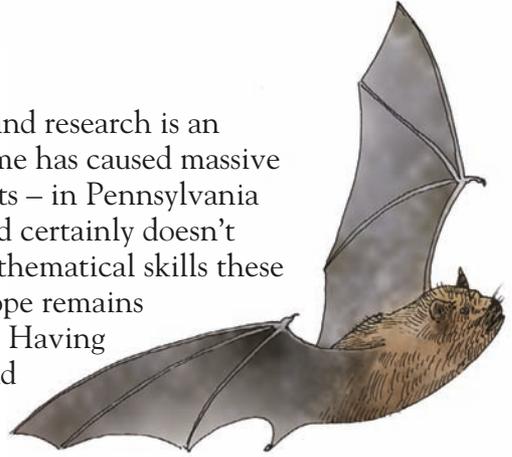


Research Briefs



Painful Progress: Bat monitoring and research is an endless season. White-nose syndrome has caused massive declines of our cave-hibernating bats – in Pennsylvania and throughout the Northeast – and certainly doesn't have us testing the limits of our mathematical skills these days. But survivors are there and hope remains that these declines will bottom out. Having wrapped up winter surveys, we found ourselves immediately hitting our priority locations with nightly excursions live-trapping these survivors as they emerged from hibernation. We spent the month traveling and sitting out on cold nights waiting for infrequent captures of these survivors. We analyze each survivor in our continual search to protect and monitor these survivors and foster research that is attempting to understand this devastating disease. In troubling times like these, it is important to remember the positives: another round of survivors has made it through winter and is now raising young. Let's hope their offspring are as tough as they have been!



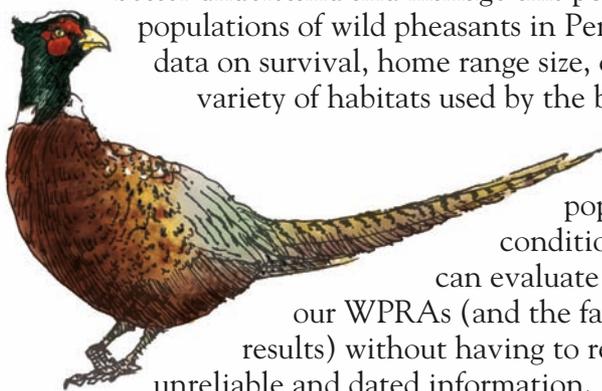
– **Greg Turner, Endangered and Threatened Mammals Biologist**

Declining Night-Herons: The Game Commission monitors annually the state's colonial nesting birds, namely the herons and egrets. One of our endangered species, the black-crowned night-heron, has been found in fewer locations in recent years, declining to a distressingly low level. The black-crowned night-heron is a crow-sized heron, so called after its distinctive black crown and crest. As its name also suggests, they are active at night, so they often are overlooked. Because they are so high in the food chain, these herons are good indicators of waterway ecosystem health. Paradoxically, most of the endangered heron colonies are in the state's urban southeastern counties. In 2013, we found this species in only four active colonies with an aggregate total of 101 nests,

a noticeable decline from the previous year's 178 recorded nests. One colony in York was not tallied in 2013, accounting for some of the difference, but all remaining known colonies shrank. The largest colony in the state is now on a hospital grounds with 50 nests, but it declined from 83 nests in 2012. The state's long-established largest colony on Wade Island near Harrisburg dropped to only 48 nests in 2012, much fewer than years previous, when it sometimes exceeded 200 nests. The geographic range of this night-heron's nesting population has changed substantially from a much wider distribution to these few diminishing colonies. We'll keep a close watch on them and continue to protect the remaining known colonies.

– *Doug Gross, Endangered and Threatened Birds Supervisor*

Pheasant Telemetry: We are currently using radio telemetry to track wild pheasants in the Franklin County Wild Pheasant Recovery Area (WPROA). Some male and female pheasants from trap-and-transfer efforts were fitted with radio collars just before they were released, and I locate their signals several times a week until the death of the bird or the end of transmitter battery life, which is about 12 months. The “necklace” design of the transmitters has been used by researchers on pheasants and other similar species in many studies with no negative effects on the birds. Each collar has a sensor that changes the tempo of the transmitter's signal if the bird has been inactive for more than six hours, telling us the bird has either died, or, in the case of a hen during nesting season, is incubating eggs. A hen can actually sit still long enough while incubating her eggs that the transmitter signal changes to “inactive.” The information from these radio-collared birds helps us better understand and manage this population, as well as future populations of wild pheasants in Pennsylvania. We collect data on survival, home range size, causes of mortality and the variety of habitats used by the birds throughout the year.



By coupling these data with additional surveys on population size and habitat conditions throughout the year, we can evaluate success or failure within our WPROAs (and the factors contributing to these results) without having to rely on opinions and other unreliable and dated information.

– *Brandon Black, Wildlife Biological Aide, Game Bird Section*