notes from the field…

Birds on a Collision Course?

Central Pennsylvania

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Todd with a two-year-old Red-tail Hawk

My toes are cold. Sitting in an uninsulated handmade plywood shack on a ridge-top in central Pennsylvania on a blustery day in late November tends to have that effect on a person (and their toes). The cross-winds don't help either. As usual, though, I'm not just sitting on this hill because I enjoy the loss of sensation in my extremities. There is, in fact, a greater purpose to all this.

In building the Department of Conservation and Field Research, we've been faced with a bit of a conundrum. We are a small program (one biologist, but soon to grow, I keep telling people), but we want our research to have consequence and to be recognized locally and internationally. In the international arena, we are trying to find field sites where we are not competing with "big" conservation organizations and where our research skills can make a real difference in on-the-ground conservation. Nationally, including here in Pennsylvania, we are taking a similar approach, trying to focus on some of the hot regional conservation issues. Development of wind power in the mid-Atlantic region is one of those hot issues.

But what do birds have to do with the issue of wind power? Everything and, hopefully someday, nothing. Wind power is an important part of the future of energy development in the United States. It lessens our dependence on imported oil, it produces no greenhouse gasses, and it is a "renewable" energy source. However, there is a down side to wind power. When it is done incorrectly, wind power can kill wildlife — flying birds and bats, mostly (although it can also kill indirectly, when it causes habitat loss).

In Pennsylvania, development of wind power occurs along the same Appalachian mountain ridges that make the state such an important corridor for the migration of birds, especially raptors. Because wind power is being developed in places where birds fly, there is great potential for conflict between birds and wind turbines. In other places in the U.S. — the west, mostly — studies have shown that some turbines kill few birds, but that other turbines may be quite dangerous to birds, for a variety of reasons. This suggests that if wind power is developed in conjunction with careful study, it should be possible to mitigate the impacts of turbines on birds. And the "careful study" part is what we at the National Aviary are planning to provide.

So that is why I'm "cold-toeing" it in a blind on a ridge near State College, Pennsylvania — I'm trying to trap migrating raptors. Further east, at places like Hawk Mountain, the birds, broad-wing hawks especially, usually migrate a little bit earlier, in September or October. However, where we are, the bigger birds that we are after, the golden eagles and red-tails, are moving later, in November and early December. In the end, this trapping season was primarily a test to see if we could set up a station and catch birds. I'm happy to report that we passed that test and caught and released many.

The next step in this process is to go out and get funding so that we can begin to address this issue with the technical tools this conservation study requires. Our project is in collaboration with biologists from the Powdermill Avian Research Center of the Carnegie Museums, and together we are now writing grants to raise that money.

Look for updates on our progress with this project (and my cold toes) in future dispatches from the field....

For more information on National Aviary conservation and field research projects, visit http://www.aviary.org/dcfr.php