



Things
That Go
Squawk
in the Night

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from Southeast Alaska's Natural World



Herons often forage for small fish in marshy areas.

You're walking along the beach in Southeast Alaska on a dark night. *Skraawkk!* A raucous shriek splits the air barely 10 feet ahead of you. As you choke down a yelp of surprise, a gravelly *croak! croak! croak!* echoes back from farther and farther away in the darkness. Stop pounding, you tell your heart. The monster is moving *away* from here!

No, you haven't stumbled across an escapee from Jurassic Park, nor a creature from outer space. You've probably disturbed a great blue heron, one of those long-necked, long-legged birds you may have seen in the daytime along a tideflat or perched on a piling or a dock. People in Southeast often see herons, even along roadsides as busy as Egan Drive in Juneau. But many do not know that herons are also active at night.

Herons have a high number of rods—nerve cells highly sensitive to dim light—in their eyes, apparently enabling them to see at night. That is when small fish such as sculpins emerge from under rocks to forage in shallow water. Night-feeding herons are often there to meet them.

Great blue herons are found all over North America, but herons in the Pacific Northwest and Southeast Alaska have darker plumage than birds in other parts of the

United States and Canada. Scientists presently classify them as a separate subspecies, *Ardea herodias fannini*. They breed only as far north as Prince William Sound.

We could not find any research conducted on great blue herons in Southeast Alaska, but a great deal of work has been done in British Columbia, and much of it should apply to Southeast. The best work we found was by Robert W. Butler of the Canadian Wildlife Service, who wrote *The Great Blue Heron* (University of British Columbia Press, 1997) and the great blue heron monograph in the definitive series *The Birds of North America* published by the American Ornithological Union.

People seem to enjoy seeing herons—even people who are not otherwise particularly interested in birds. Perhaps they enjoy the glimpse of a long-legged predator unexpectedly wading along a roadside slough. Perhaps they have watched the great, gangly birds lift off and flap gracefully across a sunset sky. Perhaps they have laughed at the

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comical sight of a scowling, sharp-beaked heap of feathers precariously perched on a rotten piling.

But what else do we know about these lanky Southeast residents?

How they fly

Adult great blue herons have wingspans of about six feet—greater than the reach of many adult humans with their arms outstretched, and nearly as great as the wingspans of bald eagles and trumpeter swans. Because their wing area is large in comparison to their weight, herons lift off the ground easily and fly with deep, slow wingbeats.

A heron's flight exudes utter confidence and ease—*flap . . . flap . . . flap . . .* two to three beats per second—and it ends with a gentle landing, probably meticulously controlled to protect the bird's long, slender legs from the shock of striking hard ground.

Hérons have a distinctive profile when they fly, too. Their necks form a characteristic S-shape unlike that of any other Southeast bird, and their legs dangle straight out behind their bodies as if perhaps they're just tagging along for the ride.

Where they're found

We may see herons most frequently near fresh or salt water, but they also turn up in unexpected places. Like eagles, they feed mostly on fish along the shore but nest and roost in large trees. One wonders how they manage to maneuver their broad wings and long legs to get there, but they often perch in spruce or hemlock trees amid thick clusters of branches, where you may see them rocking back and forth to keep their balance like inexperienced high wire artists.

Some herons forage on dry land for small mammals. At Snettisham we watched one pad across more than 300 feet of dry



gravel near the housing units, possibly looking for mice or voles. Ultimately it flapped off and landed in a tall hemlock overlooking Speel River.

How they eat

In Southeast Alaska great blue herons eat mostly small fish. They stalk their prey by standing motionless peering into the water for many minutes, or wading carefully through the shallows, placing each foot gently and deliberately, and spreading their long toes for support. Once a heron, its neck outstretched and its bill pointed downward, sees a fish, it keeps its gaze riveted on the prey. Slowly moving its body forward and under its head, it curves its neck and prepares to strike. *Zap!* The head darts forward as the bird snatches the prey, capturing it between the two serrated parts of the bill as if in a giant—and lethal—pair of tweezers.

Often the heron flips the fish around, shaking it and turning it to slide lengthwise down its throat, or perhaps dropping it on the ground and stabbing it to subdue it.

Staghorn sculpins present special problems because they have sharp, antler-like spines along the sides of their head. (These are in addition to the spines in their first dorsal fin.) Swallowed the wrong way, a sculpin

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Though they may look uncomfortable to us, herons often perch or roost in trees like this hemlock.

can stick in a bird's throat, and occasionally herons die this way. Successful birds drop the sculpins on the ground and stab or peck at them again and again until the spines are relaxed. Only then do they swallow them.

Catching fish is hard work, especially in winter when fish are less plentiful. It's not uncommon for a heron to stalk for 20 minutes or more before catching a meal. James Kushland, a researcher on the East Coast, wrote, "Studying great blues feeding is a good way to get bored out of your gourd, because mostly they just sit there." Still, herons fishing on a low tide beach as the late

evening sun dips behind the mountains convey a sense of elegance and well-being that adds special charm to the end of a long summer day.

How they nest

We may see herons often when they're feeding, but seeing them nesting is another story. In some parts of North America the birds nest in large colonies, and their rookeries are readily seen, heard, and . . . *um*, smelled. In fact, there has been a large rookery in Stanley Park in Vancouver, B.C. since at least 1921. But nesting herons are typically extremely secretive and shy. This may be particularly so in Southeast Alaska, where if they nest in colonies at all the number of nests in a colony is probably very small.

Around Juneau we know of nests above Sandy Beach, above Sheep Creek, near Fritz Cove, and above the eel grass bed near the ferry terminal. But even long-time bird-



What Herons Eat

In one study in British Columbia, great blue herons fed mostly on gunnels, eel-like fishes with long, compressed bodies. In another they ate primarily starry flounder,

three-spined sticklebacks, and staghorn sculpins.

All these species are commonly found in shallow waters in Southeast Alaska.



starry flounder



staghorn sculpin



three-spined stickleback



crescent gunnel

watchers could not tell us of many nests in other areas. That may be just as well, since herons are often susceptible to disturbance when they are nesting. Perhaps they are especially secretive in Southeast, where bald eagles, the major predators on heron young, are so numerous.

Ironically, great blue herons have a great deal in common with bald eagles. Both herons and bald eagles are year-round residents of Southeast. Both feed mostly on fish. Both build large, bulky nests out of sticks placed high in coniferous trees. Males and females of both species share in nest building, incubating, and feeding the young. Both species incubate their eggs for about a month, and both care for their chicks for about two months until the chicks are ready to fly.

Both herons and bald eagles may reuse the same nests for many years, but eagles usually build obvious structures in old-growth trees, while herons often build inconspicuous nests in dense stands of trees that may be second growth.

How they raise their young

Great blue herons usually breed after their second spring. They are generally



monogamous for the length of the season, but they choose new mates each year; and male herons are known to display and lure female herons into mating when their mates are away from the nest.

Hérons in Southeast probably begin nesting in late April and normally lay from three to six eggs. Only half the young that are hatched are likely to survive to leave the nest. If the adults flush from the nest, as they are likely to do if disturbed, ravens may swoop in and steal the unprotected eggs, or bald eagles may take the unprotected young.

Catching enough small fish to keep the young fed is a daunting undertaking for both parents. At first the chicks eat regurgitated food, but later they swallow fish directly from the mouth of the parent. One study found that nesting herons fed their two-day-old chicks 10 times in 13 hours. According to another study, a one-month-old chick consumed about the same amount of energy as an average adult heron.

By two months of age young herons are as large as their parents and are ready to fly. Once they leave the nest they are on their own, and they face pretty tough odds. Only about half of them survive.

Young herons of this size eat about the same amount of food as their parents.

Some herons and other large birds lift their wings to shade reflection from the water, but this heron is preening.

On the beach their parents do not feed them or defend them from approaching danger. Only if they learn to take flight early will they escape a bald eagle intent on mak-

Many great blue herons stay in Southeast Alaska all winter. Is this one contemplating its future, or is it thinking, "Perhaps I should have migrated"?

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ing them a meal. Only if they are quick, or perhaps lucky, will they learn how to feed themselves adequately. According to one study, young herons struck at fish at about the same rate as adults, but their capture rate was about half that of adults during their first two months after leaving the nest.

Hérons fledged early in the summer have an advantage because they learn to feed when fish are more plentiful. If they are fortunate, they may live for another 20 years.

Their future in Southeast

Heron populations are declining and have been officially declared "vulnerable" in British Columbia, where population growth and urban expansion have taken over much of the coastal and forest land the birds used to use.

Robert Butler estimates there may be only about 300 nesting pairs of herons along the Alaska coastline. Whether they survive will depend on whether there are safe places for them to nest, habitat in which they can feed, and large enough populations of small fish available to sustain them. ●

