

# Turbines Must Deal With The Birds And The Bats

Posted  
2008-01-25

## Concerns Raised For Species' Welfare

By [Hannah Northey](#)

The environmental impact of Virginia's first wind farm in Highland County could shed light on how successful such farms will be in the Valley, state officials say.

State agencies, led by the Virginia Department of Game and Inland Fisheries, will monitor the Highland New Wind Development LLC's 20 wind turbines to see how federally protected bats and birds are affected.

Biologists are concerned that inland wind farms on the East Coast could kill large numbers of common bats, and possibly affect the federally protected Indiana bat and Virginia big-eared bat, according to the State Corporation Commission.

The commission approved the Highland County project this week but required the developers to study its impact on the animals.

"We still have no experience in Virginia," said Ken Schrad, an SCC spokesman. "The Highland project, with its monitoring and mitigation program, will provide that experience for future projects."

Research in Highland County could reveal information on how and when bats are killed at the sites, and offer ways to prevent future deaths, said Richard Reynolds, a game department wildlife biologist.

"It looks as though any facility in the East will have high bat fatalities," Reynolds said. "The concern is that if we build thousands of turbines to provide renewable energy, [and] if we don't do something to minimize these impacts, they could have a significant negative impact on bats."

## Not Enough Research

The U.S. Department of the Interior's Fish and Wildlife Service has seen more applications for wind farms from developers who want to get permitted in a shorter amount of time, said Thomas Chapman, a field supervisor with the department.

While the agency supports renewable clean energy, state and federal officials are concerned for species like the endangered Indiana bat, Virginia big-eared bat, federally protected bald and golden eagles, and the West Virginia northern flying squirrel.

"We've identified some fairly serious concerns as far as building [wind farms] in certain locations," he said.

This month, those worries led to the department's opposition of another wind farm proposed by an unnamed developer in Rockingham County in Virginia, and Pendleton and Hardy counties in West Virginia. The farm would cover large swaths of habitat for two endangered bats and the bald and golden eagles, as well as land in the George Washington National Forest.

The Fish and Wildlife Service recommended the unnamed developers voluntarily apply for an "incidental take permit" and a Habitat Conservation Plan, if they decide to move ahead with the project. The plans offset harmful effects the projects might have on the species, and the permits authorize the "incidental [killing, harming or harassing] of federally listed species," according to the Fish and Wildlife Service.

Although the SCC approved the Highland County project, its developers have not applied for an incidental take permit or developed a conservation plan, said John Flora, the attorney representing the project. The Highland County developers, Flora said, may pursue a conservation plan and incidental take permit in the future.

## Learning From Highland

Biologists aren't sure how bats and birds in Virginia would be affected because no wind farm has yet been built in the

state, Reynolds said.

High bat mortality, however, has been observed at wind farms in Pennsylvania, Tennessee, New York, West Virginia and Canada, he said, indicating a risk.

At the Highland site, biologists will study bat activity in relation to climate conditions such as wind, weather and temperature, to identify when most bats are killed, he said.

For example, Reynolds said, most bats have been killed at wind farms during fall migration. During this time, biologists may slow down the turbines to protect the bats, he said.

"That will hopefully minimize fatalities to the bats and operational adjustments a facility would have to make," Reynolds said.

Students from James Madison University's College of Integrated Science and Technology may also work with state agencies to conduct research, Flora said.

"JMU has a very strong focus on green energy, how it works and what the impacts are," Flora said.

Without more research, Chapman said, common species of bats could be threatened in the future.

"As more of these facilities are built across the landscape, more of the common species may be at risk and more of those bats [could be] federally listed," he said.

Contact Hannah Northey at 574-6274 or [hnorthey@dnronline.com](mailto:hnorthey@dnronline.com)