Memorandum in Support

COMMITTEE ON ANIMALS AND THE LAW

Animals #15-a January 20, 2026

S. 6538 By: Senator Sanders
A. 933 By: M. of A. Glick
Senate Committee: Finance
Assembly Committee: Energy
Effective Date: 180th day after coloring of wind turbine rotor blades is permitted by the FAA

AN ACT to amend the public service law, in relation to the development of uniform standards for the coloring of wind turbine rotor blades

LAW & SECTIONS REFERRED TO: Amends subdivision 1 of section 138 of the Public Service Law by adding new paragraph b-1, directing the Office of Renewable Energy Siting to establish uniform standards for the coloring of wind turbine rotor blades in order to minimize bird collisions.

THE COMMITTEE ON ANIMALS AND THE LAW SUPPORTS THIS LEGISLATION

This bill amends subdivision 1 of section 138 of the Public Service Law by adding new paragraph b-1, which directs the Office of Renewable Energy Siting to establish uniform standards for the coloring of wind turbine rotor blades in order to minimize bird collisions. It also requires the Office of Renewable Energy to consult with the Department of Environmental Conservation in establishing uniform standards for coloring the rotor blades of wind turbines, with such standards being designed to avoid or minimize, to the maximum extent practicable, bird collisions arising from the location, design, construction and operation of major renewable energy facilities using wind turbines.

It is ironic that the very efforts to reduce environmental toxins from fossil fuels in an attempt to help the planet and its non-human inhabitants actually puts some of those non-human inhabitants at risk. Such is the case with wind farms; it has been estimated that at least 681,000 birds are killed annually in the United States by colliding with the rotor blades on the wind turbines that provide wind energy to replace energy produced by fossil fuels.[1] That number is expected to grow as the number of wind turbines grows each year. Again, ironically, their (uniform) white or grey color, which is intended to make them visible to planes, is exactly what makes them dangerous to birds.[2]

[1] Merriman, Joel, "How Many Birds Are Killed by Wind Turbines?" American Bird Conservancy 1/26/2021, found at https://abcbirds.org/blog21/wind-turbine-mortality/ (last visited 4/13/2025).
[2] "How Black and White Turbine Blades could Reduce Bird Mortality at Wind Farms" Robin Radar Systems (4/20/2021), found at https://www.robinradar.com/press/blog/how-black-turbine-blades-could-reduce-bird-strikes-at-wind-farms (last

However, the FAA has advised the National Audubon Society that it "[has] a process for considering such changes."[3]

While all birds are impacted by wind turbines, particularly when they are placed close to nesting areas or in the path of migration routes,[4] raptors are particularly negatively impacted.[5] Obviously, the species of birds colliding with wind turbines will be dependent upon the turbines' locations, i.e., open fields, areas near mountains or in the ocean.

Just as recognition has come that society should take steps to reduce bird deaths caused by impacts with buildings, the number of bird deaths caused by wind turbines also has become a concern, and various studies have been done seeking to establish the number of bird deaths caused by wind turbines and also seeking to find ways to reduce them. While a number of methods are being considered, the one addressed by this bill is painting the rotors (blades) of wind turbines. This method was developed to address the problem of "motion smear," the visual effect created by fast moving objects, such as hummingbird wings; motion smear makes moving objects just appear to be a blur, and when that happens with wind turbine blades, birds will collide with them.[6] However, changing the uniformity of the rotors' coloration can also disrupt the motion smear, thereby making the rotors appear to be objects. One study in which one rotor blade on each wind turbine was painted black was conducted in Norway, and it found a dramatic decrease in bird deaths. The study reported that wind turbines with one rotor blade painted black reduced bird deaths by 71.9% in comparison with the control group of wind turbines with uniformly colored rotors.[7] It also reported a particularly significant reduction in raptor deaths.[8]

There can be no dispute that wind sourced energy is the way of the future and will lead the way in the production of green energy.[9] This makes it particularly important that efforts be made to reduce the negative environmental impact of wind turbines as much as possible. Painting rotor blades is a simple and inexpensive way to do so, and the Legislators of New York State should be commended for seeing the need to take action and try to help prevent collisions of birds with wind turbines and resulting bird deaths.

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visited 4/13/2025).

[3] Dhanesha, Neel "Can Painting Wind Turbine Blades Black Really Save Birds?" Audubon Magazine 9/18/2020 found at https://www.audubon.org/news/can-painting-wind-turbine-blades-black-really-save-birds (last visited 4/13/2025).

[4] Dhanesha, Neel "Can Painting Wind Turbine Blades Black Really Save Birds?" Audubon Magazine 9/18/2020 found at https://www.audubon.org/news/can-painting-wind-turbine-blades-black-really-save-birds (last visited 4/13/2025).

[5] Taber D. Allison, Jay E. Diffendorfer, Erin F. Baerwald, et al., "Impacts to Wildlife of Wind Energy Siting and Operation in the United States," Issues in Ecology, Report No. 21, Fall 2019, at p. 8, found at https://www.esa.org/wp-content/uploads/2019/09/Issues-in-Ecology_Fall-2019.pdf (last visited 4/13/2025).

[6] Dhanesha, Neel "Can Painting Wind Turbine Blades Black Really Save Birds?" Audubon Magazine 9/18/2020 found at https://www.audubon.org/news/can-painting-wind-turbine-blades-black-really-save-birds (last visited 4/13/2025).

[7] "Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities" Ecology and Evolution, Vol. 10, Issue 16 (August 2020) found at https://onlinelibrary.wiley.com/doi/10.1002/ece3.6592 (last visited 1/28/2024).

[8] "Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities," Ecology and Evolution, Vol. 10, Issue 16 (July 26, 2020) found at https://onlinelibrary.wiley.com/doi/10.1002/ece3.6592 (last visited 4/13/2025).

[9] Dunhill, Jack "Make Wind Turbines Stripy To Stop Bird Deaths, Suggest Scientists," IFLScience (2/28/2023) found at https://www.iflscience.com/make-wind-turbines-stripy-to-stop-bird-deaths-suggest-scientists-67738 (last visited 4/13/2025). ("As wind turbines have become one of the staple technologies humans have as a means of reaching the ultimate goal of net zero emissions, their production has skyrocketed and adoption of both land and offshore wind farms has never been higher.")

For the foregoing reasons, the Committee on Animals and the Law **SUPPORTS** the passage and enactment of this legislation.