

Exhibit 19 Avian and Bat Monitoring Protocol

1.0 Post-Construction Avian and Bat Fatality Monitoring Protocol

Champlain Wind, LLC (Champlain) anticipates that the Maine Land Use Regulation Commission (LURC) will require post-construction monitoring for bird and bat fatalities at the Bowers Wind Project (Project) during at least one year post-construction. The methods in this work plan are based on standard post-construction monitoring techniques used at existing wind farms in the region, including the work plans for Stetson I and Stetson II, which were developed in consultation with the Maine Department of Inland Fisheries and Wildlife (MDIFW). The final work plan will be developed in consultation with MDIFW.

Objectives of post-construction monitoring:

- to document the species and number of individuals of bird and bat fatalities during the spring, summer, late-summer, and fall of the first year of operation of the wind farm;
- to estimate the level of take of birds and bats during the 2012 study period based on the results of standardized searches, searcher efficiency trials, scavenger carcass removal trials, and if necessary, a search area correction factor;
- to determine if fatality events are uniform across the Project area;
- to assess whether fatality rates constitute an unreasonable adverse impact to birds or bats;

Fatality Search Methods:

Mortality monitoring in 2012 will involve searches at all 27 turbines (100%). Survey effort will include weekly searches between April 15 and October 30, as well as daily searches at a subset of turbines during peak migration periods in the spring and fall. Accordingly, weekly searches will be conducted at all turbines from April 15 to April 30, May 15 to August 31, and October 1 to October 30. Figures 1 and 2 show the peak timing of discovery of bird and bat fatalities during four mortality studies at wind farms in Maine (Mars Hill 2007 and 2008, Stetson I 2009, and Stetson II 2010).

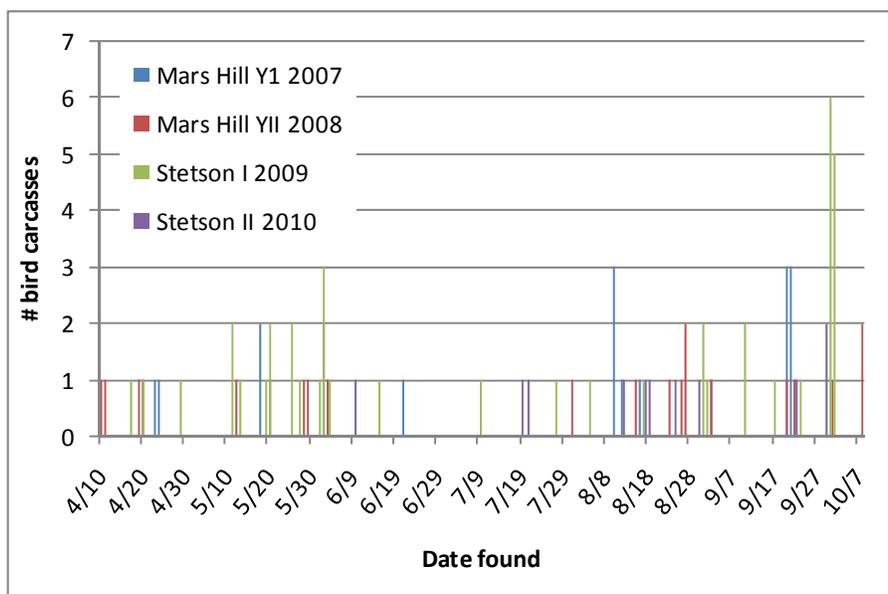


Figure 1. Timing of bird carcass discovery during four mortality studies in Maine.

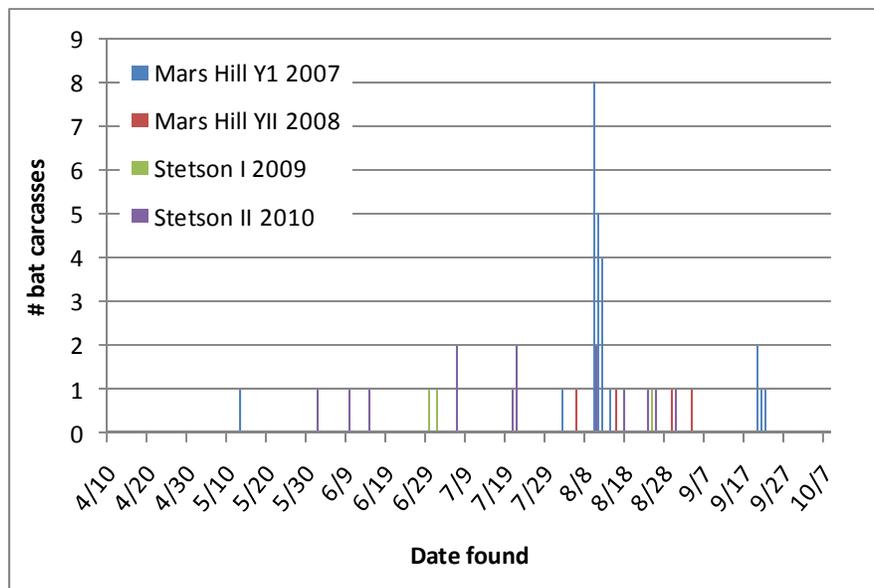


Figure 2. Timing of bat carcass discovery during four mortality studies in Maine.

Peak periods of avian carcass discovery occurred between May 15 and June 5 in the spring, and September 15 and September 30 in the fall. Bat fatality discovery peaked between July 15 and September 22. To cover the peak timing of bird and bat fatalities determined by the recent mortality studies, daily searches will be conducted at 5 turbines (located throughout the Project area) for a period of 3 weeks during spring migration (May 15 to June 5); and for 6 weeks during the bat swarming and fall migration periods (August 1 to September 15); weekly surveys will continue at the remaining 22 turbines during these two timeframes. Accordingly, there will be as many as 930 turbine searches over the course of the survey year.

Continuous monitoring during this period will result in 28 consecutive weeks of surveys. Monitoring will cover four distinct seasons:

- spring migration – April 15 to May 31;
- summer breeding – June 1 to July 15;
- late-summer – July 16 to August 31; and
- fall migration – September 1 to October 30.

The entire leveled, graded lay-down area, adjacent stable side slopes, and adjacent road sections will be searched. Therefore, the standard search area is expected to be approximately 80 meters (m) in diameter, on average. Transects will be established 4 m (13 feet [']) apart within search areas.

During periods when weekly surveys alone are being conducted, it is anticipated that 27 turbine searches will be completed during 5 survey days per week (a biologist will search 4 to 6 turbines per day). Searches will generally be scheduled for the same five days each week (Monday through Friday). During the weekly and daily search timeframes, it is anticipated that the 22 weekly-searched turbines will be surveyed over a period of 4 days (3 to 4 weekly-searched turbines per day), in addition to the 5 turbines that will be searched daily (period of 7 days). It is expected that one biologist will be able to complete all surveys, even during the periods of increased effort.

The biologist conducting turbine searches will be trained on the search protocol by the project manager. During searches, all carcasses found (intact or scavenged) will be photographed and documented on standardized field forms. The following information will be recorded for each carcass found:

- date and time;
- biologist identification;
- search plot identification;

- general weather conditions;
- ground cover conditions (e.g., vegetation type and height, wet, dry, gravel);
- distance (determined by a laser range finder) and compass direction from the turbine;
- distance and compass direction from the transect from which the carcass was detected;
- carcass condition (e.g., fresh, rigor, decomposed, intact carcass, scavenged, feather spot);
- carcass position (e.g., face-up or down, sprawled out or balled up); and
- species, age, gender, and reproductive condition (when possible).

Carcasses will be collected under the appropriate state and federal permits and will be individually bagged and frozen. Carcasses will be retained in a freezer at the Operations and Maintenance building and may be used in searcher efficiency and scavenger carcass removal trials.

In the event that a federally or state-listed species is found, the appropriate agency will be contacted and arrangements will be made to submit the carcass to the agency. If a large-scale fatality event (i.e., more than 5 carcasses at one turbine, more than 20 carcasses found across the Project area in one survey day) is observed, MDIFW will be contacted within 24 hours. If an injured bird or bat is found, when possible, the animal will be transported to a local wildlife rehabilitator.

Maintenance personnel will be informed of the timing of standardized searches and will be trained on the collision event reporting protocol in the event that a carcass or injured animal is found. Carcasses found outside of standardized searches will be documented and collected but will be reported separately from those carcasses found during standard searches, and will not be used for estimates of take.

Vegetation conditions, including percent coverage within search areas and vegetation height, will be monitored on a weekly basis. First Wind will assess the need to mow plots to increase searcher efficiency throughout the survey year.

Nightly weather conditions will be monitored throughout the survey period. Wind speed and direction, barometric pressure, and temperature will be recorded at an on-site meteorological tower, and/or by an anemometer on a turbine nacelle. Additional weather parameters will be recorded by the biologist from a location in proximity of the Project on nights prior to fatality searches. These parameters will include cloud type, percent cloud cover, general ceiling height, relative visibility, moon phase, precipitation, and any notable weather events (passing of storms or fronts). Additionally, during site visits the biologist will document incidental wildlife observations on standardized field forms.

Searcher Efficiency Trials:

Searcher efficiency trials will be conducted throughout the study period, and the biologist will be unaware of trial dates. Carcasses will be discreetly marked and placed at turbines by the trial coordinator early in the morning prior to scheduled turbine searches. Any carcasses not found during searches will be retrieved at the end of the survey day. Trial results will be documented on standardized field forms. A target number of 25 carcasses will be placed during trials over the course of the survey year. Carcasses will be of native species, if available; otherwise, surrogate non-native species will be selected. Trial carcasses will include both large and small bird and bat carcasses. Trials will be distributed across the four seasons of surveys, and carcasses will be placed in the variety of ground cover types that occur within search areas. The percent of carcasses found during trials will be used to estimate the level of bird and bat take during the study period.

Scavenger Carcass Removal Trials:

Scavenging rate trials will be conducted during each survey season and will be completed independently of the searcher efficiency trials. A target total of 25 carcasses will be placed within all available ground cover types within search areas. Fresh bird and bat carcasses of native species will be discreetly marked and monitored until they are removed by scavengers or completely decomposed. Carcasses will be checked during the first 5 days after they are placed, then again on days 7, 10, 14, 24, 28, and on additional days if necessary. During the trial periods, the status of all carcasses, including all evidence of scavenging or decomposition, will be documented on standardized field forms. The scavenger carcass

removal data will be used to estimate the percent of carcasses that remain detectable in search areas during the 7-day interval between standardized searches. Monitoring of carcasses beyond the 7-day period will also indicate the average number of days that carcasses remain in search areas.

Search area correction:

If the generally 80-m diameter search area is significantly reduced by forest edge at any search turbines, a correction factor may be applied to the number of carcasses found at these turbines. To estimate the number of carcasses that may have occurred in non-searchable areas at abbreviated search plots, a correction factor would take into account the total searchable area, the total non-searchable area, and the number of carcasses observed within the searchable area.

Analysis and Reporting:

The species, date, turbine number, and weather conditions for each bird and bat fatality will be compiled into a table and included in the annual report. Analysis will include a summary of the distances bird and bat carcasses were found from turbines and the distribution of fatalities among turbines throughout the Project area in relation to topographical and Project design features (e.g., on slope, top of hill, turbine string, location within turbine string, Federal Aviation Administration [FAA] lighting). The number of carcasses found during standard searches, the percent of carcasses found by the biologist as determined by the searcher efficiency trials, the percent of carcasses that are not removed by scavengers between search intervals, and if necessary, an area correction factor will be used to determine an estimate of bird and bat take during the study period. This will include an estimate of the number of bird and bat fatalities per turbine and per megawatt per study period. The formula used to estimate mortality will be a standard formula employed by other recent mortality studies and will be based on the method deemed most accurate at estimating fatality at the time of reporting.