

# NATURE DETECTIVES

Summer 2006

## Do You Guess Kingfisher or Great Blue Heron?

The bird utters a strange, harsh-sounding call as it flies near and lands. Some feathers kind of stick out on its head; it has mostly blue-gray feathers. The bird stands patiently, intently scanning the water below. It is waiting for a tasty fish dinner to swim within striking distance.

Finally, a careless minnow swims close. With amazing quickness the blue-gray bird strikes and comes up with a fish held crosswise in its bill. What bird is this?

"Kingfisher!" "Great Blue Heron!" you and your friend shout at once. You say, "I know the **great blue heron** is blue-gray and catches fish with such speed and skill. It stands in the marsh and waits and waits, then suddenly uncoils its long neck, stabbing its bill into the water to grab the hapless fish before it can swim away."

"No, no," your friend insists, "the **belted kingfisher** sits on a branch above the stream then dives head-first into the water to grab the fish fleeing just under the surface. The kingfisher's color is blue-gray and it is patient and quick at catching fish."

## Birds So Alike Yet So Very Different

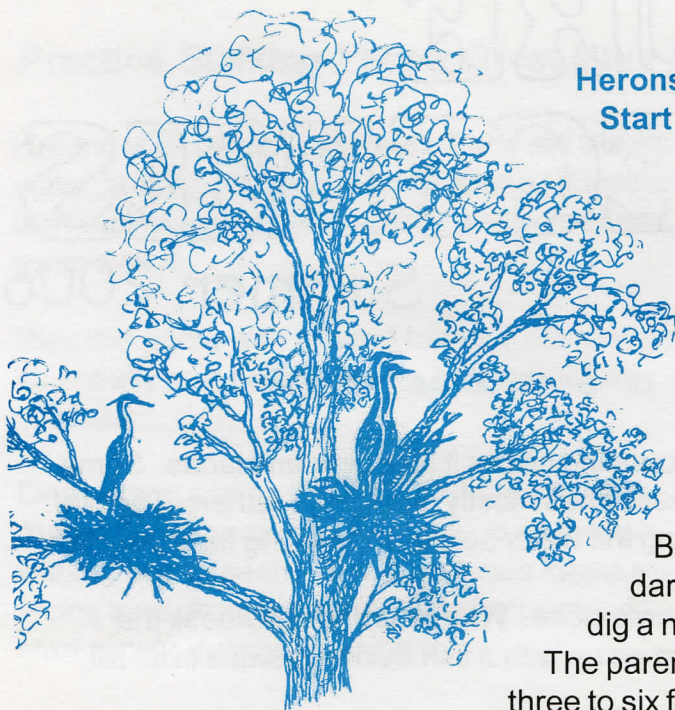
With the clues given, the answer could be great blue heron or belted kingfisher, but one look at the bird makes it easy to tell. Is it a very tall, long-necked bird with long legs that allow it to wade in the water to do its fishing? Is the call a loud, hoarse-sounding croak? It must be a great blue heron (*Ardea herodias*). Or is it a pigeon-sized bird that has a loud, rattling call and catches fish by diving into the water? It must be a belted kingfisher (*Ceryle alcyon*). The heron is tall with a skinny head and neck; the kingfisher is short with a blocky head that seems big for its body. It is clear that kingfishers and herons look very different and behave differently, but...

when you compare you find...  
lots of similarities.

### Here are some of the ways they are alike:

- Color: most of their feathers are blue-gray
- Habitat: live near water (marsh, pond, river, stream, lake)
- Favorite food: fish
- Hunting style: catch prey in their bills, sometimes spear fish with bills
- How they usually find prey: watch the water patiently
- Biggest threat: people changing their habitat
- Babies: both parents build the nest and take care of the babies





## Herons Start Life in the Treetops; Kingfishers Start Life Underground

When a heron baby is old enough to look around, it will likely have an amazing treetop view. Great blue herons tend to build their large stick nests high in tall trees. The birds like having their nests near other heron nests so a whole colony of heron families usually nest in one small group of trees. There can even be more than one nest in the same tree.

Baby kingfishers have their first view of life at the dark end of a long tunnel. Belted kingfisher parents dig a nest burrow in the bank of a stream or pond.

The parent birds use their beaks and feet to dig a tunnel three to six feet long and three or four inches wide. No nesting material is necessary; the eggs are simply laid at the end of the burrow where the tunnel widens to a foot wide and six inches high. The parents chase other kingfishers away from the area near their burrow.

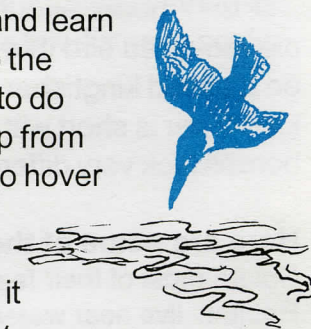
## Herons Grow Up Tall and Kingfishers Grow Up Short

When great blue heron babies reach full size, they are tall birds, around 46 inches tall, and their wings measure 70 inches tip to tip. The males and females look similar.

The belted kingfisher only grows to 13 inches tall and has wings that measure about 21 inches tip to tip. Males and females have blue-gray wings, heads and backs. They have white bellies and white bands around their necks. The females are more colorful with a rusty-brown band across their white bellies.

## Kingfishers Learn to Dive Steeply

When they are about a month old, young kingfishers leave their tunnel and learn to be fisher-birds. Parents give them practice by tossing dead fish into the water for the young birds to dive after and catch. They must learn how to do steep dives into the water and how to use their wings as brakes to keep from going more than a couple feet under the surface. They also learn how to hover for a little while over the water to adjust their dive. When they emerge from the water, they carry the fish to a handy perch such as a dead tree branch. They whack the fish on the branch to stun or kill it then swallow it head first. Though fish are the main things they eat, fish are not the only prey they hunt. They will eat other water critters such as crayfish and tadpoles. Sometimes they even eat small birds, mice, lizards, and insects. If food is really scarce they will snack on berries.



hover & dive

## Herons Learn to Walk Slowly

Great blue herons seem to learn by trial and error how to fish. If the fish is too wiggly, the heron might whap it on something or stab it with its bill to kill the fish before swallowing. Like kingfishers, herons gulp their fish prey head first to avoid getting the fish stuck in their gullet. If a fish is swallowed tail-first, its sharp fins might fan out and catch in the bird's throat. A bird with a fish stuck in its throat is likely to die. Herons will not hesitate to snatch frogs, insects or snakes to eat too. When water prey are not plentiful, a heron will catch mice or voles or even prairie dogs.

## Great Blue Heron and Kingfisher Patience

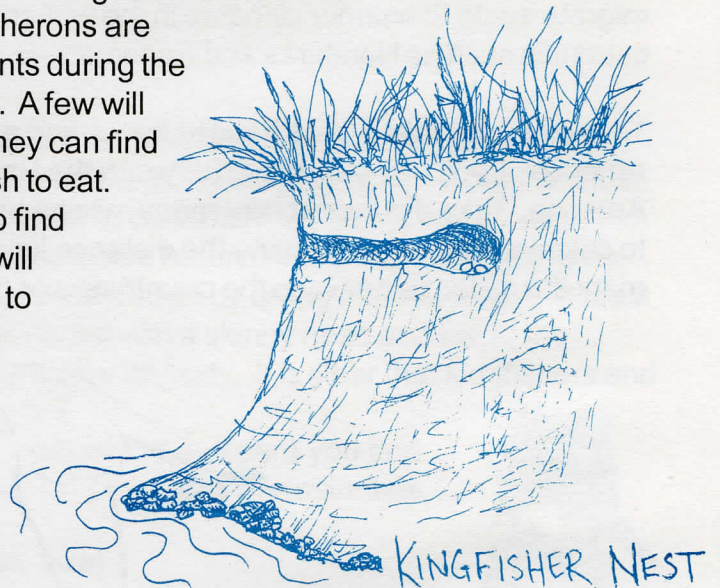
It is a challenge to test your patience for holding still with the patience of a great blue heron. Watch one hunting for a while; it holds still for such a long time staring into the water. If it wades in the water, it will move so – very – slowly. Can you hold still as long as the heron? Watch the way the heron's neck is arched forward. Heron eyes slant downward, which makes watching for fish in the water easier. Notice the way the heron's blue-grey coloring blends into its watery habitat making it hard to spot when it is still.

Notice how a belted kingfisher stands on a branch and scans the water below. Often it watches and watches, patiently waiting for a fish to swim near the surface. Can you watch as long as the kingfisher?

Look for kingfishers and herons near shallow water in Boulder County. Kingfishers often call out as they fly along their territory, which makes them easier to spot. Herons have a distinctive lazy wing beat as they fly, making them recognizable in the air.



Belted kingfishers and great blue herons are common Boulder County residents during the summer when fishing is easiest. A few will linger past summer as long as they can find unfrozen water with abundant fish to eat. Most head south for the winter to find unfrozen fishing grounds. They will return in early spring, the herons to build their treetop nests, and the kingfishers to dig their tunnels.



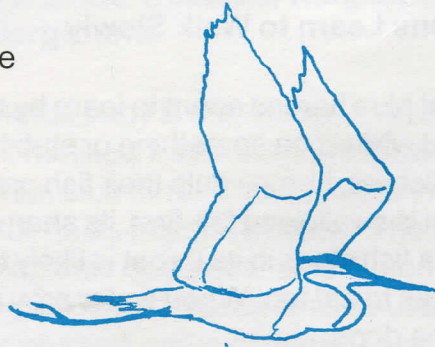
## Practice Stalking Like a Great Blue Heron

Hérons walk carefully and stand very still like statues in the water, waiting for a fish to come along. If the fish see the heron moving, they know it's dangerous and swim away!

Play this game with a friend to see if you can be as sneaky as a heron...it may be harder than you think.

One person can be the "fish" and the other the "heron." The heron has to sneak up on the fish without being "seen." The fish stands in one spot facing away from the heron. The heron should start *slowly, quietly* sneaking up.

Any time the fish hears or senses movement, it can turn around. When the fish turns around, the heron must FREEZE and stand completely still to not scare away the fish. If the fish sees the heron move while it is looking, it can "swim away" and the heron loses its dinner. But if the heron stays "frozen" until the fish turns back around, it can keep quietly sneaking up until it can tag the fish. Once the fish gets tagged, switch roles and play again.



In flight

## Migration – It's a Long Way To Go!

Some great blue herons and kingfishers stay in the same place year-round. But others migrate south to warmer climates in the winter. Some of them go as far as Central America, to countries such as Honduras and Panama.

To see how far these birds have to travel, find a map that shows North, Central and South America. Look at the distance between the United States and the countries of Central America. Take a guess at how many miles a bird would travel to get to Panama, and then try to calculate the mileage using the distance key on the map. You can use a piece of string to mark the distance between the countries, and then measure the string on the distance scale.



Just before landing