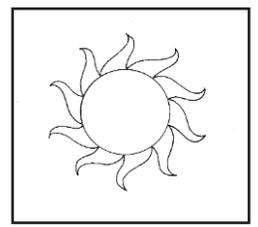
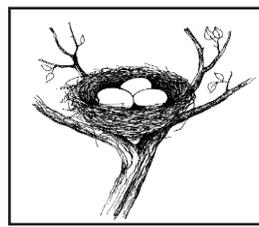
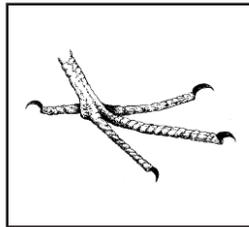
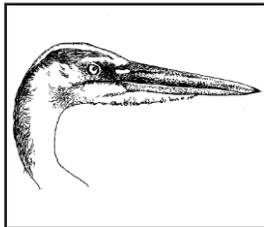
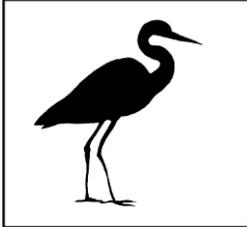




Herons, Egrets & Bitterns

Order Ciconiiformes

Family Ardeidae



Herons are long-legged, slender birds designed to wade through water. Their long necks and sharp bills help them reach for and grab fish and other aquatic creatures living in shallow waters. Herons swallow their prey whole and then **regurgitate pellets of the meal's indigestible matter** several hours later (similar to birds of prey). The larger herons have impressive **canopy-like wings** that pump slowly in distinctive flight patterns. **Most herons fly with their head and neck held in an "S" shape with their legs trailing out behind them.**



When not walking through water, they can often be seen perched in trees over the water. Their feet are not webbed like other water birds. Instead the **long, flexible toes** help them walk on soft, muddy ground. Their **strong bills** grab their prey though some larger herons have been known to impale their prey. Great blue herons, green-backed herons, great egrets, black-crowned night herons, yellow-crowned night herons, least bitterns and American bitterns all nest in Pennsylvania. The little blue heron is an occasional visitor and both the snowy egret and cattle egret are rare breeders in our state.



Great Blue Heron

Ardea herodias



The Great Blue Heron is **our largest heron, standing over three feet tall** with a wingspan just shy of six feet. They have a blackish crest of feathers on their mostly white head and dark grayish-blue bodies. **Great blues wade slowly through shallow water** while hunting, sometimes making a **canopy of their open wings to shade the water while they fish.** In addition to aquatic prey, they will also take small rodents or insects on land. When disturbed, they release a loud series of squawks as they lift off the ground with slow, deliberate wing beats.

Great blue herons, like most herons, **nest in trees**. Some nest in **large groups called rookeries**, often in mixed flocks. The males build a **nest of sticks** to attract a female. Once she accepts his unfinished nest, she will complete it with twigs the male delivers to her. Usually 3–6 blue, green or brown eggs are incubated by both parents for up to 4 weeks. However, **like birds of prey, incubation begins as soon as the first egg is laid**. This results in young hatching on different days and having **fledglings of various sizes in the same nests**. Adults regurgitate a **liquid diet to the nestlings** until the birds can eat partially digested food and then entire prey like frogs and fish.

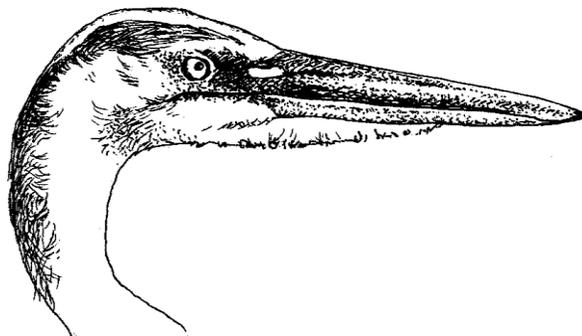
The middle toe of a heron is serrated like a saw edge and helps them preen or groom themselves. Herons also have something called “**powder down**” which helps the birds keep their feathers groomed. Some of their feathers have tips that actually break down into a powder that they spread through their plumage. The **powder helps to absorb and remove the fish oil** and debris from their eating habits.



Great Egret
Ardea alba



The **great egret**, also known as the common or American egret, was **nearly hunted to extinction during the early 1900s for the sake of vanity**. During breeding season these **large white birds grow luxurious, long white plumes that were coveted by the fashion industry**, specifically to decorate women’s hats. In time conservation laws were passed to outlaw the use of egret feathers, and the birds have been slowly returning to their former ranges. In addition to a white body, great egrets have a **yellow bill and black legs and feet**. They are our largest white bird in the state, but slightly smaller than the great blue heron.





Green Heron
Butorides virescens



Green-backed herons are much smaller than the common great blues. At little more than a foot long with a two-foot wingspan, these **bluish-green herons inhabit ponds and woodland streams**. They usually hunt in the early morning or late afternoon feeding on fish, frogs, insects or salamanders. These birds also have an unusual fishing behavior indicating they are **one of the few animals to make use of a tool**. They have been seen dropping items like feathers, small branches or even insects into the water from above to act as a fishing lure.

Greens like to **build their flimsy stick nests in trees overhanging the water**. Sometimes you can see eggs through the bottom of the nest if you are standing below it. When disturbed from a perch, green herons fly with a deep wingbeat, releasing a loud squawk as they fly off. They also **have a habit of emptying their waste in a long, white stream** when they launch into flight, so beware when you travel along stream banks where they hunt and live.



**Black-crowned
Night Heron**
Nycticorax nycticorax

**Yellow-crowned
Night Heron**
Nyctanassa violacea

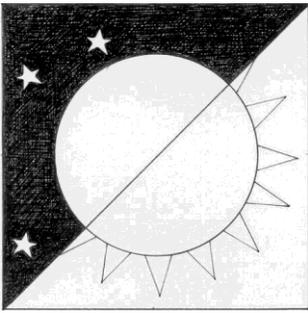


Both black-crowned and yellow-crowned **night herons are short, bulky herons with thick necks** that are rarely extended. **Both are endangered species in Pennsylvania**. These birds are about 20 inches long with a 44-inch wingspread. **Odd, but attractive, are these red-eyed birds.**

Black-crowneds (top left) have greenish-black backs with pale undersides and orange legs. Their heads are “**crowned**” in **black with three distinct white plumes attached**. Immature birds are brown-eyed and brown-streaked.

As their name suggests, **night herons are more likely to be active at night when they hunt for fish**. They will even eat dead fish if they come across them, in addition to various other aquatic creatures. Despite being a shy and endangered species, the **black-crowned night heron will nest in busy city parks with a pond or lake**. Many people may be completely unaware these birds have a colonial rookery overlooking their local fishing pond.





Yellow-crowned night herons (top right) are also endangered species in our state and much less common than the black-crowned night heron. **Similar in size to the black-crowned night heron, they have slightly longer legs and a yellow patch on their gray and white heads.**



These gray-bodied birds will hunt during the day or night, seeking out their **favorite meal of crayfish**. These birds are **more secretive** than other herons, behaving more like a bittern. The immature birds (at right) are brown-streaked.



American Bittern

Botaurus lentiginosus

Least Bittern

Ixobrychus exilis



The **least bittern** (above right) is our **smallest heron** and another of our **endangered species**. Standing up to 14 inches, they have a wingspan of 17 inches. Both their behavior and coloring make them hard to find. Bitterns like to hide by standing motionless whenever they feel threatened. These **narrow, brown-bodied** and heavily streaked birds “**freeze**” in place by **holding their pointed bills upward** (below left). This allows them to easily blend into the tall aquatic grasses and sedges where they live. Since bitterns are **weak flyers**, this adaptation helps them avoid detection.



Bitterns nest on the ground of wetlands, weaving their nests from dead plant material. **The adults approach their nests indirectly** by landing away from the nest and walking quietly through ground cover back to the nest. **This behavior avoids drawing predators to their eggs or fledglings.**



The **endangered American bittern** (top left) is the **larger of our two bitterns** standing at 1½-feet tall with a 45 inch wingspan.



The **American bittern's** brown **plumage is darkly streaked** and marked with black on the neck and flight feathers. A **shy bird of thick, tall marshland vegetation**, these bitterns are most active at dusk and at night preying on mice, snakes, lizards, frogs and the like. They **hunt by standing motionless until their prey moves by before striking out with their long, pointed bill**. Their solitary nests are mounded on the dry ground within a wetland and made of

dried cattails or reeds. During breeding they emit a **croaking call**. American bitterns also “freeze” in place when threatened. As with the least bittern and night-herons, **the fragile status of these birds is closely related to the loss of our marsh and wetlands**, their primary habitats.

While **uncommon, all of the following birds can be found on occasion** in Pennsylvania's most southeastern marshes and wetlands and our surrounding states of Maryland, Delaware and southern New Jersey, even though we normally associate them with the flooded grasses of the Everglades in Florida. Both the **little blue heron (*Egretta caerulea*)**—top right—and the **tri-colored heron (*Egretta tricolor*)**—bottom right—are similar in size at about two-feet high.

They feed like other herons, though the **tri-colored has a strange habit of spreading its wings and running through shallow water**, perhaps to corral the fish.

The elegant **snowy egret (*Egretta thula*)**—below left—and the **cattle egret (*Bubulcus ibis*)**—below center—are easy to distinguish from the equally white great egret by their much smaller sizes. Both stand a foot or more less than the great egret. The snowy has a black bill and golden feet, while the cattle egret has an orange bill and feet.



Also rare, but sometimes feeding among herons, egrets and bitterns is the exotic-looking **glossy ibis (*Plegadis falcinellus*)**. They belong to the same order as the herons and egrets, but their family is **Threskiornithidae**.

They are medium-sized waders with a **long slender bill curving downward**. Unlike most herons and egrets, ibises fly with their necks stretched out, rather than in an “S” position.



A Simple Review of Herons, Egrets & Bitterns



Hérons, egrets and bitterns are all related and **depend on a mostly aquatic habitat** in which to live, hunt and raise their young. Their diets consist of fish, aquatic insects and crustaceans, and sometimes even small mammals, reptiles and amphibians.

Most herons and egrets are slender, long-legged birds with long necks. **When they fly**, their legs often drag behind them while **they hold their neck in an “S” shape**. These birds have canopy-shaped wings that beat slowly and deliberately whenever they fly. The word **“rookery”** can refer to a group of these elegant wading birds or to their colonial nests, which they build together in tree tops near or over water. (below)

Their long, sharp bills help them grab their slippery prey. One heron, the green heron, is even believed to use a tool while hunting. Green herons have been observed dropping small items on the water’s surface as bait. When a fish surfaces to inspect the item, the heron grabs it.



These birds are all patient hunters, quietly waiting along the water’s edge where aquatic plants like rushes and cattails are growing. Some herons like **black-crowned night herons move their bill through the water to attract prey**. Others like **Louisiana herons will hold their wings open to shade the water**. This either helps them see into the water better or perhaps lure fish into the shade.

Most herons and egrets slowly lift off and fly away from any disturbance, often while emitting a loud squawk. **Bitterns are much more secretive**. If frightened, they hold their head straight up and freeze in place.



That posture, along with their heavily streaked plumage, **helps camouflage them** against the tall thin reeds where they like to hide. Sometimes they even weave from side to side to imitate the movement of the reeds as if a breeze started to blow.

Hérons and egrets have elaborate feather plumes around their heads and necks that they develop during mating season. Many years ago those feathers were popular fashion accessories on women's clothing, especially hats. In order to meet the demand, these beautiful birds were killed almost to the point of becoming extinct. Today these birds, along with all migratory birds, are protected by both state and federal law.