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Good Morning,

With the recent developments in wind power generation in Nova Scotia, both on land and offshore, we feel we must register our concerns relating to bird mortality from both collisions with the turbine blades and associated infrastructure (towers, power lines etc.) plus habitat loss from the access roads and construction impacting nesting sites.

Each spring and fall billions of birds fill the skies over North America, with millions using what is known as the Atlantic Flyway which has a particularly dense concentration of waterfowl and shorebirds from as far afield as Greenland and we are proposing putting more hazards in their way during an already difficult time for them with many species already under serious threat.

It is estimated that in the US alone over 500,000 bird deaths are directly attributable to turbine strikes per annum and with increased the construction of turbines this will only increase bringing even more pressure on many species in a time of drastic population declines due to climate change, habitat loss and other factors.

We would also like to express our alarm over the recent environmental assessment (EA) in relation to the Comeaus Hill/Wedgeport wind project, several concerns were raised into quality of this assessment by Environment and Climate Change Canada (ECCC), John F Kearny Associates, the Nova Scotia Bird Society (NSBS) and the Canadian Wildlife Service (CWS) but no investigation, as far as we are aware, or commitment to a fresh and thorough EA has been forthcoming.

But all is not "doom and gloom" there are ways we/you can help and below are some suggestions that could easily be considered for all current and future wind generation projects in NS.

Imagine the message this would send out to the world by Nova Scotia becoming a global leader in bird and bat strike mitigation in the wind industry!

I have included links to some companies involved in this below including one of the major players based here in Canada, Accipiter Radar plus information from REWI "a Guide to wind energy on reducing collisions".

www.accipiterradar.com

www.robinradar.com

www.energy5.com

https://rewi.org/guide/chapters/04-minimizing-collision-risk-to-wildlife-during-operations/

The text below is from Robin Radar and gives a great overview of measures we could take.

Several cutting-edge technologies have been developed to mitigate bird collisions in wind farm environments:

Radar Systems: Advanced radar systems can detect birds in the vicinity of wind farms, providing real-time data on their locations and movements. This information allows wind farm operators to temporarily halt turbine operations during periods of high bird activity.

Acoustic Deterrents: Sound-based deterrents, such as speakers emitting specific bird alarm calls, can help steer birds away from wind turbines. These acoustic deterrents exploit birds' natural instincts to avoid potential threats, reducing the likelihood of collisions.

Paint and Lighting Solutions: The application of contrasting colors on wind turbine blades can increase their visibility to birds, thereby reducing collisions. Additionally, the strategic use of lights with specific wavelengths can deter birds from approaching wind turbines.

Automated Shutdown Systems: Advanced artificial intelligence systems can be integrated with wind turbines to detect bird presence and automatically shut down operations temporarily, mitigating collision risks. These systems rely on visual recognition algorithms trained to identify birds accurately.

Also locating the sites away from flyways, headlands and looking into other alternative power generation methods strongly urged.

Yours

Tony Millard

President Nova Scotia Bird Society