#### SCCP Species Profile 2016 Version



# 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: : Barn Owl (*Tyto alba*)
Status Global: G5 Provincial: S2? SARA: 1-Special Concern BC List: Red

The only member in BC of the family Tytonidaea ("barn owls") and genus Tyto, this species is one of the most widely distributed globally but has limited distribution in BC. The scientific name literally means "white owl". Of all the owl species it may have the greatest number of common name variations including Demon Owl, Monkey-faced Owl, Hissing Owl, Hobgoblin or Hobby Owl.



# Characteristics (things to look for)



Length 30-37 cm, Wingspan 104-120 cm. A slender owl with tawny to golden-brown dorsal plumage with varying amounts of gray. Breast and belly plumage ranges from white to buff and is sparsely to heavily speckled with small black spots. The head lacks ear tufts and has relatively small dark eyes and a distinctive heart-shaped, white to buff facial disk. The legs are long and sparsely feathered, wings long and rounded with a short rounded tail. As with many raptors, sexes differ with females being larger and heavier. As well females are darker, and more heavily speckled than males. Owlets are covered in fluffy snow-white down which becomes similar to adult plumage as they mature.

## Looks like (Similar)

Barn Owl overlaps in distribution and habitat preferences with several other owls including Shorteared Owl and Barred Owl. However the overall pale, buff coloured plumage with little or no dark spotting or barring and heart shaped facial disk distinguish Barn Owl from these other species.



#### **Habitat**

Barn Owl expansion into BC is somewhat related to the expansion and clearing of agricultural lands in the early part of the 20th century. Preferred breeding, foraging and over-wintering areas include fields of

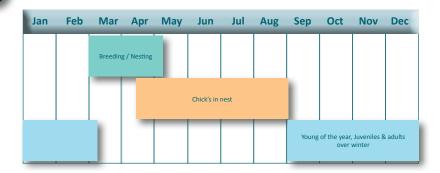
dense grass, marsh, lightly grazed pasture and hayfields, often around human habitation. Nesting occurs in buildings (church steeples, attics, platforms in silos and barns, wooden water tanks) as well as caves, crevices on cliffs, burrows, and hollow trees (though rarely in trees with dense foliage). This species will readily exploit nest boxes. Reproductive success generally is higher in a properly placed and maintained nest box than in a natural nest cavity. Intensively cultivated habitats are of less value in general because of low prey populations. This species earns its name from its adaptability to manmade structures associated with these land uses. Quantity and quality of dense grass habitats are significantly correlated with nest activity. Nests are most often located in man-made structures. The most common nests are on platforms high in old wooden barns.



Diet

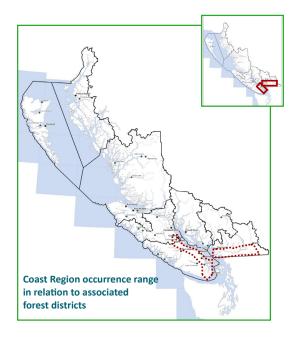
Barn Owl is an effective predator on introduced and native rodents especially Townsend's Vole (63-85% of diet). In urban areas introduced species such as Norwegian and Black Rat and House Mouse may provide a surrogate food source. Bird species are taken when small mammals are scarce. This species is dependent on access and availability of key prey sources making them susceptible to starvation during prolonged periods of snow cover.

## **Life Cycle**



#### Range

Barn Owls occur at the lowest elevations available within their range in British Columbia. On the Coast Region this species is thought to have originated from a central colonization point in the Fraser estuary in the early 1900's. Mild winters and expanding agricultural land use contributed to its spread through the Fraser Lowlands to Hope from the 1940's to the 1980's. Breeding range on Vancouver Island is from Sooke to Campbell River, including the Gulf Islands. In southern BC there are breeding records from Osoyoos and the Kootenay Valley as far east as Creston.



#### **Threats**

- Habitat loss and habitat fragmentation dues to urbanization, including draining and infilling of wetlands, and industrialization/ conversion of limited farmland foraging habitats to greenhouses and rowcrops throughout the lower Fraser River. The most common nest sites on high platforms of barns are lost as old farm structures are demolished.
- Accidental killing of Barn Owls by collision with vehicles is a significant factor and will likely increase with expanded road and highway development, and increased traffic volume on existing roads.
- Direct mortality due to severe winters is a significant source of mortality for British Columbia populations.
- Fluctuations in prey populations (vole species a primary prey) which are vulnerable to changes from land use, and changes in grassland habitats from spread of invasive grass species (e.g. non-native reed canary grass species).
- Direct mortality and sub-lethal effects from the use of pesticides to control weeds as well as rats and mice in agricultural and urban areas as well as impacts to prey abundance.

# Conservation/ Management

Apply conservation and management objectives as set-out in the "Best Management Practices for Raptor Conservation During Urban and Rural Land Development in British Columbia". Integrate complementary objectives, recommendations and assessment methods found in "Recovery Plan for the Barn Owl (*Tyto alba*) in British Columbia" and "Draft Recovery Strategy for the Barn Owl (*Tyto* 

*alba*) in Ontario". Inventory and monitoring resources include standardized methods (RISC standards # 11 Inventory Methods for Raptors (Version 2.0). For further details on conservation and management objectives for this species, please consult the above noted resources, references provided or contact provincial and federal agencies.

This species is listed under the Federal Species At Risk Act (SARA) and is subject to protections and prohibitions under the 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.

#### **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 January 2016.

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