.9
17-Aug	0												n/o	15.5	0.9
18-Aug	0												n/o	18.7	1.3
19-Aug	0												n/o	19.3	5.8
20-Aug	0												n/o	18.5	9.2
21-Aug	0												n/o	12.8	1.9

(continued)

**Appendix A Table 4.** Summary of species and weather, Deerfield Western Expansion Low Detector – Fall 2006 (continued)

Night of	Detector Nights	BIG BROWN GUILD				RBEP			MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	red bat/eastern pipistrelle	eastern red bat	little brown bat	Myotis spp.	northern myotis	small-footed myotis				unknown
22-Aug	0												n/o	14.4	0.8	
23-Aug	1							1					1	2	14.8	1.2
24-Aug	1												2	2	15.5	0.6
25-Aug	1													0	15.8	5.2
26-Aug	1												1	1	17.0	6.1
27-Aug	1													0	15.9	4.4
28-Aug	1													0	19.3	6.9
29-Aug	1													0	16.8	0.2
30-Aug	1				1									1	9.3	0.8
31-Aug	1				2			1					1	4	10.8	0.9
1-Sep	1								1					1	16.6	9.4
2-Sep	1													0	15.6	29.7
3-Sep	1													0	15.8	6.0
4-Sep	1													0	15.0	3.2
5-Sep	1													0	14.4	0.0
6-Sep	1								1					1	14.0	0.6
7-Sep	1								3					3	10.5	0.2
8-Sep	1				1				2				1	4	12.9	0.0
9-Sep	1													0	13.8	4.9
10-Sep	1			1										1	6.8	0.6
11-Sep	1			1					1					2	7.0	3.2
12-Sep	1								1				2	3	9.8	3.3
13-Sep	1								2					2	15.8	4.3
14-Sep	1													0	16.3	2.2
15-Sep	1								1					1	12.8	1.5
16-Sep	1													0	14.0	0.2
17-Sep	1												1	1	11.9	0.1
18-Sep	1	1							2				1	4	19.4	6.0
19-Sep	1													0	13.4	2.2
20-Sep	1													0	9.7	9.0
21-Sep	1													0	5.0	2.4
22-Sep	1			1					1					2	14.4	6.6
23-Sep	1												1	1	18.2	2.6
24-Sep	1	1							1					2	14.4	8.5
25-Sep	1		1										2	3	9.9	6.5

(continued)



**Appendix A Table 4.** Summary of species and weather, Deerfield Western Expansion Low Detector – Fall 2006 (*continued*)

Night of	Detector Nights	BIG BROWN GUILD				RBEP			MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	red bat/eastern pipistrelle	eastern red bat	little brown bat	Myotis spp.	northern myotis	small-footed myotis				unknown
26-Sep	1													0	5.4	2.3
27-Sep	1												1	1	14.0	4.0
28-Sep	1												1	1	15.2	18.3
29-Sep	1													0	2.6	2.2
30-Sep	1								1					1	12.5	18.7
1-Oct	1													0	10.9	0.2
2-Oct	1													0	7.9	2.2
3-Oct	1			1										1	13.0	0.6
4-Oct	1	1											1	2	13.9	15.3
5-Oct	1													0	5.5	2.7
6-Oct	1													0	2.0	1.7
7-Oct	1												1	1	2.9	2.0
8-Oct	1								1				1	2	4.6	0.4
9-Oct	1								2					2	7.1	0.8
10-Oct	1						1		3				1	5	10.7	7.0
11-Oct	1													0	14.0	15.6
12-Oct	1												1	1	5.5	10.6
13-Oct	1													0	1.8	4.6
14-Oct	1													0	2.4	5.1
15-Oct	1													0	1.9	1.7
16-Oct	1													0	1.3	1.7
17-Oct	1													0	2.9	0.4
18-Oct	1													0	12.5	25.9
19-Oct	1								1				1	2	11.0	4.2
20-Oct	1													0	14.5	6.5
21-Oct	1													0	2.7	12.5
22-Oct	1													0	0.3	3.9
23-Oct	1													0	8.6	4.7
24-Oct	1													0	3.8	9.9
25-Oct	1													0	4.0	12.3
26-Oct	1													0	4.1	11.2
<b>By Species</b>		3	5	4	13	0	1	3	5	42	1	1	56	134		
<b>By Guild</b>		25				4			49			56				
		<b>BIG BROWN GUILD</b>				<b>RBEP</b>			<b>MYSP</b>			<b>UNKN</b>	<b>Total</b>			

n/o - indicates that detector was not operating on that night

Appendix A Table 5. Summary of species and weather, Deerfield Western Expansion Tree Detector – Fall 2006															
Night of	Detector Nights	BIG BROWN GUILD				RBFP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)	
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis				unknown
13-Jun	1											0	14.1	1.2	
14-Jun	1											0	15.8	0.5	
15-Jun	1											0	11.1	1.1	
16-Jun	1											0	15.4	3.6	
17-Jun	1											0	17.0	0.0	
18-Jun	1											0	19.8	0.8	
19-Jun	1											0	15.1	0.5	
20-Jun	1											0	16.7	3.2	
21-Jun	1											0	16.8	1.6	
22-Jun	1											0	21.4	1.4	
23-Jun	1											0	19.5	1.4	
24-Jun	1											0	17.2	3.1	
25-Jun	1											0	19.4	2.7	
26-Jun	1											0	22.5	20.7	
27-Jun	1											0	22.5	20.2	
28-Jun	1											0	19.1	2.3	
29-Jun	1											0	18.2	5.5	
30-Jun	1											0	13.4	3.0	
1-Jul	1											0	16.7	3.0	
2-Jul	1											0	22.9	10.6	
3-Jul	1											0	19.3	4.5	
4-Jul	1											0	20.1	0.9	
5-Jul	1											0	20.4	3.3	
6-Jul	1											0	16.2	2.3	
7-Jul	1											0	13.8	1.2	
8-Jul	1											0	15.9	2.1	
9-Jul	1											0	17.8	0.9	
10-Jul	1											0	19.0	2.8	
11-Jul	1											0	21.8	6.7	
12-Jul	1											0	18.2	0.8	
13-Jul	1											0	22.4	8.3	
14-Jul	1											0	17.3	0.5	
15-Jul	1											0	19.9	0.4	
16-Jul	1											0	20.6	0.7	
17-Jul	1											0	21.2	2.7	
18-Jul	1											0	21.8	0.4	
19-Jul	1											0	21.3	1.3	

(continued)

**Appendix A Table 5.** Summary of species and weather, Deerfield Western Expansion Tree Detector – Fall 2006 *(continued)*

Night of	Detector Nights	BIG BROWN GUILD				RBFP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
20-Jul	1											0	20.8	7.7
21-Jul	1											0	21.7	4.3
22-Jul	1											0	20.3	1.0
23-Jul	1											0	17.2	6.5
24-Jul	1											0	14.2	0.4
25-Jul	1											0	17.1	0.9
26-Jul	1											0	21.0	3.7
27-Jul	1											0	21.1	0.4
28-Jul	1											0	24.4	6.2
29-Jul	1											0	17.5	0.5
30-Jul	1											0	21.5	4.7
31-Jul	1											0	15.3	3.6
1-Aug	1											0	26.3	5.3
2-Aug	0											n/o	23.2	4.6
3-Aug	1											0	21.1	3.5
4-Aug	0											n/o	17.5	2.2
5-Aug	0											n/o	14.5	4.9
6-Aug	0											n/o	21.0	6.2
7-Aug	0											n/o	20.8	5.3
8-Aug	0											n/o	13.0	0.4
9-Aug	0											n/o	13.6	1.4
10-Aug	0											n/o	14.2	1.6
11-Aug	0											n/o	10.0	0.7
12-Aug	0											n/o	9.1	1.9
13-Aug	0											n/o	13.0	2.0
14-Aug	0											n/o	21.0	8.5
15-Aug	0											n/o	15.9	3.3
16-Aug	0											n/o	14.1	0.9
17-Aug	0											n/o	15.5	0.9
18-Aug	0											n/o	18.7	1.3
19-Aug	0											n/o	19.3	5.8
20-Aug	0											n/o	18.5	9.2
21-Aug	0											n/o	12.8	1.9
22-Aug	0											n/o	14.4	0.8
23-Aug	1											0	14.8	1.2
24-Aug	1											0	15.5	0.6
25-Aug	1											0	15.8	5.2

*(continued)*

**Appendix A Table 5.** Summary of species and weather, Deerfield Western Expansion Tree Detector – Fall 2006 *(continued)*

Night of	Detector Nights	BIG BROWN GUILD				RBFP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
26-Aug	1											0	17.0	6.1
27-Aug	0											n/o	15.9	4.4
28-Aug	0											n/o	19.3	6.9
29-Aug	0											n/o	16.8	0.2
30-Aug	0											n/o	9.3	0.8
31-Aug	0											n/o	10.8	0.9
1-Sep	1											0	16.6	9.4
2-Sep	1											0	15.6	29.7
3-Sep	1											0	15.8	6.0
4-Sep	1											0	15.0	3.2
5-Sep	1											0	14.4	0.0
6-Sep	0											n/o	14.0	0.6
7-Sep	0											n/o	10.5	0.2
8-Sep	0											n/o	12.9	0.0
9-Sep	0											n/o	13.8	4.9
10-Sep	0											n/o	6.8	0.6
11-Sep	0											n/o	7.0	3.2
12-Sep	0											n/o	9.8	3.3
13-Sep	0											n/o	15.8	4.3
14-Sep	0											n/o	16.3	2.2
15-Sep	0											n/o	12.8	1.5
16-Sep	0											n/o	14.0	0.2
17-Sep	0											n/o	11.9	0.1
18-Sep	0											n/o	19.4	6.0
19-Sep	0											n/o	13.4	2.2
20-Sep	0											n/o	9.7	9.0
21-Sep	0											n/o	5.0	2.4
22-Sep	0											n/o	14.4	6.6
23-Sep	0											n/o	18.2	2.6
24-Sep	0											n/o	14.4	8.5
25-Sep	0											n/o	9.9	6.5
26-Sep	0											n/o	5.4	2.3
27-Sep	0											n/o	14.0	4.0
28-Sep	0											n/o	15.2	18.3
29-Sep	0											n/o	2.6	2.2
30-Sep	0											n/o	12.5	18.7
1-Oct	0											n/o	10.9	0.2

*(continued)*

Night of	Detector Nights	BIG BROWN GUILD				RBFP		MYSP			UNKN	Total	Temperature (c)	Wind Speed (kph)
		big brown bat	hoary bat	silver-haired bat	silver-haired/big brown	eastern pipistrelle	eastern red bat	little brown bat	<i>Myotis</i> spp.	northern myotis	small-footed myotis			
2-Oct	0											n/o	7.9	2.2
3-Oct	0											n/o	13.0	0.6
4-Oct	0											n/o	13.9	15.3
5-Oct	0											n/o	5.5	2.7
6-Oct	0											n/o	2.0	1.7
7-Oct	0											n/o	2.9	2.0
8-Oct	0											n/o	4.6	0.4
9-Oct	1											0	7.1	0.8
10-Oct	1											0	10.7	7.0
11-Oct	0											n/o	14.0	15.6
12-Oct	0											n/o	5.5	10.6
13-Oct	0											n/o	1.8	4.6
14-Oct	0											n/o	2.4	5.1
15-Oct	0											n/o	1.9	1.7
16-Oct	0											n/o	1.3	1.7
17-Oct	0											n/o	2.9	0.4
18-Oct	0											n/o	12.5	25.9
19-Oct	0											n/o	11.0	4.2
20-Oct	0											n/o	14.5	6.5
21-Oct	0											n/o	2.7	12.5
22-Oct	0											n/o	0.3	3.9
23-Oct	0											n/o	8.6	4.7
24-Oct	0											n/o	3.8	9.9
25-Oct	0											n/o	4.0	12.3
26-Oct	0											n/o	4.1	11.2
By Species		0	0	0	0	0	0	0	0	0	0	0		
By Guild		0				0		0			0	0		
		BIG BROWN GUILD				RBFP		MYSP			UNKN	Total		

n/o - indicates that detector was not operating on that night

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G6132147.54#	6/13/06	21:47	LE	East High	silver-haired/big brown	big brown bat
G6132147.54#	6/13/06	21:47	LE	West Low	silver-haired/big brown	big brown bat
G6132215.48#	6/13/06	22:15	UNKN	West Low	Unknown	Unknown
G6132304.11#	6/13/06	23:04	UNKN	West Low	Unknown	Unknown
G6140127.17#	6/13/06	1:27	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6140127.17#	6/13/06	1:27	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6170039.04#	6/16/06	0:39	LACI	East High	hoary bat	big brown guild
G6170125.52#	6/16/06	1:25	MYLU	West Low	little brown bat	MYSP
G6180402.42#	6/17/06	4:02	LACI	West Low	hoary bat	big brown guild
G6182124.56#	6/18/06	21:24	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6182218.10#	6/18/06	22:18	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6182222.46#	6/18/06	22:22	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6182309.20#	6/18/06	23:09	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6182309.25#	6/18/06	23:09	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6182309.34#	6/18/06	23:09	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6190050.17#	6/18/06	0:50	UNKN	East High	Unknown	Unknown
G6212143.57#	6/21/06	21:43	MYLU	East High	little brown bat	MYSP
G6212303.17#	6/21/06	23:03	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6212308.07#	6/21/06	23:08	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6222251.19#	6/22/06	22:51	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6222253.23#	6/22/06	22:53	UNKN	East High	Unknown	Unknown
G6222306.57#	6/22/06	23:06	MYSP	East High	<i>Myotis</i> spp.	MYSP
G6230057.13#	6/22/06	0:57	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G6230323.38#	6/22/06	3:23	UNKN	East High	Unknown	Unknown
G6250050.02#	6/24/06	0:50	UNKN	East High	Unknown	Unknown
G6250101.16#	6/24/06	1:01	LABO	East High	eastern red bat	RBEP
G6250109.49#	6/24/06	1:09	UNKN	East High	Unknown	Unknown
G6250129.06#	6/24/06	1:29	MYLU	East High	little brown bat	MYSP
G6250153.08#	6/24/06	1:53	UNKN	East High	Unknown	Unknown
G6262119.00#	6/26/06	21:19	LACI	West Low	hoary bat	big brown guild
G6262212.08#	6/26/06	22:12	LE	West Low	silver-haired/big brown	big brown bat
G6280009.34#	6/27/06	0:09	UNKN	West Low	Unknown	Unknown
G6290125.13#	6/28/06	1:25	UNKN	West Low	Unknown	Unknown
G6290433.58#	6/28/06	4:33	UNKN	West Low	Unknown	Unknown
G7012153.37#	7/1/06	21:53	LACI	East High	hoary bat	big brown guild
G7020155.01#	7/1/06	1:55	UNKN	East High	Unknown	Unknown
G7020155.20#	7/1/06	1:55	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7032255.29#	7/3/06	22:55	UNKN	East High	Unknown	Unknown
G7032255.44#	7/3/06	22:55	MYLU	East High	little brown bat	MYSP
G7032303.40#	7/3/06	23:03	MYLU	East High	little brown bat	MYSP
G7040134.18#	7/3/06	1:34	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7040134.51#	7/3/06	1:34	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7040137.26#	7/3/06	1:37	UNKN	East High	Unknown	Unknown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G7040138.17#	7/3/06	1:38	UNKN	East High	Unknown	Unknown
G7040138.46#	7/3/06	1:38	UNKN	East High	Unknown	Unknown
G7040146.00#	7/3/06	1:46	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7042228.57#	7/4/06	22:28	UNKN	East High	Unknown	Unknown
G7050211.55#	7/4/06	2:11	UNKN	East High	Unknown	Unknown
G7082142.14#	7/8/06	21:42	EPFU	East High	big brown bat	big brown
G7092219.36#	7/9/06	22:19	UNKN	East High	Unknown	Unknown
G7092240.38#	7/9/06	22:40	MYSE	East High	northern myotis	MYSP
G7100017.33#	7/9/06	0:17	UNKN	East High	Unknown	Unknown
G7100101.36#	7/9/06	1:01	UNKN	East High	Unknown	Unknown
G7100232.39#	7/9/06	2:32	UNKN	East High	Unknown	Unknown
G7102155.31#	7/10/06	21:55	LE	East High	silver-haired/big brown	big brown bat
G7102210.52#	7/10/06	22:10	LE	East High	silver-haired/big brown	big brown bat
G7102247.38#	7/10/06	22:47	MYSP	West High	<i>Myotis</i> spp.	MYSP
G7102250.48#	7/10/06	22:50	LE	East High	silver-haired/big brown	big brown bat
G7102321.10#	7/10/06	23:21	MYLU	East High	little brown bat	MYSP
G7102331.53#	7/10/06	23:31	MYLU	East High	little brown bat	MYSP
G7102341.42#	7/10/06	23:41	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7110019.53#	7/10/06	0:19	UNKN	East High	Unknown	Unknown
G7110123.25#	7/10/06	1:23	UNKN	East High	Unknown	Unknown
G7112222.16#	7/11/06	22:22	UNKN	East High	Unknown	Unknown
G7112356.16#	7/11/06	23:56	UNKN	East High	Unknown	Unknown
G7120026.02#	7/11/06	0:26	UNKN	East High	Unknown	Unknown
G7120026.03#	7/11/06	0:26	UNKN	East High	Unknown	Unknown
G7120056.16#	7/11/06	0:56	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7120103.35#	7/11/06	1:03	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7120158.41#	7/11/06	1:58	UNKN	East High	Unknown	Unknown
G7132316.24#	7/13/06	23:16	LE	West Low	silver-haired/big brown	big brown bat
G7140108.40#	7/13/06	1:08	UNKN	East Low	Unknown	Unknown
G7140154.38#	7/13/06	1:54	EPFU	East Low	big brown bat	big brown
G7140201.07#	7/13/06	2:01	EPFU	East High	big brown bat	big brown
G7140427.54#	7/13/06	4:27	MYLU	West Low	little brown bat	MYSP
G7142151.28#	7/14/06	21:51	LE	West Low	silver-haired/big brown	big brown bat
G7142155.14#	7/14/06	21:55	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7142216.09#	7/14/06	22:16	LE	West Low	silver-haired/big brown	big brown bat
G7142249.39#	7/14/06	22:49	UNKN	West Low	Unknown	Unknown
G7142315.27#	7/14/06	23:15	UNKN	West Low	Unknown	Unknown
G7142347.04#	7/14/06	23:47	UNKN	West Low	Unknown	Unknown
G7142356.24#	7/14/06	23:56	UNKN	East Low	Unknown	Unknown
G7150134.15#	7/14/06	1:34	LE	West Low	silver-haired/big brown	big brown bat
G7150136.40#	7/14/06	1:36	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G7150336.38#	7/14/06	3:36	UNKN	West Low	Unknown	Unknown
G7150337.01#	7/14/06	3:37	MYSP	West Low	<i>Myotis</i> spp.	MYSP

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G7150344.23#	7/14/06	3:44	UNKN	East Low	Unknown	Unknown
G7150348.55#	7/14/06	3:48	UNKN	West Low	Unknown	Unknown
G7152112.03#	7/15/06	21:12	LE	West Low	silver-haired/big brown	big brown bat
G7152228.21#	7/15/06	22:28	LE	East Low	silver-haired/big brown	big brown bat
G7152234.57#	7/15/06	22:34	LE	East High	silver-haired/big brown	big brown bat
G7152334.17#	7/15/06	23:34	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G7152340.52#	7/15/06	23:40	UNKN	East High	Unknown	Unknown
G7160024.29#	7/15/06	0:24	LABO	East Low	eastern red bat	RBEP
G7160031.07#	7/15/06	0:31	UNKN	East High	Unknown	Unknown
G7160130.51#	7/15/06	1:30	LE	West Low	silver-haired/big brown	big brown bat
G7160200.44#	7/15/06	2:00	UNKN	West Low	Unknown	Unknown
G7160212.14#	7/15/06	2:12	UNKN	West Low	Unknown	Unknown
G7162316.33#	7/16/06	23:16	UNKN	West Low	Unknown	Unknown
G7162316.39#	7/16/06	23:16	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7170020.44#	7/16/06	0:20	UNKN	West Low	Unknown	Unknown
G7170202.50#	7/16/06	2:02	UNKN	West Low	Unknown	Unknown
G7170224.37#	7/16/06	2:24	UNKN	East Low	Unknown	Unknown
G7170225.05#	7/16/06	2:25	MYLE	West Low	small-footed myotis	MYSP
G7170225.21#	7/16/06	2:25	UNKN	West Low	Unknown	Unknown
G7172147.20#	7/17/06	21:47	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G7172154.04#	7/17/06	21:54	MYLU	East High	little brown bat	MYSP
G7172220.02#	7/17/06	22:20	MYLU	West Low	little brown bat	MYSP
G7172347.06#	7/17/06	23:47	UNKN	East Low	Unknown	Unknown
G7180123.58#	7/17/06	1:23	UNKN	West Low	Unknown	Unknown
G7180410.47#	7/17/06	4:10	UNKN	East Low	Unknown	Unknown
G7182140.16#	7/18/06	21:40	UNKN	West Low	Unknown	Unknown
G7182328.39#	7/18/06	23:28	UNKN	West Low	Unknown	Unknown
G7182348.11#	7/18/06	23:48	UNKN	West Low	Unknown	Unknown
G7192253.36#	7/19/06	22:53	LE	East Low	silver-haired/big brown	big brown bat
G7192300.30#	7/19/06	23:00	LE	East High	silver-haired/big brown	big brown bat
G7200045.29#	7/19/06	0:45	UNKN	East Low	Unknown	Unknown
G7200052.21#	7/19/06	0:52	LE	East High	silver-haired/big brown	big brown bat
G7200211.50#	7/19/06	2:11	UNKN	East Low	Unknown	Unknown
G7200218.43#	7/19/06	2:18	MYLU	East High	little brown bat	MYSP
G7200253.00#	7/19/06	2:53	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7200333.17#	7/19/06	3:33	MYLU	West Low	little brown bat	MYSP
G7200452.56#	7/19/06	4:52	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7212155.40#	7/21/06	21:55	UNKN	East Low	Unknown	Unknown
G7212202.24#	7/21/06	22:02	LABO	West Low	eastern red bat	RBEP
G7220253.42#	7/21/06	2:53	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7222049.41#	7/22/06	20:49	LABO	East Low	eastern red bat	RBEP
G7222056.45#	7/22/06	20:56	LABO	East High	eastern red bat	RBEP
G7222249.46#	7/22/06	22:49	UNKN	West Low	Unknown	Unknown

(continued)



Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G7222337.25#	7/22/06	23:37	UNKN	East High	Unknown	Unknown
G7230025.17#	7/22/06	0:25	LACI	East High	hoary bat	big brown guild
G7232238.18#	7/23/06	22:38	LE	West Low	silver-haired/big brown	big brown bat
G7242310.48#	7/24/06	23:10	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7242344.46#	7/24/06	23:44	UNKN	West Low	Unknown	Unknown
G7252046.42#	7/25/06	20:46	UNKN	West Low	Unknown	Unknown
G7252104.35#	7/25/06	21:04	UNKN	West Low	Unknown	Unknown
G7260250.39#	7/25/06	2:50	UNKN	East Low	Unknown	Unknown
G7262100.05#	7/26/06	21:00	UNKN	East High	Unknown	Unknown
G7262143.55#	7/26/06	21:43	UNKN	East Low	Unknown	Unknown
G7262158.41#	7/26/06	21:58	UNKN	East Low	Unknown	Unknown
G7262206.02#	7/26/06	22:06	UNKN	East High	Unknown	Unknown
G7262238.28#	7/26/06	22:38	MYSE	West Low	northern myotis	MYSP
G7262247.50#	7/26/06	22:47	UNKN	East High	Unknown	Unknown
G7262251.10#	7/26/06	22:51	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7262309.33#	7/26/06	23:09	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G7262316.54#	7/26/06	23:16	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7270110.53#	7/26/06	1:10	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7270231.19#	7/26/06	2:31	UNKN	East Low	Unknown	Unknown
G7270421.17#	7/26/06	4:21	UNKN	East Low	Unknown	Unknown
G7270422.31#	7/26/06	4:22	UNKN	East Low	Unknown	Unknown
G7270423.32#	7/26/06	4:23	UNKN	East Low	Unknown	Unknown
G7270429.54#	7/26/06	4:29	UNKN	East High	Unknown	Unknown
G7272118.05#	7/27/06	21:18	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G7272128.44#	7/27/06	21:28	UNKN	West Low	Unknown	Unknown
G7272302.55#	7/27/06	23:02	UNKN	West Low	Unknown	Unknown
G7272303.33#	7/27/06	23:03	UNKN	West Low	Unknown	Unknown
G7272333.14#	7/27/06	23:33	UNKN	East Low	Unknown	Unknown
G7272339.12#	7/27/06	23:39	UNKN	West Low	Unknown	Unknown
G7272341.25#	7/27/06	23:41	UNKN	West Low	Unknown	Unknown
G7272349.00#	7/27/06	23:49	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G7272356.27#	7/27/06	23:56	MYSP	East High	<i>Myotis</i> spp.	MYSP
G7272356.42#	7/27/06	23:56	UNKN	East High	Unknown	Unknown
G7280005.02#	7/27/06	0:05	LACI	West High	hoary bat	big brown guild
G7280050.32#	7/27/06	0:50	UNKN	East Low	Unknown	Unknown
G7280057.50#	7/27/06	0:57	LE	East Low	silver-haired/big brown	big brown bat
G7280105.13#	7/27/06	1:05	LE	East High	silver-haired/big brown	big brown bat
G7282106.03#	7/28/06	21:06	UNKN	East Low	Unknown	Unknown
G7282106.17#	7/28/06	21:06	UNKN	East Low	Unknown	Unknown
G7290120.59#	7/28/06	1:20	UNKN	East Low	Unknown	Unknown
G7290128.28#	7/28/06	1:28	UNKN	East High	Unknown	Unknown
G7300228.25#	7/29/06	2:28	UNKN	East Low	Unknown	Unknown
G7302202.22#	7/30/06	22:02	EPFU	West High	big brown bat	big brown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G7302203.36#	7/30/06	22:03	LACI	West Low	hoary bat	big brown guild
G7312017.23#	7/31/06	20:17	UNKN	West High	Unknown	Unknown
G7312018.39#	7/31/06	20:18	LACI	West Low	hoary bat	big brown guild
G7312253.40#	7/31/06	22:53	UNKN	East Low	Unknown	Unknown
G7312301.21#	7/31/06	23:01	UNKN	East High	Unknown	Unknown
G7312329.54#	7/31/06	23:29	UNKN	West Low	Unknown	Unknown
G8010029.51#	7/31/06	0:29	UNKN	West Low	Unknown	Unknown
G8010134.30#	7/31/06	1:34	UNKN	East Low	Unknown	Unknown
G8010229.55#	7/31/06	2:29	UNKN	East Low	Unknown	Unknown
G8010423.03#	7/31/06	4:23	UNKN	East Low	Unknown	Unknown
G8012228.19#	8/1/06	22:28	UNKN	East High	Unknown	Unknown
G8012230.31#	8/1/06	22:30	UNKN	West Low	Unknown	Unknown
G8012357.05#	8/1/06	23:57	LE	East Low	silver-haired/big brown	big brown bat
G8020004.51#	8/1/06	0:04	UNKN	East High	Unknown	Unknown
G8020057.10#	8/1/06	0:57	UNKN	West Low	Unknown	Unknown
G8022042.26#	8/2/06	20:42	LACI	East Low	hoary bat	big brown guild
G8022050.14#	8/2/06	20:50	LACI	East High	hoary bat	big brown guild
G8022106.15#	8/2/06	21:06	UNKN	West High	Unknown	Unknown
G8022142.35#	8/2/06	21:42	UNKN	East Low	Unknown	Unknown
G8022150.25#	8/2/06	21:50	UNKN	East High	Unknown	Unknown
G8022201.20#	8/2/06	22:01	MYLU	West Low	little brown bat	MYSP
G8022210.52#	8/2/06	22:10	UNKN	East High	Unknown	Unknown
G8022222.13#	8/2/06	22:22	LE	East Low	silver-haired/big brown	big brown bat
G8022230.06#	8/2/06	22:30	UNKN	East High	Unknown	Unknown
G8022357.09#	8/2/06	23:57	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G8030015.14#	8/2/06	0:15	UNKN	West Low	Unknown	Unknown
G8030035.04#	8/2/06	0:35	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8030035.23#	8/2/06	0:35	UNKN	East Low	Unknown	Unknown
G8030039.35#	8/2/06	0:39	UNKN	East Low	Unknown	Unknown
G8030106.43#	8/2/06	1:06	UNKN	East Low	Unknown	Unknown
G8030434.40#	8/2/06	4:34	UNKN	West Low	Unknown	Unknown
G8032109.43#	8/3/06	21:09	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8032111.16#	8/3/06	21:11	PISU	East Low	eastern pipistrelle	RBEP
G8032114.36#	8/3/06	21:14	LABO	East Low	eastern red bat	RBEP
G8032117.38#	8/3/06	21:17	UNKN	East High	Unknown	Unknown
G8032119.09#	8/3/06	21:19	UNKN	East High	Unknown	Unknown
G8032122.30#	8/3/06	21:22	LABO	East High	eastern red bat	RBEP
G8032219.30#	8/3/06	22:19	LABO	East Low	eastern red bat	RBEP
G8032225.49#	8/3/06	22:25	UNKN	East Low	Unknown	Unknown
G8032227.24#	8/3/06	22:27	LABO	East High	eastern red bat	RBEP
G8032233.17#	8/3/06	22:33	UNKN	East Low	Unknown	Unknown
G8032233.30#	8/3/06	22:33	UNKN	East Low	Unknown	Unknown
G8032233.43#	8/3/06	22:33	UNKN	East High	Unknown	Unknown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G8032234.19#	8/3/06	22:34	UNKN	East Low	Unknown	Unknown
G8032241.24#	8/3/06	22:41	UNKN	East High	Unknown	Unknown
G8032242.13#	8/3/06	22:42	UNKN	East High	Unknown	Unknown
G8032313.10#	8/3/06	23:13	UNKN	East Low	Unknown	Unknown
G8032321.01#	8/3/06	23:21	UNKN	East Low	Unknown	Unknown
G8032321.05#	8/3/06	23:21	UNKN	East High	Unknown	Unknown
G8032328.56#	8/3/06	23:28	UNKN	East High	Unknown	Unknown
G8042232.07#	8/4/06	22:32	LABO	East Low	eastern red bat	RBEP
G8042240.06#	8/4/06	22:40	UNKN	East High	Unknown	Unknown
G8042336.15#	8/4/06	23:36	UNKN	East Low	Unknown	Unknown
G8052053.47#	8/5/06	20:53	PISU	East High	eastern pipistrelle	RBEP
G8052150.12#	8/5/06	21:50	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8052158.14#	8/5/06	21:58	MYSP	East High	<i>Myotis</i> spp.	MYSP
G8052253.50#	8/5/06	22:53	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8052336.41#	8/5/06	23:36	UNKN	East Low	Unknown	Unknown
G8060035.08#	8/5/06	0:35	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8060431.35#	8/5/06	4:31	LE	East Low	silver-haired/big brown	big brown bat
G8062055.17#	8/6/06	20:55	UNKN	East High	Unknown	Unknown
G8062056.05#	8/6/06	20:56	LACI	East High	hoary bat	big brown guild
G8062218.50#	8/6/06	22:18	LE	East High	silver-haired/big brown	big brown bat
G8062224.53#	8/6/06	22:24	UNKN	East Low	Unknown	Unknown
G8070023.59#	8/6/06	0:23	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8070108.40#	8/6/06	1:08	UNKN	East Low	Unknown	Unknown
G8070116.50#	8/6/06	1:16	UNKN	East High	Unknown	Unknown
G8240023.57#	8/23/06	0:23	UNKN	East Low	Unknown	Unknown
G8240024.12#	8/23/06	0:24	LE	East Low	silver-haired/big brown	big brown bat
G8240024.46#	8/23/06	0:24	UNKN	West High	Unknown	Unknown
G8240033.12#	8/23/06	0:33	UNKN	East High	Unknown	Unknown
G8240033.27#	8/23/06	0:33	LE	East High	silver-haired/big brown	big brown bat
G8240043.16#	8/23/06	0:43	UNKN	West Low	Unknown	Unknown
G8240059.42#	8/23/06	0:59	LABO	West Low	eastern red bat	RBEP
G8240355.33#	8/23/06	3:55	UNKN	West High	Unknown	Unknown
G8242130.36#	8/24/06	21:30	UNKN	West Low	Unknown	Unknown
G8250143.40#	8/24/06	1:43	UNKN	West Low	Unknown	Unknown
G8252045.48#	8/25/06	20:45	UNKN	East Low	Unknown	Unknown
G8252055.11#	8/25/06	20:55	UNKN	East High	Unknown	Unknown
G8262117.26#	8/26/06	21:17	UNKN	West Low	Unknown	Unknown
G8262131.07#	8/26/06	21:31	UNKN	East Low	Unknown	Unknown
G8262142.02#	8/26/06	21:42	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8262151.31#	8/26/06	21:51	UNKN	East High	Unknown	Unknown
G8270241.11#	8/26/06	2:41	UNKN	East Low	Unknown	Unknown
G8270241.23#	8/26/06	2:41	UNKN	East Low	Unknown	Unknown
G8270250.41#	8/26/06	2:50	UNKN	East High	Unknown	Unknown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G8292129.14#	8/29/06	21:29	UNKN	East Low	Unknown	Unknown
G8302119.59#	8/30/06	21:19	UNKN	East High	Unknown	Unknown
G8302342.08#	8/30/06	23:42	LE	West Low	silver-haired/big brown	big brown bat
G8310323.59#	8/30/06	3:23	UNKN	East Low	Unknown	Unknown
G8310324.06#	8/30/06	3:24	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G8310333.51#	8/30/06	3:33	UNKN	East High	Unknown	Unknown
G8312228.09#	8/31/06	22:28	UNKN	East Low	Unknown	Unknown
G8312325.11#	8/31/06	23:25	LE	West Low	silver-haired/big brown	big brown bat
G8312346.58#	8/31/06	23:46	LABO	West Low	eastern red bat	RBEP
G9010019.47#	8/31/06	0:19	UNKN	West Low	Unknown	Unknown
G9010124.09#	8/31/06	1:24	LE	West High	silver-haired/big brown	big brown bat
G9010337.17#	8/31/06	3:37	LE	East Low	silver-haired/big brown	big brown bat
G9010347.06#	8/31/06	3:47	LE	East High	silver-haired/big brown	big brown bat
G9010505.20#	8/31/06	5:05	LE	West Low	silver-haired/big brown	big brown bat
G9012032.34#	9/1/06	20:32	UNKN	East High	Unknown	Unknown
G9012149.10#	9/1/06	21:49	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9012358.38#	9/1/06	23:58	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9062329.07#	9/6/06	23:29	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9072212.53#	9/7/06	22:12	LABO	West High	eastern red bat	RBEP
G9072250.12#	9/7/06	22:50	UNKN	East High	Unknown	Unknown
G9072321.43#	9/7/06	23:21	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9080003.34#	9/7/06	0:03	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9080055.44#	9/7/06	0:55	UNKN	East High	Unknown	Unknown
G9080057.17#	9/7/06	0:57	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9080110.07#	9/7/06	1:10	UNKN	East High	Unknown	Unknown
G9080317.55#	9/7/06	3:17	MYSP	East High	<i>Myotis</i> spp.	MYSP
G9081938.08#	9/8/06	19:38	LE	West Low	silver-haired/big brown	big brown bat
G9082158.04#	9/8/06	21:58	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9090113.29#	9/8/06	1:13	UNKN	West Low	Unknown	Unknown
G9090416.30#	9/8/06	4:16	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9100152.28#	9/9/06	1:52	UNKN	East Low	Unknown	Unknown
G9101936.31#	9/10/06	19:36	LANO	West Low	silver-haired bat	big brown guild
G9102116.45#	9/10/06	21:16	UNKN	East High	Unknown	Unknown
G9102119.01#	9/10/06	21:19	UNKN	East Low	Unknown	Unknown
G9102129.27#	9/10/06	21:29	UNKN	East High	Unknown	Unknown
G9110405.18#	9/10/06	4:05	UNKN	East Low	Unknown	Unknown
G9110415.45#	9/10/06	4:15	UNKN	East High	Unknown	Unknown
G9112032.31#	9/11/06	20:32	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9112153.05#	9/11/06	21:53	UNKN	East Low	Unknown	Unknown
G9112332.06#	9/11/06	23:32	LANO	West Low	silver-haired bat	big brown guild
G9122013.54#	9/12/06	20:13	UNKN	West Low	Unknown	Unknown
G9122126.26#	9/12/06	21:26	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9122238.25#	9/12/06	22:38	UNKN	West Low	Unknown	Unknown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G9122321.09#	9/12/06	23:21	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9132226.33#	9/13/06	22:26	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9132237.14#	9/13/06	22:37	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9132238.44#	9/13/06	22:38	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9140104.52#	9/13/06	1:04	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9152111.26#	9/15/06	21:11	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9160517.17#	9/15/06	5:17	UNKN	East High	Unknown	Unknown
G9170225.06#	9/16/06	2:25	MYSP	East High	<i>Myotis</i> spp.	MYSP
G9170356.18#	9/16/06	3:56	LANO	East High	silver-haired bat	big brown guild
G9172021.23#	9/17/06	20:21	UNKN	West Low	Unknown	Unknown
G9172058.24#	9/17/06	20:58	UNKN	East Low	Unknown	Unknown
G9180006.09#	9/17/06	0:06	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9182026.35#	9/18/06	20:26	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9182026.56#	9/18/06	20:26	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9182035.38#	9/18/06	20:35	UNKN	East Low	Unknown	Unknown
G9182046.37#	9/18/06	20:46	UNKN	East High	Unknown	Unknown
G9182049.18#	9/18/06	20:49	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9182054.08#	9/18/06	20:54	EPFU	West Low	big brown bat	big brown
G9182133.40#	9/18/06	21:33	UNKN	West Low	Unknown	Unknown
G9190023.53#	9/18/06	0:23	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9221926.18#	9/22/06	19:26	LANO	West Low	silver-haired bat	big brown guild
G9222032.01#	9/22/06	20:32	UNKN	East Low	Unknown	Unknown
G9222043.15#	9/22/06	20:43	UNKN	East High	Unknown	Unknown
G9222052.24#	9/22/06	20:52	UNKN	East High	Unknown	Unknown
G9222103.07#	9/22/06	21:03	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9222108.04#	9/22/06	21:08	LACI	East Low	hoary bat	big brown guild
G9222114.23#	9/22/06	21:14	MYSP	East High	<i>Myotis</i> spp.	MYSP
G9222122.36#	9/22/06	21:22	MYSP	East High	<i>Myotis</i> spp.	MYSP
G9222133.39#	9/22/06	21:33	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9222144.57#	9/22/06	21:44	UNKN	East High	Unknown	Unknown
G9222244.18#	9/22/06	22:44	UNKN	East Low	Unknown	Unknown
G9222352.56#	9/22/06	23:52	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9230131.41#	9/22/06	1:31	UNKN	East High	Unknown	Unknown
G9231937.02#	9/23/06	19:37	UNKN	West Low	Unknown	Unknown
G9250012.11#	9/24/06	0:12	EPFU	West Low	big brown bat	big brown
G9250355.20#	9/24/06	3:55	MYSP	West Low	<i>Myotis</i> spp.	MYSP
G9251947.05#	9/25/06	19:47	LACI	West Low	hoary bat	big brown guild
G9252056.28#	9/25/06	20:56	UNKN	West Low	Unknown	Unknown
G9252205.56#	9/25/06	22:05	UNKN	West Low	Unknown	Unknown
G9252243.56#	9/25/06	22:43	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9252255.24#	9/25/06	22:55	MYSP	East High	<i>Myotis</i> spp.	MYSP
G9252315.32#	9/25/06	23:15	UNKN	East Low	Unknown	Unknown
G9260020.52#	9/25/06	0:20	UNKN	East Low	Unknown	Unknown

(continued)

Appendix A Table 6. All bat sequences recorded - Deerfield Fall 2006 (continued)						
Filename	Date (night of)	Time	Species	Detector	Common Name	Guild
G9280003.31#	9/27/06	0:03	UNKN	West Low	Unknown	Unknown
G9282107.01#	9/28/06	21:07	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9282327.50#	9/28/06	23:27	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9290514.23#	9/28/06	5:14	UNKN	West Low	Unknown	Unknown
G9292047.30#	9/29/06	20:47	MYSP	East Low	<i>Myotis</i> spp.	MYSP
G9302134.23#	9/30/06	21:34	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA040104.25#	10/3/06	1:04	LANO	West Low	silver-haired bat	big brown guild
GA041937.31#	10/4/06	19:37	UNKN	West Low	Unknown	Unknown
GA042113.56#	10/4/06	21:13	MYSP	East Low	<i>Myotis</i> spp.	MYSP
GA042114.19#	10/4/06	21:14	UNKN	East Low	Unknown	Unknown
GA042211.09#	10/4/06	22:11	EPFU	West Low	big brown bat	big brown
GA052112.21#	10/5/06	21:12	MYSP	East Low	<i>Myotis</i> spp.	MYSP
GA060211.35#	10/5/06	2:11	UNKN	East Low	Unknown	Unknown
GA070009.27#	10/6/06	0:09	MYSP	East Low	<i>Myotis</i> spp.	MYSP
GA071952.19#	10/7/06	19:52	UNKN	West Low	Unknown	Unknown
GA080043.19#	10/7/06	0:43	UNKN	West Low	Unknown	Unknown
GA080153.50#	10/7/06	1:53	UNKN	East Low	Unknown	Unknown
GA090004.53#	10/8/06	0:04	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA100030.04#	10/9/06	0:30	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA100044.13#	10/9/06	0:44	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA102008.48#	10/10/06	20:08	RBEP	West Low	red bat or eastern pipistrelle	RBEP
GA102015.17#	10/10/06	20:15	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA102231.17#	10/10/06	22:31	UNKN	West Low	Unknown	Unknown
GA102305.36#	10/10/06	23:05	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA102312.58#	10/10/06	23:12	UNKN	East Low	Unknown	Unknown
GA110051.46#	10/10/06	0:51	MYSP	West Low	<i>Myotis</i> spp.	MYSP
GA110058.38#	10/10/06	0:58	MYSP	East High	<i>Myotis</i> spp.	MYSP
GA110100.52#	10/10/06	1:00	MYSP	East Low	<i>Myotis</i> spp.	MYSP
GA122014.37#	10/11/06	20:14	MYSP	East Low	<i>Myotis</i> spp.	MYSP
GA122012.21#	10/12/06	20:12	MYSP	East High	<i>Myotis</i> spp.	MYSP
GA122115.11#	10/12/06	21:15	UNKN	East High	Unknown	Unknown
GA122117.28#	10/12/06	21:17	UNKN	East Low	Unknown	Unknown
GA122133.58#	10/12/06	21:33	UNKN	West Low	Unknown	Unknown
GA162013.23#	10/16/06	20:13	UNKN	East Low	Unknown	Unknown
GA191938.47#	10/19/06	19:38	UNKN	West Low	Unknown	Unknown
GA192130.23#	10/19/06	21:30	MYSP	West Low	<i>Myotis</i> spp.	MYSP