BIRDS AND BATS AT BACKBONE MOUNTAIN WIND FARM

By Peter Shoenfeld
On November 17, the National Wind
Coordinating Committee (NWCC) sponsored a two-day meeting on these subjects, in the offices of RESOLVE in Washington's West End. The first day focused on the question "How is Biological Significance Determined When Assessing Possible Impacts of Onshore Wind Power Facilities?". The second day was a meeting on the NWCC Wildlife Working Group. A number of wind energy companies, government regulatory agencies, consulting groups, and environmental organizations were represented.

I attended the second day's meeting only, largely to hear presentations related to bird/bat mortality at the Mountaineer Backbone Mountain sight, where the Highlands Conservancy participates in study oversight. Dr. Paul Kerlinger, who is study director this year's Mountaineer avian mortality study, presented "FAA Lighting of Wind Turbines and Bird Collisions." Jim Lindsay, who has environmental responsibility for FPL Energy, the Mountaineer operating company, presented " FPL West Virginia Site Survey Results."

Dr. Kerlinger's principal conclusion was that the red flashing FAA lights used on wind turbines do not seem to attract night migrating birds, although the obstruction lighting used on communications towers does attract these same birds, as do the bright lights sometimes used on buildings. This was based on the absence of major mortality events at FAA-lighted turbines, and the lack of correlation between presence of these lights and such mortality as has occurred, in studies to date, including the one at Mountaineer. Possibly causative differences between the turbines and the communications towers include lower height and the absence of guy wires. In discussion, it was suggested that existing data should be re-examined for correlation between mortality- at-turbines and proximity-to-lights. This would address the possibility that the birds are in fact attracted by the FAA lights, but are as likely to get killed by other turbines on their way to the lights, as by the lighted turbines themselves.

Dr. Kerlinger also presented some bottom-line conclusions regarding bird mortality at Mountaineer. He concluded that about 180 birds were killed this year (about 4 birds per turbine), disregarding the May event where 27 birds were killed in fog near the bright sodium vapor lighting substation lighting, which has since been turned off. This conclusion was based on an extrapolation using the number of dead birds actually found (65) and an adjustment to reflect measurements of searcher efficiency (birds found/birds present) and scavenging rate (reciprocal mean time before killed birds are scavenged). I criticized the precision of of Kerlinger's result (4 dead birds/turbine/year) on statistical grounds. Because of the small sample used in the efficiency study, and the low efficiency actually measured, there can be little confidence that this number was not in fact much higher or lower.

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Mr. Lindsay described the Mountaineer project and its history of environmental risk assessment and monitoring. He then announced and described the recent bat kill (see last months Voice). He said that there had been previously documented, similar impacts at Buffalo Ridge, MN and Stateline, WA, and that all of these may have been due to a tendency for migrating bats to turn off or ignore their biological echolocation equipment. He said that FPL was surprised by the severity of this event, but now intends research to (a) determine the biological significance on local populations, (b) determine how bat behavior is involved, and © to develop mitigation techniques. Since then he has circulated an initial white paper, commissioned by FPL.

Maryland wind farm critic Dan Boone took exception to some aspects of Lindsay/s presentation. He suggested that FPL should have foreseen this event, and that Kerlinger's recent dead bird search efficiency and scavenging study should have included bats. He also indicated to me that he considered the Highlands Conservancy in some way culpable.

A detailed final report on Dr. Kerlinger's study is expected in December. The Technical Review Committee, in which the Highlands Conservancy participates, will have a review in finalizing this report and in planning next year's studies.

Other second day talks included a future development forecast by Tom Gray of AWEA, an analysis of collision risk and mitigation strategies at Altamont Pass by Shawn Smallwood, a survey of collision risk by Wally Erickson of West, Inc. Rob Manes of the Wildlife Management Institute presented a powerful argument that wind farm development would lead to species endangerment through habitat fragmentation in mid-west grasslands areas, particularly for both Lesser and Greater Prairie Chickens. He also opined that similar effects might be found for forest species.