

British Columbia's Coast Region Species and Ecological Communities of Conservation Concern

SOUTH COAST CONSERVATION PROGRAM

Protecting and Restoring at Risk species and Ecological Communities on BC's South Coast



SPECIES PROFILE: Great Blue Heron fannini subspecies (*Ardea herodias fannini*) Global: G5T4 Provincial: S23B,S4N SARA: 1-Special Concern BC List: Blue - Identified Wildlife

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*.



Great Blue Heron

Characteristics (things to look for)

Height: 60 cm Wingspan 1.5 m. 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.



Juvenile

Looks like (Similar)

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



Sandhill Crane

Habitat

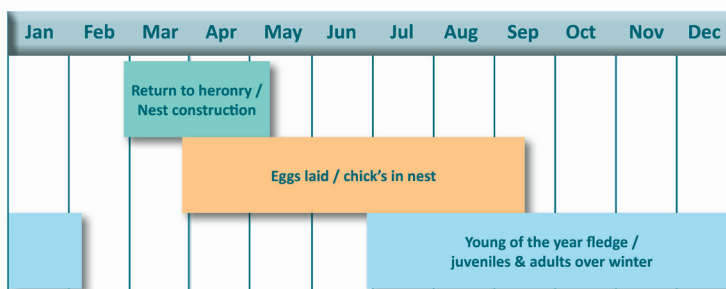
Habitat (especially during breeding season) ranges from riparian areas, estuaries, lakes and lowland rivers and streams. Foraging habitat includes: Eel grass beds, mudflats, agricultural fields and old-fields (mainly short-grass or mowed), wharves, beaches, irrigation ditches, urban lakes, streams, drainage ditches and backyard ponds. During non-breeding periods birds roost high up in mature trees in close proximity to foraging sites. Heronries are typically found within 10 km of foraging habitats. 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 constructed on the horizontal branches of mature trees, often Black Cottonwood, Bigleaf Maple or conifers. 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.



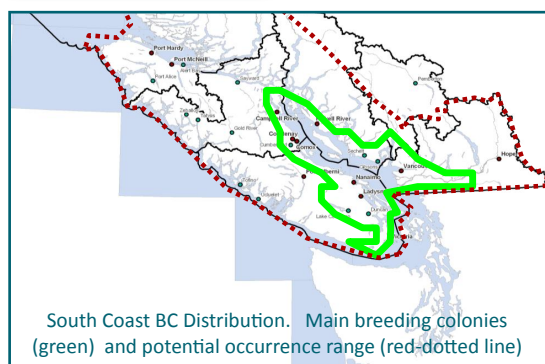
Diet

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.

Life Cycle



Range



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. The major nesting colonies ("heronries") on the South Coast include: Tsawwassen, Bowen Island, Deer Lake, UBC (main campus) and West Vancouver. Many of these locations support >100 nesting pairs. Other heronries occur on the Southern Gulf Islands and southeast Vancouver Island. A major heronry located at the confluence of the Coquitlam and Fraser Rivers adjacent to Colony Farm Regional Park became abandoned around 2012. Although some nesting may still be occurring there. It is estimated that approximately 4-5000 breeding birds make up the coastal subspecies population in BC, with some heronries like Tsawwassen supporting at least 10% of that population.

Threats

- Habitat loss due to significant urbanization, draining and infilling of wetlands, foreshore development, logging and removal of riparian forest.
- Low breeding success and high rates of nest abandonment in response to disturbance and human activities. 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.

Conservation/Management

Please 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 and described by Vennesland & Norman (2006), Survey Protocol for Measurement of Nesting Productivity of Great Blue Heron Nesting Colonies. Integrate complimentary methodologies as found in the Inventory Resource Information Standards Committee Inventory Methods for Colonial-Nesting Freshwater Birds #8 (Version 2.0).

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.

Sources

BC Conservation Data Centre: Conservation Status Report *Ardea herodias fannini*, Great Blue Heron, Fannini Subspecies. [internet] Updated January 2009. - Butler, Robert W. and Philip D. Baudin. 2000. [Internet]. Status and Conservation Stewardship of the Pacific Great Blue Heron in Canada. Proceedings of a Conference on the Biology and Management of Species and Habitats at Risk. Volume One. B.C. Ministry of Environment, Lands and Parks, Victoria, B.C. and University College of the Cariboo, Kamloops, B.C. 490pp. - COSEWIC. 2008. [internet] COSEWIC assessment and update status report on the Great Blue Heron *fannini* subspecies *Ardea herodias fannini* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 39 pp. - Chatwind T., S. Bonar and K. Kissinger. 2007. [Internet] Pacific Great Blue Heron Population Inventory and Monitoring Vancouver Island and the Gulf Islands 2005. Prepared for the BC Ministry of Environment. - McClaren Erica L. 2003. [Internet] Pacific Great Blue Heron Population Inventory and Monitoring Project: Strait of Georgia, British Columbia. Prepared for the BC Ministry of Environment. - Ministry of Environment, Lands and Parks Resources Inventory Branch. 1998. [Internet]. RISC standards # 8 (Version 2.0) Colonial-Nesting Freshwater Birds. - Ministry of Environment. 2014. [Internet] Develop with Care, Great Blue Herons Fact Sheet #11. Environmental Guidelines for Urban and Rural Land Development in British Columbia. 2 pp. - Proulx, Gilbert et al. 2003. A Field Guide to Species at Risk in the Coast Forest Region of British Columbia. Published by International Forest Products and BC Ministry of Environment. Victoria (BC). - Summers, Ken. 2004. [Internet] Accounts and Measures for Managing Identified Wildlife Great Blue Heron *Herodias ardea* Accounts V. 2004. - Vennesland, R. and Norman, D., 2006. [Internet]. Survey Protocol for Measurement of Nesting Productivity at Pacific Great Blue Heron Nesting Colonies.

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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 2015.

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