

Impacts of Wind Energy Development on Wildlife - Key Issues of Concern

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Summary:

We believe that wildlife kills can be prevented or minimized, and we advocate broad collaboration to achieve this end. However, until reliable solutions are developed, high risk areas should be avoided. These include locations along major migratory corridors or within the normal flight range of large roosting and feeding aggregations of birds or bats.

Needs for Renewable Energy Sources

We support development of clean, renewable energy sources and believe that wind power has potential. Nevertheless, as illustrated at wind power facilities from Altamont, California to Mountaineer, West Virginia, sufficient wildlife have been killed to warrant serious concern about cumulative impacts that could become severe if development continues without careful planning to minimize harm to birds and bats, both of which are ecologically essential.

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We strongly encourage immediate research to develop wildlife safe turbines and to test repellent devices and the efficacy of feathering turbine blades during critical periods as options to minimize mortality.

Approval Process for New Facilities

Pre-siting Environmental Impact Studies- These are typically under funded, inadequate to evaluate true wildlife risks, and rarely include objective, scientific peer review, either of methodology or results. They also lack standardized procedures, rendering them virtually useless in making broad comparisons that could facilitate an understanding of potentially cumulative impacts or of the relative risks associated with varied habitat and topography. Furthermore, findings are typically considered proprietary

and seldom are disclosed to public decision makers until after decisions are made. This renders them meaningless to the permitting process.

Jurisdiction in Decision Making- Although many permitting decisions involve migratory or endangered species for which local decisions may have state, regional or even international impact, these broader, potentially cumulative impacts, are seldom understood or considered in local approval processes. The potentially serious consequences of such decisions are especially clear when building along major migratory flyways. In addition, threats to already declining species, for which cumulative impacts could needlessly push them into endangered status, are typically ignored.

Project lobbying with local communities- In their rush to gain rapid approval of projects, proponents too frequently gloss over critical wildlife issues, claiming wildlife agency and organizational approvals that are reported in a highly misleading manner. Balanced, objective viewpoints are not always portrayed when biological issues and data are disseminated. Furthermore, statements that no endangered species will be threatened ignore the fact that already declining species could be forced into endangered status.

Monitoring and Reporting Mortality Impacts for Operational Facilities

Post-construction Impact Studies—Most post-construction studies are too poorly funded by industry to obtain credible results and are biased against detection of small birds and bats. Mortality searches typically have been conducted without objective peer review from the scientific community on methodology, results, or interpretations of findings. Field sampling biases, most notably scavenger removal rates (documented as high as 70% in 24 hours), and searcher efficiency (often less than 25% in vegetated terrain) are seldom accounted for. Mortality searches are typically conducted at seven, 14 or 28-day intervals, leading to significant underestimation of fatalities, especially for small birds and bats.

Failure to Measure Population Impacts—Proponents of wind energy development often state that reported mortality is inconsequential to overall populations. However, there are no adequate efforts to document long-term fatality rates relative to local or migratory population sizes, and regional comparisons are often inappropriate. The two facilities at Meyersdale, Pennsylvania and Mountaineer, West Virginia, where more than 2,000 bats were killed in just six weeks in 2004, are no longer even being monitored. Without ongoing monitoring, it is impossible to say that cumulative impacts will not effect species populations, especially those that must migrate long distances where multiple wind power facilities will be encountered. Claims that wind power facilities contribute only a small part of overall mortality are not substantiated with empirical data. They also do not consider the numbers of turbines planned for the future, the fact that current fatality is underestimated, or that at least some impacted species are already in decline.

Industry Accountability

Avoiding High Risk Locations or Finding Solutions to Avoid or Minimize Risks–

Although the need for renewable energy sources is substantial, this should not exempt associated industries from the accountability and monitoring required to understand and solve problems. The wind industry has not been held adequately accountable for wildlife kills, and is devoting inadequate resources to finding preventative solutions.

Building permits should require standardized assessment of all turbine-caused wildlife mortality, subject to prompt public disclosure and peer review, including a requirement to address any mortality findings deemed by objective outside review from the scientific community to be potentially unsustainable (either locally or cumulatively over broad areas of a species' distribution). Processes are also needed to ensure standardized compliance with all permitting requirements for monitoring at each location through the life of project (to be passed on with each transfer of ownership).

Areas already known to be exceptionally high risk, such as those near extra large aggregations of birds or bats should be avoided until solutions to prevent or minimize mortality are found. Such sites include major migratory flyways, key foraging, nesting, and roosting habitats, and large bat caves. There is little evidence that such areas are being avoided by industry. In Texas, leading companies are currently seeking support to build facilities in one of our continent's most important migratory bird flyways as well as dangerously near the most important bat caves of the New World, caves supporting more than 50 million bats.

Safer Wind Turbines and Energy Conservation

Wildlife Safe Turbines–There are wind turbines currently under development that report no wildlife mortality, and some of their unique designs appear unlikely to pose threats to either birds or bats. This is promising and needs further testing. Such turbines are anticipated in varied sizes, useful from rooftops to full industrial, and some are reported to be equally or more efficient in power production than currently built turbine designs. Such alternatives should be seriously considered, especially in wildlife sensitive areas.

Energy Conservation–Too little attention is being paid to energy conservation. Even at currently planned expansion rates, wind turbines are anticipated to meet only 5% of U.S. energy needs over the next 20 years. Without suggesting that this is unimportant, it also should be noted that simple energy conservation could significantly reduce consumption and demand without reducing human life styles or harming the environment