

HERONS

Great Blue Heron

No wild animal is more closely associated with the City of Richmond than the Great Blue Heron. Not only is this tall, long-legged bird a common sight along the dykes and ditches that characterize the city, but in stylized form it is found on City documents, signage, vehicles, and more.

The **Great Blue Heron** (*Ardea herodias*) is one of Canada's largest birds. In its characteristic hunched posture, with the neck held in an S-shape curve, it stands about sixty centimeters tall, but with the neck extended, from bill-tip to end of tail it is a metre long. Its outstretched wings reach almost two meters. The plumage is blue-grey, with patches of black and rusty-orange on the crooks of the wings. As breeding season approaches, adults sprout long, plume-like feathers on the neck, chest, and head. Males and females look alike, although males are slightly larger.

Pacific Great Blue Heron

Great Blue Herons are found from Alaska to Mexico, and breed all across southern Canada, but those that live in coastal British Columbia, including Richmond, belong to a distinct subspecies known as the Pacific Great Blue Heron, or *Ardea herodias fannini*. The "fannini" subspecies is slightly smaller and darker than other Great Blue Herons, and is unique in not migrating south during the winter.



Diet

During warmer months, Pacific Great Blue Herons feed mostly on small marine fish, including gunnels, sculpins, and shiner perch that live in beds of eelgrass, a kind of seaweed that grows close to shore and is accessible to herons at low tide. They are opportunistic hunters, and also eat small crustaceans, freshwater fish, frogs, snakes, and small mammals such as shrews and voles. They hunt by sight, so forage during the day. In winter, when days are short and low tides occur most often at night, herons hunt along ditches and in open fields, searching for voles and other small animals. To the dismay of fish enthusiasts, they may also take koi and other exotic fish from backyard ponds.

Nesting

Pacific Great Blue Herons may nest singly or in small groups, but in the Lower Mainland are known for large, conspicuous colonies that may contain a hundred or more nests. Nests made of long thin sticks are clustered high in trees. Communal nesting helps protect against predators, and may also help adults find food, as they follow each other to foraging areas. The most successful colonies are established in mature forests within a few kilometers of eelgrass beds where human activity and threats of predation on eggs and nestlings are low.

Breeding starts in late February or early March. In established colonies, males return first to claim a nest, and courtship begins when females arrive about a week later. Pairs bond by stretching, producing a variety of raucous calls, and clacking their bills together. Males gather fresh twigs, which they present to females, who arrange them in the growing nest. Pairs are monogamous, but only for a single breeding season.

Two to five eggs (usually four) are laid two days apart. Incubation lasts about 27 days, with eggs hatching in the sequence they were laid. Once chicks emerge, adults fly off to gather food for hungry nestlings. A favourite prey is shiner perch, which are also breeding at this time and are plump with eggs.

Young herons leave the nest at sixty days, when they have reached adult size (approximately 2 kilograms, which is forty times their hatch weight). In late summer they leave the colony, following their parents to feeding areas, where they quickly become independent. Young herons explore on their own, and in late summer it is not uncommon to find naïve black-crowned juvenile birds at ponds in busy parks and other places adult birds would not likely visit.



Status and Protection

The common sight of Pacific Great Blue Herons in the Lower Mainland may give the impression that their population is large and healthy. There is, however, cause for concern, because of ongoing habitat loss, and increased predation by Bald Eagles. Both of these stresses are related to the expanding human population of southern British Columbia, which lies within the heart of the fannini subspecies' territory. The population of the Lower Mainland has doubled in the past 40 years, and rapid growth continues. Housing, transportation infrastructure, farmland and marine developments have absorbed much potential heron nesting and feeding habitat. The population of Bald Eagles in the region has also increased significantly, partly because eagles thrive near urban centres by scavenging at landfill sites. They also prey on herons, and because of their increased numbers, nearby heron colonies are subject to increased predation. Eagle predation is a major reason for herons to prematurely abandon existing colonies and move elsewhere, possibly to poorer-quality habitats, farther from adequate food sources.

The Pacific Great Blue Heron is identified by the British Columbia Provincial Government as vulnerable, though not yet endangered. Under the Provincial Wildlife Act, herons, their eggs and nests, and trees used for nesting are protected year-round. Herons are also protected by the Migratory Birds Convention Act, a long-standing treaty between Canada and the United States. The fannini subspecies of the Great Blue Heron is categorized federally (by COSEWIC) as "of concern," and as such its population will continue to be monitored. Although the legal protections make it illegal to actively harm herons or their colonies, there is no standing legislation that specifically sets aside habitat for the herons' future needs.



Pacific Great Blue Herons in the Lower Mainland

As a result of Bald Eagle predation and other factors, large, long-established colonies in Pacific Spirit Park, Point Roberts, and Coquitlam have been abandoned in recent years, and have been replaced by new colonies in Tsawwassen, a site relatively vulnerable to harsh weather, and Deer Lake Park in Burnaby that is close to a busy road and other human disturbances. There has been a heron colony in Stanley Park in Vancouver for more than a century, although it has moved within the park several times. It is currently located near the Vancouver Park Board Office and the tennis courts off Beach Avenue. Although herons usually avoid human activity, this colony has persisted since 2001, despite the constant presence of pedestrians, dogs, cyclists, vehicular traffic, and tennis players. In March and April, one can watch two species, human and heron, seemingly oblivious to each other, one whacking tennis balls back and forth with great effort, the other a few metres above, expressing passion in the clacking of bills, passing back and forth of sticks, and occasional loud squawking.

In Richmond, during nesting season (March to August), adult Pacific Great Blue Herons can be seen foraging on the shore outside the dyke, at low tide in shallow water at Iona Beach Regional Park, and along the arms of the Fraser River. Outside of nesting season, small numbers may be seen roosting together on driftwood logs on the foreshore or hunting in ditches and fields. The size and other-worldly countenance of Pacific Great Blue Herons evoke an evolutionary connection to dinosaurs, and remind us that they are and have for a long time been an important part of this environment. Hopefully, sufficient nesting and foraging habitat will be preserved in our region and this magnificent bird will remain as a living symbol of our city.

