Bicknell's Thrush Final Report
Deerfield Wind Project
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This report tiers to Jenna Casey's survey report prepared on June 24th, 2005 which includes the protocol and results of two surveys conducted on the eastern ridge of the proposed Deerfield Wind Project. The surveys were conducted on June 8 and June 23, 2005.

Background

Bicknell's Thrush is listed as a US Forest Service Eastern Region Regional Forester's Sensitive Species for the Green Mountain National Forest and also listed as a State of Vermont Threatened species. It is a neo-tropical migratory bird that is in severe decline. See attached Casey report for additional information on habitat needs.

The western ridge of the proposed Deerfield Wind project is predominately northern hardwoods and does not have Bicknell's Thrush habitat. The eastern ridge of the project has been surveyed in past years for Bicknell's Thrush as part of an annual Vermont state-wide Bicknell's Thrush survey conducted by Vermont Institute of Natural Science (VINS) and the State of Vermont. VINS stopped conducting surveys in this area in recent years due to the marginal habitat conditions (elevation is just at 3000 feet and area has limited early successional habitat or stunted spruce fir conditions) and no recordings of Bicknell's Thrush for the area. The Non Game Natural Heritage Program of the Vermont State ANR considers this area as marginal habitat for Bicknell's Thrush, and thus is a low priority for Bicknell's Thrush survey activities.

Bicknell's Thrush surveys were conducted by David Capen and Dan Coker of UVM as pre-construction wildlife studies for the Searsburg Wind Energy project (the existing wind energy site on the eastern ridge). The survey route covered the majority of the eastern ridge which includes lands that are now being proposed for the Deerfield Wind project. Their survey results showed that Bicknell's Thrush was heard twice nearby the first met tower site. Surveys conducted by VINS after construction did not yield any sightings nor call backs from Bicknell's Thrush.

A Bicknell's Thrush survey was conducted on the eastern ridge south of the existing wind turbines by Jenna Casey of the Green Mountain National Forest on June 8 and 28, 2005

as part of pre-construction wildlife studies for the proposed Deerfield Wind project. See the attached survey report for more details on the purpose and protocol used for this survey. No Bicknell's Thrush were seen or heard during the survey periods.

Conclusion

Given the poor/marginal habitat on the eastern ridge of the proposed project area, and the negative results of sightings and call backs from recent surveys, it is highly unlikely that Bicknell's Thrush are using the eastern ridge project area as nesting habitat. It is possible that Bicknell's Thrush are transients to the area as there is suitable habitat of high elevation spruce fir on the surrounding nearby peaks of the project site.

As Bicknell's Thrush is a top neo-tropical migratory bird conservation priority, and the survey route on the eastern ridge is already demarcated (flagging and GPS coordinates for listening points), it is recommended that surveys continue to be conducted by Forest Service staff during the spring of 2006 and 2007 before construction begins if and when the project is implemented. If Bicknell's Thrush is observed nesting within the proposed construction area, mitigation measures would need to be implemented including stopping construction from May 15th to August 1st (additional mitigation measures as outlined in the VINS Conservation Strategy for Bicknell's Thrush would be recommended).

Construction of the turbines possibly might improve Bicknell's Thrush habitat conditions of regenerating spruce fir. Apart from the Deerfield Wind project, Forest Service staff should consider continuing surveys for a period of time after construction of the project in areas where spruce fir was allowed to regenerate. These surveys would add to the database for the Statewide Bicknell's Thrush monitoring program.

Bicknell's Thrush Survey: June 8 and 23, 2005
Deerfield Proposed Wind Tower Expansion

Jenna Casey – Wildlife Biologist Student Trainee, GMNF

Background and Purpose:
Bicknell's Thrush (*Catharus bicknelli*) is a migratory songbird that breeds exclusively in high-elevation (>3000 feet) spruce and fir forests of New England and Canada. Due to its specialized habitat requirements, limited breeding range, and small population size, the Bicknell's Thrush is listed as a top conservation priority among neotropical migratory songbirds, as well as listed as a GMNF Regional Foresters Sensitive Species. The National Forest land in the area proposed for the wind tower expansion is mostly >3000 feet in elevation, has some stunted spruce and fir, but is mostly northern hardwoods. The purpose of this project was to conduct a thorough and systematic survey for Bicknell's Thrush on the east ridge of the proposed project within the proposed wind tower expansion area on National Forest land in Searsburg, Vermont. Bicknell's Thrush surveys were not conducted on the western ridge of the proposed project because it is below 3000 feet in elevation, is all hardwood forest at the top of the ridge, and does not include Bicknell's Thrush habitat.

Protocol:
The protocol used for this survey follows the Vermont Institute of Natural Science (VINS) Mountain Birdwatch Protocol used to survey for Bicknell's Thrush (BITH) and other high elevation songbirds. The survey consists of 10-minute counts at listening stations spaced at 250m intervals between 4:30 and 6:30am. Eight points were surveyed along the route of the proposed wind towers (fig. 1). If no BITH are detected at any of the 10-minute point counts or between locations, BITH vocalizations are played for one minute at each station, followed by a two minute listening period. This playback portion of the survey begins at the end point (in this survey point 8) and works back toward point one. This playback is conducted until a BITH is detected. If audio playbacks fail to elicit a response, a follow-up search is needed of the area before June 30. The search can be conducted at dawn (4:30am-5:30am) or at dusk (8:00-9:00pm) and consists of audio playbacks at 100-m intervals.

Results:
No BITH were detected during the initial survey (June 8th, 4:35am-6:25am) or during the follow-up survey (June 23rd, 4:05-4:55am). Other mountain songbirds that VINS records, like Swainson's Thrush, Blackpoll Warbler, White-throated Sparrow and Winter Wren were detected. Even though this project location is above or at 3000 feet in elevation, the suitable spruce and fir habitat BITH prefer is mainly at and around survey point one, where a met tower is located. A mixed forest of northern hardwoods and sparse softwoods surrounds all other survey points. During the follow-up survey on June 23rd, only 10 survey points spaced at 100m along the route were surveyed because of time constraints. Surveying additional points would have gone outside of the 5:00 am window and are located in the poorer habitat.