



Bringing back the birds

8 May 2020

Re: Review of Scope of Avian Studies for Heritage Wind

To Whom it May Concern:

American Bird Conservancy (ABC) supports wind energy development as part of a comprehensive effort to reverse climate change, provided that this development includes appropriate protections for birds. ABC has had staff dedicated to promoting [Bird-Smart Wind Energy](#) for more than 10 years. Our recommendations for appropriate wind facility planning, design, construction and operation are outlined in our [principles](#) for Bird-Smart Wind Energy. Appropriate facility and turbine siting, outside of high-risk areas for birds, is a crucial component of facility planning to minimize impacts to birds.

Below we provide a review of avian studies conducted to date to inform planning for the Heritage Wind project. We find the current scope of studies inadequate. Specifically, we believe that: (1) radar studies are needed to assess risks to migratory birds, (2) migratory waterfowl surveys are needed, and (3) supplemental breeding bird surveys are needed to adequately assess risks to birds, including species of conservation concern.

We note that this review was restricted to publicly available information, which encompassed less than half of the studies listed in the final scoping statement for the proposed project. As such, concerns and recommendations outlined in this review should be considered a minimum, with a potential to be expanded as further information is obtained.

Ecological Importance of the Iroquois – Oak Orchard Wetland Complex

The biodiversity value of the Iroquois National Wildlife Refuge – Tonawanda Wildlife Management Area – Oak Orchard Wildlife Management Area wetland complex cannot be overstated. This protected area complex and vicinity (hereafter “Iroquois – Oak Orchard wetland complex”) is listed as a focus area in the [2005 Atlantic Coast Joint Venture Waterfowl Implementation Plan Revision](#) (ACJV 2005), indicating its importance as a migratory stopover site for waterfowl. The area is highlighted as an important breeding site for many bird Species of Greatest Conservation Need in the [Strategy for Conserving New York’s Fish and Wildlife Resources](#) (NYSDEC 2005), including Cerulean Warbler, Prothonotary Warbler, Bobolink, and state-listed species such as Bald Eagle, Henslow’s Sparrow, and Black Tern. It is also considered an [Important Bird Area](#) by National Audubon Society.

Part of the ecological value of the Iroquois – Oak Orchard wetland complex is the open water wetlands, a landscape feature that often supports high biodiversity. Of similar importance is the

large, largely contiguous nature of the habitat block formed by this complex. Many species of birds and other wildlife require large areas of forest interior, where conditions differ in important ways from locations near the edges between habitats. Due to widespread loss and fragmentation of eastern forests and other habitats, many such species are now present on the landscape in much-reduced numbers, and many are considered species of conservation concern.

Birds do not recognize administrative boundaries. As such, the ecological unit of importance at the Iroquois – Oak Orchard wetland complex includes largely contiguous forest and forested wetlands beyond the public lands, encompassing lands east and northeast of Oak Orchard WMA. Indeed, the National Audubon Society explicitly includes these lands in their Important Bird Area designation.

Importance of the Iroquois – Oak Orchard Wetland Complex to Migratory Birds

The Heritage Wind site is also located in an area known to be important for migratory birds. Between 2011 – 2018, the USFWS conducted radar studies of bird migration in the vicinity of Great Lakes shorelines to inform wind energy development in the region. Radar studies are able to detect nocturnal migratory flights (e.g., large flocks of migratory songbirds) that daytime, ground-based studies are not. One such [USFWS radar study](#) (Rathbun et al. 2016) included an inland location, about 6 miles southeast of Oak Orchard WMA, in addition to sites closer to the Lake Ontario shoreline. The study found that migratory activity was heavy at the Genesee County site as well as the shoreline locations. They also found that high numbers and densities of birds and bats flew in the rotor-swept zone of turbines, putting them at risk of collisions. They concluded that the areas they studied are important for migratory birds, suggesting that:

The proximity of the [Iroquois National Wildlife] refuge combined with the time periods sampled and a possible migratory pathway from the eastern end of Lake Erie to the shore of Lake Ontario could explain why our sole inland site appeared to have higher activity than our shoreline sites.
[pg. 46]

Heritage Wind in Context of the Iroquois – Oak Orchard Wetland Complex

The analysis in the preceding sections establishes that the Iroquois – Oak Orchard wetland complex is extremely important to: (1) many bird species of conservation concern during the breeding season, (2) migratory waterfowl, and (3) large numbers of nocturnally migrating birds. As such, the placement of turbines in the vicinity of this complex poses a high risk to birds, including state listed species and other species of conservation concern.

Heritage Wind proposes to place multiple turbines in close proximity to the Iroquois – Oak Orchard wetland complex. A total of nine turbines are within two miles of the complex, eight of which are within one mile. The USFWS radar study found that nocturnal spring migratory bird movements were primarily oriented between north and east at the Genesee County site, which generally corresponds with the orientation of the proposed turbine layout from the Iroquois – Oak Orchard wetland complex. As such, turbines are likely to lie within the flight path of

nocturnal migrants. Nocturnal migrants gradually ascend for night flights at dusk, and descend to stopover sites at dawn, making nearby turbines a particular risk.

This places a high burden of proof on the applicant to demonstrate that despite this, the proposed facility poses no undue risk to birds.

To characterize bird populations, the applicant has retained consultants for a number of studies. Notably, this does not appear to include studies that would assess presence and movement patterns of migratory birds. Given the high use of this area by migratory birds demonstrated by USFWS radar studies, that is an unacceptable omission. Similarly, it does not appear that migratory waterfowl surveys were completed. Further, the 2017 breeding bird survey report does not appear to have included survey sites within 1.5 miles of the southernmost proposed turbine locations, (i.e., T1 through T7, those closest to the Iroquois – Oak Orchard wetland complex). This is similarly unacceptable, given the obvious ecological importance of this complex and the proposed turbine locations in close proximity.

Assessment and Recommendations

In our view, the avian studies conducted to date are insufficient to adequately assess the risk of the proposed project to birds. The *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects* (NYSDEC 2016) cite radar studies as an appropriate methodology for evaluating nocturnally migrating bird activity. Given the documented importance of this area for migratory birds, we assert that this type of study is necessary. We also recommend that surveys of migratory waterfowl be conducted. Further, we recommend that supplemental bird surveys be conducted with a focus on avifauna in the vicinity of the Iroquois – Oak Orchard wetland complex to more effectively inform assessment of the potential impacts to birds in this ecologically important area.

Thank you for considering our analysis and recommendations. Please feel free to contact us at any point to discuss this matter further.

Sincerely,

Joel Merriman



Director, Bird-Smart Wind Energy Campaign
American Bird Conservancy
P: (202) 888-7471
jmerriman@abcbirds.org