

Heron Colony Observation Protocol

The Pennsylvania Game Commission is seeking help in monitoring heron populations and distributions throughout the state. We are concerned with the location and populations of great blue herons, black-crowned night-herons, and yellow-crowned night-herons; as the latter two species are endangered in Pennsylvania and great blue herons are valuable indicators of habitat quality. Contact heron@pa.gov with any questions.



Photo by J. Dingel, PGC

When to begin looking for colonies?

Heron begin nesting as early as April and observations should be finished by the end of May, sooner is better as this will be much more difficult once the leaves come out. If you find a new colony after May, please still send it in!

What to look for?

All the heron species we are looking for make stick nests and nests are placed together in colonies or groups. Many of these are flimsy looking. Active nests will usually be stained white with guano and will be near or often over water. Great blue heron nests are typically in standing dead timber and are found in a wetland that is often sheltered by higher geographic features. Nests tend to look like this example below from the Poconos.

Both species of night-herons are much more tolerant of human activities and can often be found in and around public areas. These birds tend to nest in live trees and are often, but not always, lower in the canopy than great blue herons. Nests can often be located by the dead vegetation underneath them due to guano and very noisy chicks in the nest. Night-heron nests are smaller and appear very flimsy, active nests will be stained white.



How far away to observe the colony?

One of our greatest concerns is minimizing human disturbance at the colony. We do this to limit the stress on the birds and to reduce the chances of predation on chicks. We are asking that the colonies be observed from as far away as possible, preferably more than 100 yards. The information we are looking for can be obtained from this range and beyond with binoculars. The birds will tell you when you are too close; if the birds begin to act as if you're disturbing them, move farther away!

Signs that the birds are disturbed:

- Alarmed squawks coming from the colony. These are sharper than the general chatter.
- Adults standing up over nests and moving away from the nests
- Adults flushing from the colony

If this happens, do not get closer as the next responses are detrimental to chick survival

- Chicks moving out of nests
- Chicks regurgitating their stomach contents, these burn and cost the chicks a meal
- Chicks fighting, occasionally resulting in falling from the nest and tree all together

In Reference to the Observation Form

The Heron Colony Observation Form was created as a fillable PDF. We encourage observers to complete the form and submit electronically to heron@pa.gov.

1. Observer Information:

Please provide observer name, address, phone and/or email so that any questions regarding the data sheet could be clarified in the future. If you're a volunteer, please check the appropriate box.

2. Colony Location Information:

Please record the township the colony is located, colony latitude, and colony longitude. Estimate and record the distance from your observation point to the colony (meters).

3. Effort Information:

In order to capture survey effort, please record the date and time of the survey, the total time spent surveying birds (minutes), and roundtrip miles driven from office (or home) to the survey.

4. Nest Colony Information:

Please record the heron species being observed (great blue heron, black-crowned heron, or yellow-crowned heron). Record the number of nests that can be seen in the colony and, if possible, note how many of nests are identified as active.

A good indicator of an active nest is:

- Visible white-wash or guano on the edge of a nest
- Presence of adult(s) standing on or *very* near the nest
- Incubating adult
- Young birds observed inside the nest.

If chicks are visible, please indicate that separately in the appropriate box. Note any other avian species observed. Count the total number of birds, adults, and juveniles.

5. Additional Colony Information:

Please note any possible threats to the colony such as, signs of predators, or human caused risks (e.g., human activities near the colony). If possible, please identify dominant tree species of the colony. Feel free to note anything you see adult birds doing near the colony area, and chicks doing in the colony. Things like standing near or over nests, sitting on the nest (look closely as they really get down in there), feeding chicks, chicks flapping and learning to fly, and anything else you find interesting. This information will help us get an idea for how far along the chicks are without having to disturb the nests to observe them directly.

Where to return data:

You can email the completed data sheets to heron@pa.gov. If you have any questions, please feel free to send an email and we'll get back to you as soon as possible. Again, thank you all for your contributions to heron research!

