

BC's Coast Region: Species & Ecosystems of Conservation Concern

Grizzly Bear (*Ursus arctos*)

Global: G4, Provincial: S3, COSEWIC: SC, BC List: Blue Identified Wildlife



Notes on *Ursus arctos*: This member of the family Ursidae (“bears”), a family descended from a dog-like carnivore ancestor, is the most widely distributed of all bear species. In North America it occurs as a coastal (“Brown Bear”) and interior form (“Grizzly Bear”). Grizzly Bear are still classified in some literature as the separate subspecies *U. a. horribilis*. While the coastal and interior forms have significantly different diets and vary in size, both go by one species classification in BC.

Description

Total length: 1.8-2.1 m, Weight: males 250-350 kg; females 100-175 kg. The largest bear in BC, Grizzly Bear have a sturdy build with a prominent shoulder hump (muscle mass covered with long guard hairs) and a massive flat head with upturned muzzle (dish-face profile). The nose is pig-like, ears are short and round. The coat varies in colour from blond to cinnamon to dark brown. On adults, silver or blond hair tips give this species a “grizzled” appearance. Claws on the front paws are long and prominent (3.5-10 cm). Cubs often have a v-shaped blond chest bib.

Diet

Though descended from carnivore ancestors, Grizzly Bear are basically giant omnivores. Key food sources are those rich in both animal and plant protein. In the spring, after emergence from denning, this species targets meadows and vegetated shorelines where it can graze on abundant supplies of high protein sedge and grass species. Throughout the summer foraging includes berries, insects, small mammals and some ungulates (e.g. elk, caribou and moose fawns). In the fall, returning salmon form a key part of the diet which continues to be supplemented with berries and vegetation.

Look's Like?

Grizzly Bear shares its range with the more common American Black Bear, the only other member of the genus *Ursus* in BC. However the two species are distinctly different in body shape, size and colour. American Black Bear as the name implies, are generally black (with some exceptions¹) with a smooth, uniform coat, dog-like nose, straight facial profile, no face ruff, no shoulder hump and shorter claws.

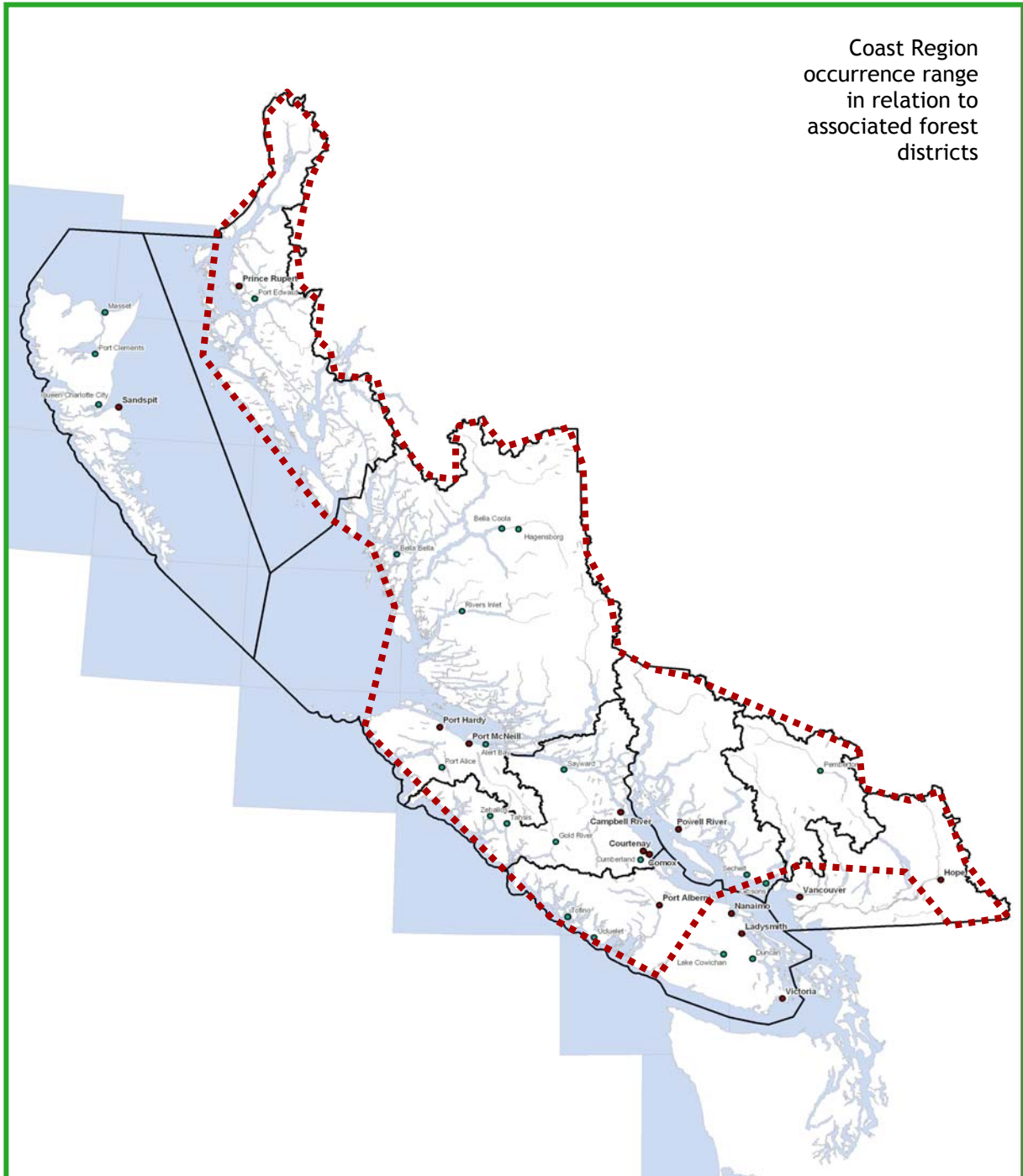


American Black Bear (“cinnamon” morph)

¹ American Black Bear periodically have varying colour morphs including cinnamon, blond, glacial (mottled blue-grey) and one of the most well known - white, also known as “Spirit” or “Kermode” Bear.

Distribution

Elevation: Valley bottoms to alpine. Historically distributed throughout mainland valley bottoms and alpine areas of the Coast Region (historically absent from Vancouver Island and Haida Gwaii), Grizzly Bear have now been locally extirpated from much of their historic range in the south Cascades and southwest BC. This species is still relatively common on the Central and North Coast, where their unique role in coastal ecosystems (e.g. with species such as salmon) have made them a keystone species for conservation in areas like the Great Bear Rainforest. Grizzly Bear still occur in parts of their historic range on the South Coast with local populations in the Howe Sound-Garibaldi Range and wilderness areas on the north side of the Fraser River (Upper Pitt, Harrison Rivers). While still absent from the major coastal islands, several individual bears have been confirmed on Vancouver Island since 2003 with the most recent sighting in the summer of 2010.



Grizzly Bear (*Ursus arctos*), potential occurrence range for the Coast Region

Habitat Preferences Grizzly Bear prefer landscapes with a mosaic of mature forests interspersed with immature stands, meadows and clearings such as avalanche chutes. This species has demonstrated some level of adaptation to urban and rural areas (several individuals are known to range near Squamish, Whistler and Pemberton) as well as recreational developments such as ski hills and lodges.



Grizzly Bear utilize a range of habitat types including streams, floodplains, estuaries and wet meadows as part of seasonal foraging requirements.

Critical Features Hibernating and breeding dens occur at high elevations on steep north-facing slopes. Grizzly Bear seldom reuse an excavated den but will often come back to the same vicinity to dig a new den. Indirect and direct impacts to den sites can occur from logging, removal of standing, dead and downed wood, and encroachment or disturbance from backcountry or off-road vehicle and ATV use. Based on home range sizes (which can range up to tens of thousands of hectares for both males and females) and migration/dispersal capabilities, core areas of well-distributed, interconnected and seasonally important habitats are required across large landscape units (e.g. the entire Coast Region).

Seasonal Life Cycle

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
			Breeding – *Delayed egg implantation									
			cubs born – weaned late summer and stay with sow for up to 2 years									
			Hibernation									

Fertilized eggs do not become attached to the female’s uterus until onset of hibernation in late October-November.

Threats

- ◆ Resource based and extractive land use activities (e.g. logging, gas, oil and mineral exploration and extraction, hydro projects, recreational and backcountry uses) which contribute to the fragmentation, loss or significant alteration of critical habitat features and food sources.
- ◆ Loss of connectivity, forage and denning features from urbanization and expanding settlement patterns in formerly “wilderness” areas continues to contribute to conservation issues for Grizzly Bear populations throughout their remaining range.
- ◆ Grizzly Bear have relatively low birth rates and dispersal capabilities. The high fidelity to maternal home ranges of female grizzlies in particular may reduce the rate of recolonization of areas where breeding populations have been depleted.
- ◆ Direct mortality from vehicle and rail collisions, human wildlife conflicts (e.g. livestock or garbage induced interactions) and poaching.

Conservation & Management Objectives

- ◆ Conservation and management objectives for this species should incorporate requirements and recommendations that integrate multi land use approaches such as those found in the “EBM Working Group Focal Species Project” and the “Recovery Plan for Grizzly Bears in the North Cascades of British Columbia”. Integrate complimentary objectives and

practices found in the Identified Wildlife Provisions for this species found in “Accounts and Measures for Managing Identified Wildlife - Accounts V. 2004 *Ursus arctos* Grizzly Bear and “Wildlife Guidelines for Backcountry Tourism/Commercial Recreation in British Columbia”.

- ◆ Inventory and monitor using standardized methods as found in Resource Information Standards Committee #21: Inventory Methods for Bears Version 2.0.

Specific activities should include:

- ◆ Identify spatial fragmentation thresholds which impact foraging and connectivity requirements and reduce population viability.
- ◆ Create a network of connected reserves to ensure population viability. Parks and protected areas in fragmented landscapes are not a guaranteed means of protecting populations and may actually isolate populations.
- ◆ Restrict and avoid road development in backcountry areas that presently have low density road networks. For existing roads, close during critical times (e.g. breeding) and rehabilitate/decommission when relevant activities (e.g. forestry operations) cease.
- ◆ Wildlife underpasses or overpasses should be installed at appropriate intervals where high road densities and potential for vehicle interactions occur. Clear-span crossings across streams are preferred.
- ◆ Increase awareness about the sensitivity of Grizzly Bear to disturbance and clearing. Promote user groups and landowners to follow best management practices that limit disturbance and reduce human-wildlife conflicts (e.g. BC’s “Bear Smart Program”).
- ◆ Attractant-free backcountry sites (e.g., camps for tree planters, cruisers, engineers, wilderness camping, hunters and wildlife viewing) should be monitored to ensure potential for bear interactions is reduced through appropriate food storage and garbage management.

This species is listed under the Federal Species At Risk Act (SARA), is Identified Wildlife under the BC Forest and Range Practices Act and subject to protections and prohibitions under the BC Wildlife Act. All hunting seasons on Grizzly Bear are managed provincially through Limited Entry Hunts (LEH) open by lottery to resident hunters or by quotas granted to licensed guides. There are no LEH seasons on Grizzly Bears in any threatened Grizzly Bear Population Unit. 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. Comments or corrections should be directed to the South Coast Conservation Program: info@sccp.ca. Content updated August 2010.

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