## DELAWARE-OTSEGO AUDUBON SOC., INC PO BOX 544 ONEONTA, NY 13820

To:

Town of Warren Town Board Richard Jacks, Town Supervisor 642 Kingdom Road Mohawk, New York 13407

# COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE JORDANVILLE WIND POWER PROJECT

Towns of Stark and Warren, Herkimer County, NY

Town of Warren Town Board, Lead Agency

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Jordanville Wind Power Project. The Delaware-Otsego Audubon Society membership area is close by and directly south of the project. We generally support wind power as an alternative to nuclear and fossil fuels. A copy of our policy on windpower is attached to these comments.

Despite our support for wind power, we do have concerns about how this project will impact wildlife. This is a very large project that is being built in good habitat for grassland birds, and potentially in migration routes for raptors. Many of these species are in decline, and impacts from this project will exacerbate that decline, especially from habitat degradation.

In addition, the DEIS and Avian Impact Assessment do not adequately address the use of the area by Short-eared Owls for foraging during the fall and winter, and possible nesting.

Below are more specific concerns regarding each of these issues and others, along with boldfaced recommendations.

#### **Impacts on grassland birds**

The Avian Impact Assessment states the area has "an impressive community of grassland nesting birds." As more large wind projects are proposed for open areas of the state, the displacement of nesting birds from disturbances and habitat destruction may be a greater problem than blade impacts. Where possible, turbines should be located in habitat that results in the lowest impact to species of concern--in this case, grassland species which are in decline. Consideration also needs to be given to reducing the number of turbines in this large project by eliminating those that are in the best bird habitat. More information should be sought from on-site surveys, and from local experts, to learn about specific locations of rare and threatened birds so turbine siting can be adjusted to avoid disturbing these areas.

One study referenced in the avian assessment demonstrated that there were reductions in nesting densities for a number of open country species near the turbines; in some cases this impact can extend over 500+ ft. from the turbines. If extrapolated to the Jordanville project, a 500' radius could mean about 1,350 acres of the 6,225 acres in the project area, or around 22%, would be affected. Since much of this area is grasslands, and many of the nesting species are in decline, this is an important local or regional avian impact

We recommend that this loss and degradation of a significant amount of grassland bird habitat be mitigated. A reserve area equal or greater in size than the habitat impacted by turbines and destroyed by road construction, should be established nearby and endowed by Community Energy for future management for grassland birds.

In addition, landowners who lease land for the project benefit financially and should make changes in agricultural practices to offset bird impacts. Farmers who receive payment for the placement of turbines on their open land should be required to delay mowing until July 15 or later in an area equal to that impacted by turbines and other infrastructure on their property. Annual payments for the placement of turbines should be made contingent on this requirement.

#### **Impacts on migrating raptors**

We recognize the involvement of consultant Paul Kerlinger in the establishment of the Franklin Mountain Hawkwatch near Oneonta in the mid-1970s. Our organization has now operated the Franklin Mountain Hawk Watch for 16 consecutive fall seasons and tallied almost 9000 hours of hawk counting. We respectfully disagree with a number of assumptions and conclusions about hawk migration in the region found in the avian impact assessment.

We challenge the implication that the number of raptors seen at a hawk watch site is directly related to the risk to the birds. Hawk watch sites recording large numbers are usually tallying many Sharp-shinned and Broad-winged Hawks. In his article "Wind Power Development and Raptor Migration in the Central Appalachians" (Hawk Migration Studies, volume XXXI, No.2), David Brandes of Lafayette College examines risk factors that suggest these species are likely to be at lower risk from turbine impacts than most species. These risk assessments are based on how birds migrate, forage and their relative abundance. A much higher number of risk factors have been assigned to Red-tailed Hawk and Golden Eagle – two species that are seen in high numbers locally. David Brandes states "Golden Eagle appears to be at the highest risk." A significant portion of the eastern population of this New York State Endangered Species passes through the region. Franklin Mountain, 35 miles south of the project, has recorded both the highest daily and seasonal counts of Golden Eagle anywhere in the east.

Recently reported impacts to White-tailed Eagles at Smola, Norway where a number of birds have been killed by collisions with wind turbines, and breeding success has dropped since construction of a wind farm, is an example of how a species at risk, even though low in numbers, can be affected by modern wind turbines.

We take issue with several other claims and assumptions about the local and regional raptor migration. Contrary to the documents, little of significance is known about the local raptor migration away from Franklin Mountain, especially the migration of Golden Eagles.

• "Thousands of birdwatchers have searched the state to locate the migration corridors of raptors."

There may have been informal efforts to locate migration routes of raptors in the region, but these have not been done in any systematic fashion and would be incomplete at best, particularly in the vicinity of the project area. There is no published data to support such a generalized claim. If there are documents and data relating to work in this area, we would reconsider this assessment.

It is known from records at Franklin Mountain that significant flights of Golden Eagles can occur at a site on a small number of days. It would be easy to misjudge a site given only a small amount of data.

• "No major hawk migration pathways are known or suspected to occur within or near the site."

Again, this statement is unsupported. No monitoring of raptor migration was carried out as part of the avian assessment, either on site or in the vicinity, and little if any data exists in this regard. Considering the significant fall flights at Franklin Mountain, it must be

considered as possible or likely that concentrations of raptors—hundreds to thousands per season—occur to the north.

Although a site comparable to Franklin Mountain has not been identified for spring raptor migration, we do suspect there are areas of concentration for northbound migration through the region also.

Without on site monitoring during migration periods, the movement of raptors through the project site cannot be adequately assessed.

•"It is safe to say that most of the localities where large numbers of hawks occur during migration are known."

We don't agree with this statement but even if future efforts determined it to be true, any avian assessment must include relative risk for individual species, as well as gross numbers of birds. Data suggests that Golden Eagles in the east concentrate along a small number of common paths during migration. Data gathered at Franklin Mountain raises interesting possibilities about this behavior. Several significant one-day events at Franklin Mountain were followed 3 days later by very similar events at Allegheny Front in Pennsylvania 250 miles distant. The most noteworthy are November 20 and 23, 2003 and November 11 and 14, 2005. These events suggest the use of common migration paths by many birds. However, there is no knowledge of any route followed by birds between these two sites due to a lack of observation effort. We mention this connection between sites in a direction away from the project because this phenomenon may well start some distance to the north and be influenced or impacted by the project.

A fall hawk count conducted by Franklin Mountain staff at Cape Wycoff in Cherry Valley during the fall of 2002 supports the idea that the terrain immediately south of the Mohawk River does not concentrate migrating raptors. This does not rule out the possibility that raptors concentrate at sites in the Adirondacks, or, even that Golden Eagles may be highly concentrated in that area. These birds would disperse slightly as they move south through the Mohawk Valley, and then assemble along the Susquehanna River ridges after crossing the divide between the two rivers. This possibility could result in a much higher density of Red-tailed Hawks and Golden Eagles in some areas than would be otherwise expected.

Virtually nothing is known about how the birds that pass through Otsego County in the fall return north in the spring. Golden Eagles are known to concentrate their migration along ridges in both fall and spring. In some areas they follow paths in the spring that are similar to their fall migration. We hypothesize that fall migrant Golden Eagles return north along the ridges of the Susquehanna watershed in the spring. Frequently in the spring, several Golden Eagles will be casually observed by a hawk watcher who resides in Burlington. They travel northeast following the ridge above the Wharton Creek. Eagles traveling northeast along the ridges above the Wharton, Butternut and Oaks Creeks would continue on a path directly into the project area. If this happens, a higher than expected concentration of Golden Eagles and Red-tailed Hawks will disperse directly into the widely spaced project area after leaving the Susquehanna River watershed. Much more needs to be learned about raptor migration locally. Spring migration surveys should be done at the northern termini of the ridges immediately south and southwest of the project to see how many raptors, especially Golden Eagles, are moving into and through the project area.

Again, no monitoring of the raptor migration took place for this project in spring

or fall. We recommend that a study of the movements of these birds through and near the project site be carried out as part of the avian assessment.

#### **Impacts on Short-eared Owls**

The majority of Short-eared Owls, a NY State endangered species, found in recent years within the Fort Plain Christmas Bird Count circle are on the western edge of the count circle about 4 miles from the project area. These owls are found because they are actively sought each year during the count. Habitat in the project area is similar to where the owls are found in the count circle. We believe that Short-eared Owls are very likely to be in the project area in the late fall and winter.

Our organization occasionally organizes winter trips in search of owls north of Route 20. Trip leaders will monitor the presence of Short-eared Owls prior to a trip. Many remain in this area through the winter when ground conditions are good. The close by Fort Plain CBC count circle is usually targeted because those owl locations are known. The 12 Feb 2000 trip found 14 owls within about 5 miles of the project. On 11 March 2006, 7 or 8 owls were found at a different location about the same distance away. During the fall of 2004, a congregation of 75 Short-eared Owls were reported by a local resident at a location about 3 miles east of the project. We would be pleased to share what is known about these observations.

The Phase 1 Avian Impact assessment states that Short-eared Owl, if breeding, "would have been easily detected and reported to the State, the BBA, or the BBS." We strongly disagree. Contributors to these comments have extensive Breeding Bird Atlas and Breeding Bird Survey experience. One surveyed about half the blocks in the project area for the Atlas. Two served as Regional Coordinators for the Atlas. This is not a conspicuous bird at the time of day when most people are surveying for these projects. Breeding Bird Atlas surveys frequently involve several mornings spent in a 9 to 10 square mile survey block. Surveyors often do not live in these survey blocks and are not intimately familiar with the area. Rare birds are easy to miss, and, because they are unexpected, less effort is made to locate them.

As evidenced by a dearth of reports, this rural area has few birdwatchers. Rural residents would not know what kind of owl they were seeing, and would not know who to report it to. This is supported by several reports we have received from local residents who did not make an official report to anyone. The first was of a congregation of 75 owls on Brookman Corners Road just east of Starkville in 2004. The other is a report of breeding near the project. A farmer told two of our directors, who were scouting for a trip, of witnessing a small group of Short-eared Owls in the summer of 2005 about 5 miles from the project. We believe this was a family group. He made the claim early this year while looking at a Short-eared Owl through a spotting scope. This person is familiar with the similar species Northern Harrier.

No Breeding Bird Survey routes are within the project area. Very few of those cited are in similar habitat. As with the Breeding Bird Atlas, it would be very easy to miss a single foraging owl while surveying one of these routes.

Birds of North America, states "wintering areas often turn into breeding areas if food is plentiful." Short-eared Owl should be treated as if it may be nesting within the project area. A targeted effort must be made to assess this New York State Endangered Species' use of the project area.

(Please note, the Avian Impact Assessment does not include this data: 8 Shorteared Owls were found during the 105<sup>th</sup> Fort Plain CBC. 4 were found during the 106<sup>th</sup> Fort Plain CBC. Most of those were found about 4 miles from the project.)

#### Important Bird Areas (IBAs)

The Phase 1 Avian Impact Assessment notes that there are no Important Bird Areas close by the project. There are no IBAs because this area was so poorly known prior to the most recent Atlas. Since the completion of Breeding Bird Atlas Surveys, the Atlas Region 4 Co-coordinators have communicated to National Audubon Society officials their intention to submit 2 applications for IBAs during the next round. The first will include Weaver Lake and Maumee Swamp, just south of the project. It will be submitted under the "at-risk" criteria for birds that are listed by the State or federal government, or, are of continental concern. Data indicates this wetland complex was totally missed during the first Atlas effort.

The other IBA proposal will be for grassland birds. The IBA proposal would be north of US 20, south of the Mohawk River and from West Winfield in the west to Sharon Springs in the east. While the exact boundaries are yet to be determined, it will include the complete project area. This proposed IBA will be submitted under the "at-risk" criteria and also under the "grassland assemblage" criteria. Parts of this area are included in Audubon New York's Grassland Birds Focus Area program. We believe these areas meet IBA criteria and feel they should be treated as if they were in fact IBAs.

It is important to note that this is not a reaction to the project. The decision to nominate these areas as Important Bird Areas was made prior to any knowledge of the Jordanville wind project

### Post-construction studies

We are pleased that post-construction mortality surveys are recommended in the avian risk assessment. However, there is little detail on how these surveys would be conducted. The timing of such surveys will be critical. It is important that they be conducted during the migration cycles and also designed to consider impacts when Short-eared Owls are present foraging, and in the spring and summer when those owls and Northern Harriers are nesting.

During migration season, all days are not equal. Ideal migration conditions for raptors are closely related to weather factors. Weather conditions may cause passerines to fly at low elevations. Since conditions that could result in high mortality during migration may only occur on a small number of days each season, randomly selecting dates could easily result in data that suggest a lower than actual numbers of bird kills. Surveys should be done immediately following conditions that would be expected to put birds at risk.

#### Other concerns

 While data was gathered from Christmas Bird Counts, Breeding Bird Survey Routes, the NYS Breeding Bird Atlas and other sources, it seems that no effort was made to

- contact birders who know the area. If such an effort had been made, we could have provided a significant amount of information about the regular presence of numbers Short-eared Owls, and possible nesting, very close to the project area.
- One of our Directors did much of the recent New York State Breeding Bird Atlas 2000 surveys in that area. If he and other Atlas surveyors had been contacted, they may have been able to provide detailed information on the location of rare and threatened species.
- Regarding information on the migration radar studies, it would have been helpful to have weather conditions included with the nightly flight data to see if any particular conditions resulted in flights at lower elevations, or in any other changes in flights.
- One season of on-site surveys for breeding birds does not provide enough data and completely assess the full complement of breeding species at a location. There is variability from year to year and multiple seasons are necessary. Some species -Short-eared Owl and Henslow's Sparrow for example - are rare and difficult to find. They could be easily missed in a single year of surveys.

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Cc: Kathryn Schneider Peter Nye Mark Woythal Michael Morgan Jillian Liner