

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.

When to begin looking for colonies

Hérons 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! Contact heron@pa.gov with any questions.

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. These 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. With this in mind 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:

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. Also record the date and time of the observation in this section.

Nest Colony Information: Please record the heron species being observed (great blue heron, black-crowned heron, or yellow-crowned heron). Also record the number of nests that can be seen in the colony and if possible, notes how many of the nests are active. A good indicator of an active nest is visible white-wash or guano on the edge of a nest, or of course the presence of adults or chicks inside the nest. If chicks are visible, please indicate that separately in the appropriate box. Also note if any other avian species are observed. Please note any possible threats to the colony such as, signs of predators, or human caused risks such as human activities near the colony. In the space provided for descriptions of the colony, please note things such as the shape of the colony, or if the colony is split into different areas of the available habitat.

Colony Location Information: Please record as much information as possible about the physical location of the colony; street name, township, and coordinates. Also, describe the habitat of the general area where the colony is located. This can be as simple as in a swamp with dead timber, on an island, in the pine trees around a park, or in a sycamore tree in over a driveway.

Notes: 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!