

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

Barn Swallow (*Hirundo rustica*)

Global: G5 Provincial: S3S4B COSEWIC: N/A BC List: Blue



Adults



Chicks & mud nest

Notes on *Hirundo rustica*: This gregarious member of the family Hirundinidae (swallows and martins), is often associated with noisy colonial nesting sites in barns and under the eaves of buildings. A neotropical migrant, over-wintering in Central America and Mexico, Barn Swallow in BC migrate via Washington State and the Pacific Flyway. The only member of the genus *Hirundo* in BC, Canadian Breeding Bird Survey data suggests Barn Swallow have experienced a 2.9% annual decline over the past 30 years, a decline that has steepened in the last decade to 7.6% annually.

Description

Size 14.6 - 19.9 cm long, Wingspan of 31.8 - 34.3 cm, Weight 17 - 20 g. Dorsal plumage on adults is a metallic blue-black with a pale beige/russet breast, chin and bib. The long, deeply-forked tail feathers are a key feature to identify this species from other swallows. Males and females are similar in appearance, though males are more vibrantly colored and have longer outermost tail feathers (retrices), with white spots (lacking in females). Males with the longest outermost tail feathers tend to be more successful at securing mates and have higher survival rates.

Diet

An insectivore, Barn Swallow are proficient consumers of a diverse range of insects, including mosquitoes, flies and moths. Prey is captured in midair, often over water, open fields or roads. Diet is also supplemented (particularly during bad weather) with berries, seeds, and dead insects found on the ground. Swallows will fly several kilometers from their nest sites to forage. During long periods of continuous rainfall adults may find it difficult to find prey items, effecting young of the year survival rates. Swallows drink mid-flight, dipping their bills to the waters surface as they fly over.

Look's Like?

Several species of swallows, swifts and martins can be mistaken for Barn Swallow. The similarly coloured, but stouter Cliff Swallow or the high flying Violet-green and Tree Swallows often occupy similar habitats. The open, cup-shaped nest made of mud flakes, feathers and organic matter is a characteristic distinguishing Barn Swallow from other species.



Tree Swallow

Habitat Preferences

Nests are usually constructed on vertical surfaces under eaves or porch covers, barns or other buildings, on light fixtures, under bridges or in caves or cliff crevices. This species commonly refurbishes old nests from year to year and returns to the same nesting area in successive years. Young of the year often return to within 30 km or closer to natal sites. This species has been known to adapt to and utilize urban landscapes such as parking lots, warehouses and residential structures such as outdoor lighting fixtures.

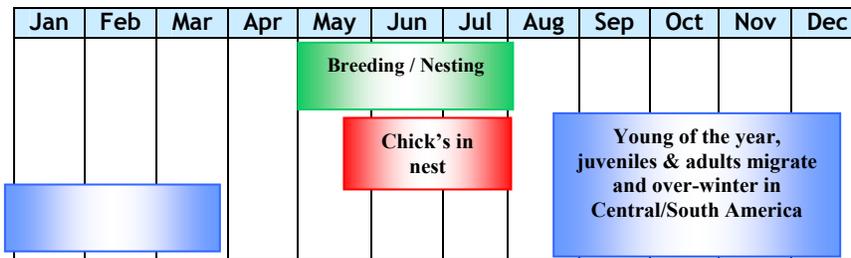
Critical Features

Barn Swallows construct nests formed from mud pellets that may be collected from riverbanks, wetlands or exposed soils up to a kilometer from the nest site. Nests are lined with grass, animal hair, and feathers. Nests built on man-made structures (e.g. under eaves, bridges, docks) require a ledge to support the nest, a vertical wall to which the nest can be attached and a roof or overhang to protect from precipitation.



Open areas from floodplains to alpine meadows, frequently near water, provide habitat features for Barn Swallow.

Seasonal Life Cycle



Threats

- ◆ Loss of nesting habitat through the conversion and demolition of barns and other rural structures to urban and suburban uses.
- ◆ Distribution coincides with areas undergoing significant urbanization and natural habitat loss including draining and infilling of wetlands.
- ◆ The use of pesticides to control plant and insect pests may have lethal and sub-lethal effects as well as impacting reproductive success and food availability.
- ◆ Young swallows may die from nest infestations of blowfly and other parasitic insects and mites. Other deaths of young occur from severe hot or cold temperatures, fallen nests, and introduced predators, including rats, and grey squirrels.
- ◆ Swallows, in search of flying insects are often attracted to open roads and road verges. Mortalities from cars may increase as natural food producing habitats decline and road densities increase with development.
- ◆ Barn Swallow nests are often removed or barriers are installed to prevent access to historic nest platforms due to noise and dropping buildup during the breeding season.

Conservation & Management Objectives

- ◆ Assess, inventory and monitor using methodology set out in the RISC standards #16 Inventory Methods for Swallows and Swifts (Version 2.0). For swallows and other species that have extensive distances between nesting and foraging areas, determination of individual populations should be based on nest sites and nest colonies, not on locations of foraging individuals even if they are 5km apart.

Specific activities should include:

- ◆ Current and historical nest sites should be monitored regularly to determine long-term population trends.
- ◆ Protect known nest sites from human disturbance and/or work with homeowners or operators to reduce nest use conflicts.
- ◆ Work to retain a suitable mosaic of preferred nest sites (e.g. buildings) with adjacent foraging and roosting areas.
- ◆ Utilize integrated pest management programs to reduce and avoid the need for traditional chemical pest control methods.
- ◆ In areas of suitable foraging habitat, nest platform programs should be initiated or continued to increase nesting opportunities.
- ◆ Public information and education products should continue to be developed to encourage landowners to conserve and enhance nesting and foraging habitats and understand the value swallows provide in natural insect pest control services.
- ◆ Recent stewardship initiatives to manage for old-field communities in the Fraser Delta (e.g. Delta Farmland Wildlife Trust) and the Fraser Valley should be of value to the conservation of this species.

This species is subject to protections and prohibitions under the Federal Migratory Birds Convention Act and BC Wildlife 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

- B.C. Conservation Data Centre. 2010. [Internet]. Species Summary: *Hirundo rustica* B.C. MoE.
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