
Distinguishing features: This small stocky seabird has a metallic slate-grey appearance with striking pale grey eyes and distinct blue-grey feet and legs. A tiny white eyebrow above each eye and a small pink patch on the lower bill are the main colour variations on the body.

Distribution: One of the most rarely seen birds, Cassin’s Auklet spends almost its entire life on the ocean, coming to land only to breed. The breeding range of this species extends from the middle of Baja California north along the west coast of North America to southeast Alaska and along the south coast of the Alaska Peninsula west along the Aleutian Islands (Derocher 2004, Bertram 2005). The Coast Region supports ~75% of the global population where it is found throughout numerous breeding colonies (~61) on offshore islands along the western and northern coasts of Vancouver Island, the northern mainland coast and Haida Gwaii. Breeding sites are reused annually with Triangle Island in the Scott Island group off northwestern Vancouver Island representing the largest Cassin’s Auklet breeding colony in the world (Derocher 2004, Bertram 2005). This species utilizes much of the waters off the BC coast throughout its lifecycle though higher densities can be found around the northwestern side of the Haida Gwaii archipelago and the mouth of Juan de Fuca off southwestern Vancouver Island in the winter (Derocher 2004, Kaiser 1990).

Description: Length: 230 mm Wingspan: 110-129 mm Adult birds are stocky, rounded and small with a slate-grey, back fading to lighter grey sides and a white belly. The bird has a small white eyebrow above each eye which is only discernable close up. The lower part of the black bill has a small pinkish-white spot at the base. This species has distinct grey-blue legs and feet. Plumage is the same throughout the year and both sexes are similar. Juveniles are pale grey with a white throat. The eyes, which are brown in the young, become a striking metallic grey in the adult. The short rounded wings are designed to carry the bird in flight as well as act like flippers while the bird forages underwater.

Diet: As with the other open ocean seabirds this species shares foraging areas with, Cassin’s Auklet feed throughout the year on krill and other invertebrates that can be caught in the top 30 m of ocean waters. In spring and early summer, the auklets readily feed on larval or juvenile forage fish rich in oil and nutrients such as herring. Auklets are pursuit divers, using their wings like flippers to “fly” swiftly underwater up to 80 meters in depth in pursuit of prey (Kaiser 1990, Bertram 2005). Adults possess a special throat pouch (called a “gular” pouch) with which they transport food back to nest burrows to feed their chicks.

 Looks Like? This species may be hard to visually identify off the water as it overlaps in breeding sites with other colonial seabirds such as Ancient Murrelet and like Murrelets arrives and exits nesting areas under cover of darkness so. Nest burrows can be identified from other species by the purplish coloured guano deposited by adult birds and chicks at the nest entrance (Derocher 2004, Bertram 2005). This species is also unique in that generally only one extremely large egg almost 16% of the female’s body weight is produced per year (Kaiser 1990).

Primary Habitat: Colonial nest burrows (1-5m long) are excavated in soft soils under stumps, fallen logs, large tree roots, grass tussocks, forbs, salmonberry bushes and ferns on steep seaward slopes (Derocher 2004, Bertram 2005).

Secondary Habitat: While the majority of burrows are excavated within soils of mature forested areas or tussock grass communities, rock crevices or natural cavities under downed woody debris are sometimes used for nesting.

Critical Feature: As with other co-occurring seabird species Cassin’s Auklet has a high fidelity to breeding sites and prefers suitable undisturbed nesting areas within 500 meters of adjacent open-ocean forage areas. The availability of coldwater upwelling zones especially over submerged continental shelf breaks that support high densities of forage fish and zooplankton are key to maintaining local populations (Derocher 2004, Bertram 2005).
**seasonal Life Cycle:**

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**Habitat Guild:** Open marine waters (pelagic), old growth and mature second growth upland and coastal forests, bluffs and seaward slopes with grass and forb communities.

**Threats**
- Introduced predators (rats and raccoons) represent one of the most immediate threats to this ground nesting species.
- Distribution coincides with areas which may be subject to long-term impacts to food resources from climate change (e.g. ocean warming and acidification) and marine industry pollution.
- Mortality from gill-net fishing and boat infrastructure and oil spills have contributed to the decline of the species.
- Increased coastal windstorms also possibly linked to climate change may impact nesting colony habitat.
- Human disturbance from recreational activities and development of tourism destinations on historic nesting colony areas.

**Key Conservation & Management Objectives**
- It is estimated BC supports 75% of the global Cassin’s Auklet population. While still considered widespread and abundant this species requires further study to determine overall breeding success and potential impacts from human disturbance and climate change.
- Further investigation of adult food preferences is required as present data is limited.
- Resources should be directed to continued eradication and control programs of introduced predators to protect remaining breeding colonies and provide opportunities for recolonization.
- Conserve and protect existing and potential preferred nesting habitats from disturbance, especially seaward slopes supporting essential vegetated cover features and soils for burrow excavation.
- Assess habitat suitability and apply management criteria as setout in the Identified Wildlife Management Strategy (IWMS) account for this species.
- If any sites rank as high or moderate capability for Cassin’s Auklet - assume the species may be utilizing the area for nesting and implement protective measures.
- Although forested sites with soft soils and large downed wood provide preferred nesting habitat, tussock grass communities on bluffs are also exploited as are bluffs and slopes with crevices or other natural cavities.
- Sightings, specimens, or observations of activities threatening its habitat should be reported to the regional Species at Risk Biologist at the Ministry of Environment office.
- Increase awareness about the sensitivity and value of the unique undisturbed coastal foreshore and mature forests ecosystems found on, in and around the Haida Gwaii Archipelago and Vancouver Island.
- Encourage resort lodges, tourism tenure holders and foreshore landowners to create conservation covenants to buffer critical colonial nesting sites (existing and potential).
- Ensure proper maintenance of bilge and/or septic systems, fuel storage facilities and disposal of wastes from water craft and shoreline developments/businesses.

**Main References & Citations:**
- Committee on the Status of Endangered Wildlife in Canada: http://www.cosewic.gc.ca/

**Image credits:**
- Cassin’s Auklet: Duncan Wright
- Downed old growth: J.E. Armstrong
- Auklet burrow: kqedquest flir