

BC's Coast Region: Species & Ecosystems of Conservation Concern
Great Blue Heron *fannini* subspecies (*Ardea herodias fannini*)
 Global: G5T4 Provincial: S3B,S4N COSEWIC: SC BC List: Blue Identified Wildlife



Adult



Juvenile

Notes on *Ardea herodias fannini*: Great Blue Heron are a member of the family Ardeidae (Heron, Egrets and Bitterns), represented by ~64 species globally. Although herons resemble birds such as cranes, they are not in the same family. Herons are one of the bird groups that have “powder down”, feathers which disintegrate into a fine powder and are used during preening to absorb and remove dirt and other matter which may reduce waterproofing and insulation. Two subspecies occur in BC, the coastal form *A. h. fannini* and the interior form *A. h. herodias*

Description

Height: 60 cm Wingspan 1.5m. Both sexes are similar. Adult Great Blue Heron are tall, long-legged wading birds with a sinuous neck held in an “S” curve at rest and in flight. The long thick bill is yellow and black, the head and face are white. In mature birds, plumage is a steel blue-grey with dark blue-grey flight and tail feathers. As birds mature a distinctive black plume extends from above the eye to beyond the back of head and a bib of long trailing plumes on the chest and scapula area become more pronounced. Juveniles are grey-brown on the back and upper wing plumage and lack the black eyebrow and adult head and bib plumes.

Diet

Primarily a fish eater (piscivorous), this subspecies also exploits a range of amphibian species including invasive species such as Green Frog and American Bullfrog. Small mammals such as Townsend’s Vole, mice and shrews are stalked in meadows and agricultural fields and may form an important component of the diet in winter in certain areas.

Look’s Like?

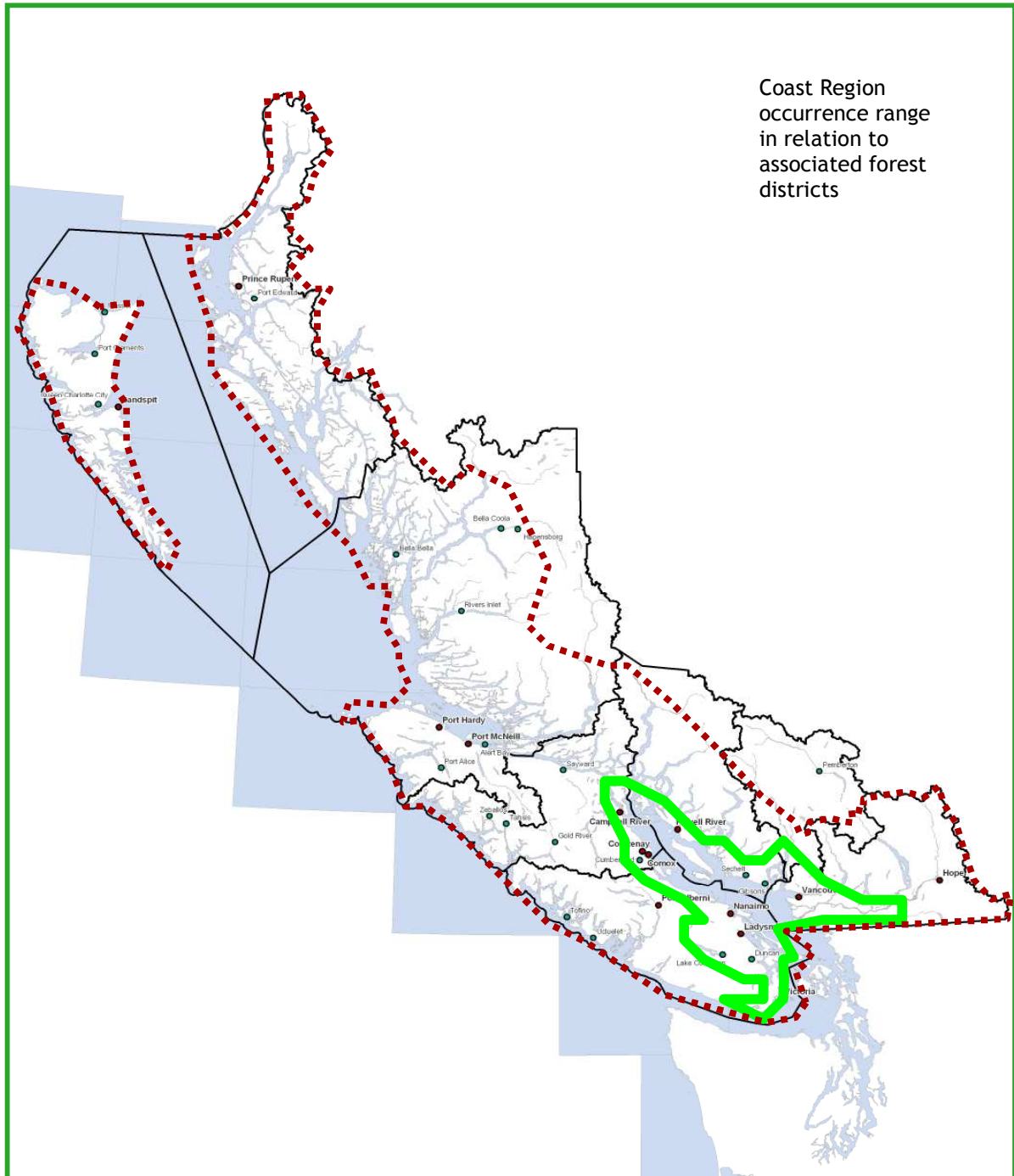
Great Blue Heron are often mistakenly referred to as a “cranes” due to the fact that the closest look alike in size is the much less common Sandhill Crane (the only species of crane in BC). Unlike Great Blue Heron, Sandhill Crane has a large patch of bare, red skin above the eye, flies with a fully extended neck and nests on the ground. Cranes also have a distinct “bustle” or group of large curved feathers over the lower back and tail area.



Sandhill Crane

Distribution

Elevation: 0-1100 m. The *fannini* subspecies of Great Blue Heron is found throughout the Coast Region. While foraging and breeding sites are quite dispersed, this subspecies is more common on the South Coast especially in association with low elevation lakes, wetlands, sloughs and estuaries. Currently, of the 49 nesting colonies (“heronries”), identified, 46 occur in the Georgia Basin (including Tswassen, Coquitlam River, Bowen Island, UBC main campus, West Vancouver). A majority (68%) of these sites are concentrated in ~6 colonies of > 100 nesting pairs each. Four of these 6 colonies were located in the Fraser Lowlands, the other 2 are located on southern Vancouver Island and the southern Gulf Islands.



Great Blue Heron *fannini* ssp. (*Herodias ardea fannini*) main breeding colonies - green (South Coast) and potential occurrence range (red-dotted line), for the Coast Region

Habitat Preferences

Eel grass beds, mudflats, Agricultural fields, and old-fields (mainly short-grass or mowed), wharves, beaches, irrigation ditches and urban lakes, streams, drainage ditches and backyard ponds are all utilized for foraging. During non-breeding periods birds roost high up in mature trees in close proximity to foraging sites.

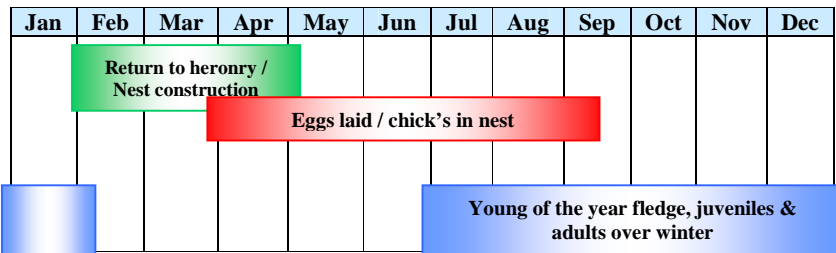
Critical Features

Heronries are typically found within 10 km of foraging habitats

(2). Though generally associated with stands of trees well away from noise, light and human disturbance, some heronries (e.g. Stanley Park), have become established in dense urban areas. Canopy closure is a factor for heronries, typically being >80%, though birds have been known to use stands with more open canopies. Heronries can be over 350 nests and sites are reused in successive years. Small nesting colonies are more common on the sunshine coast and on Vancouver Island. Nests are located at 4-70 m above ground and consist of large stick platforms, <1 m diameter. Nests are lined with twigs; bark strips, coniferous boughs and rushes. Both the nest and the ground beneath are often covered in droppings, discarded food, and occasionally dead chicks.



Seasonal Life Cycle



Threats

- ◆ Distribution overlaps with areas undergoing significant urbanization, disturbance and habitat loss including draining and infilling of wetlands, foreshore development, logging and riparian forest loss.
- ◆ Breeding success/nest and chick abandonment rates are directly affected by disturbance and human activities. In particular canopy removal or clearing near a nesting area can cause nest abandonment and chick mortality.
- ◆ Increased predation by recovering bald eagle populations may result in low breeding success and abandonment of some nesting colonies.

Habitat (especially during breeding season) ranges from riparian areas, estuaries, lakes and lowland rivers and streams. Nests are constructed on the horizontal branches of mature trees, often black cottonwood, bigleaf maple or conifers.

Conservation & Management Objectives

- ◆ Apply the BC Ministry of Environment's most recent version of the "Develop with Care, Great Blue Herons Fact Sheet #11" which contains recent updates and adjusted timing windows and buffers for the subspecies. Foresters applying buffers and timing windows as found in *Accounts and Measures for Managing Identified Wildlife Great Blue Heron Herodias ardea* under the *Forest and Range Practices Act* should consider harmonizing activities and practices to reflect the most recent science reflected in the Develop With Care Guidelines.
- ◆ Assess, inventory and monitor using methodology set out by the Heron Working Group, integrate complimentary methodologies as found in the Inventory Resource Information Standards Committee Inventory Methods for Colonial-Nesting Freshwater Birds #8 (Version 2.0).

Specific activities should include:

- ◆ Design and locate developments to avoid disturbing heronries and feeding areas. Avoid disturbance during staging and breeding season (January 15 - September 15), including roost sites outside of that timing window.
- ◆ Physical vegetative barriers are the most effective deterrent to human disturbances and predation of heron colonies.
- ◆ Riparian buffers imposed to protect fish habitat are insufficient for protecting the complete range of foraging and refugia requirements of this subspecies. Buffers of at least 300 m in undeveloped areas, 200 m in rural areas, and 60 m in urbanized areas are recommended. An additional 200 metre 'no disturbance' buffer is recommended during the nesting season, especially for colonies not previously disturbed by human activities.
- ◆ Maintain connectivity and reconnect fragmented segments of riparian forests and isolated wetlands. Conserve veteran components (e.g. mature trees used for nesting, roosting and perching) in riparian areas.
- ◆ Restore and maintain the quality of seasonal and permanent forage sites and buffers that have been impacted by pollution, dredging, infilling, deforestation and other activities.
- ◆ Encourage landowners to create conservation covenants to buffer and protect nesting colony sites and adjacent foraging areas such as wetlands and riparian habitat on their property. Support efforts to secure stewardship agreements and conservation covenants to protect important heron habitats on the coast of British Columbia.

The fannini subspecies of Great Blue Heron is listed under the Species at Risk Act (SARA), is subject to protections and prohibitions under the Federal Migratory Birds Convention Act and BC Wildlife Act and is Identified Wildlife under the Forest and Range Practices Act. Habitat for this species may also be governed under provincial and federal regulations including the Fish Protection Act and Federal Fisheries Act as well as Regional and local municipal bylaws.

Content for this Factsheet has been derived from the following sources

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Every effort has been made to ensure content accuracy. When managing for this species and for the most current information please also contact the Heron working Group or the regional species at risk biologist. Comments or corrections should be directed to the South Coast Conservation Program: info@sccp.ca. Content updated March 2012.

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