

Do wind turbines impact birds, bats and wildlife?

Wind energy is far less harmful to wildlife than traditional energy sources it displaces.

- » No form of energy is free from environmental impact; however, wind energy has **among the lowest impact** as it emits no air or water pollution, requires no drilling or mining for fuel, and creates no hazardous waste.
- » **Protecting wildlife** and sensitive natural habitats is a priority for NextEra Energy Resources.
- » As part of its development process, NextEra Energy Resources conducts **thorough wildlife studies** and ensures each site complies with all local, state and federal environmental regulations.
- » We follow industry best practices and work with the U.S. Fish and Wildlife Service and state and provincial wildlife agencies to site wind turbines responsibly.
- » We work to avoid impacts to wetlands that may provide habitat for migratory birds and use buffers to avoid impact to nesting birds.
- » NextEra Energy Resources **conducts monitoring** for potential wildlife impacts at each site following construction and throughout the life of the project.
- » When properly sited, wind turbines pose less danger to birds than other common structures such as buildings or roads.¹



LEADING ENVIRONMENTAL PRESERVATION



NextEra Energy Resources has contributed millions of dollars toward wildlife conservation across North America. The investment in research will help with the continual improvement of turbine siting as well as further studies on avian populations and minimization of impacts.

For example, since 2009, NextEra Energy Resources has partnered with Texas Christian University (TCU) on research aimed at reducing the impact of wind energy production on birds and bats. TCU, with funding from our company, constructed a dedicated "bat flight room" for studying bat behavior. In partnership with the U.S. Department of Energy, TCU scientists have recently extended these research efforts to develop a new technology that could reduce bats' interest in approaching wind turbine towers.

In Canada, we've partnered with Bat Conservation International (BCI) to test new technology to protect bats. Ultrasonic Acoustic Deterrents (UADs) are devices that emit high frequency sound that is inaudible to humans, pets, or livestock. The sound discourages bats from flying near wind turbines.

Sources:

¹ Erickson, W. et. Al. "A Comprehensive Analysis of Small-Passerine Fatalities from Collision with Turbines at Wind Energy Facilities." Plos One (September, 2014)