## Wind turbines kill fewer birds than do cats, cell towers



Wind turbines kill far fewer birds in North America than do cats or collisions with cell towers, says a study out Monday.

As wind power expands in the United States, critics often blame giant turbine blades for bird deaths. What's billed as the most comprehensive analysis ever of these fatalities says birds face far greater threats.

Wind turbines kill between 214,000 and 368,000 birds annually — a small fraction compared with the estimated 6.8 million fatalities from collisions with cell and radio towers and the 1.4 billion to 3.7 billion deaths from cats, according

to the peer-reviewed study by two federal scientists and the environmental consulting firm West Inc.

"We estimate that on an annual basis, less than 0.1% ... of songbird and other small passerine species populations in North America perish from collisions with turbines," says lead author Wallace Erickson of Wyoming-based West.

The study based its estimate on data from 116 studies conducted in the U.S. and Canada, after adjusting for the fact that surveys don't capture all fatalities. Some carcasses are missed by monitors, disappear because of scavenging or decompose before they're counted. Nearly two thirds, or 63%, of reported fatalities were small birds of 156 different species.

The wind energy industry has occasionally been at odds with conservation groups because of bird deaths. They clashed in December when the Obama administration, eager to promote non-polluting renewable energy as a way to address climate change, announced a new federal rule that allows wind farms to lawfully kill bald and golden eagles under 30-year permits.

Yet many environmentalists say wind power ultimately benefits birds. It is a "a growing solution to some of the more serious threats that birds face, since wind energy emits no greenhouse gases that accelerate climate change," Terry Root of Stanford Woods Institute for the Environment, said in a statement accompanying the study's release.

Earlier this month, a National Audubon Society report said that hundreds of bird species in the U.S. — including the bald eagle and eight state birds, from Idaho to Maryland — are at "serious risk" due to climate change. It said some species are forecast to lose more than 95% of their current ranges.

"Our scientists are still reviewing this particular study," says Audubon spokesman David Ringer. He says his group strongly supports "properly sited wind power as a renewable energy source that helps reduce the threat posed to birds and people by climate change." He says it has helped develop guidelines for the wind industry to minimize harm to wildlife

The study, published in PLOS ONE, was funded by the American Wind Wildlife Institute, a non-profit that works with the wind industry, wildlife agencies and environmental groups to promote responsible wind energy. Co-authors include Douglas Johnson of the U.S. Geological Survey and Joelle Gehring of the Federal Communications Commission.