



The Northern Saw-whet Owl is one of the smallest owls in North America, and also one of the most common in northern forests.

Northern Saw-whet Owl

(Aegolius acadicus)

STATUS

SARA **NO STATUS**
 Alberta **SECURE**

British Columbia **YELLOW**
 Saskatchewan **NO STATUS**

PRIMARY HABITAT

Coniferous/Mixedwood

TERRITORY SIZE

> 50 ha

NEST TYPE

Cavity (secondary)

NEST REUSE

Common

STAND LEVEL

Retain aspen >35 cm dbh with signs of damage or decay, and trees/snags with visible cavities.

LANDSCAPE LEVEL

Large, contiguous old coniferous or mixedwood forests with natural gap dynamics.

BREEDING WINDOW



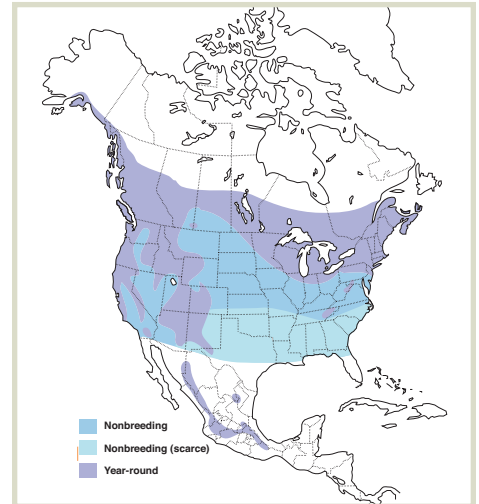
HABITAT ECOLOGY

- The Northern Saw-whet Owl is found in a wide range of forest types but is most common in riparian coniferous forests.¹ It is also found in cottonwood, ponderosa pine and Douglas fir forests² but it is uncommon in subalpine forests.¹
 - In Alberta’s boreal mixedwood forest, Northern Saw-whet Owls were most common on landscapes with cropland (average = 20%) interspersed with deciduous forest, and were positively associated with soft (vegetated) linear features.³
- This species nests in old cavities excavated mainly by Northern Flickers as well as by Pileated Woodpeckers, meaning large-diameter deciduous trees are an important habitat feature, particularly in coniferous-dominated stands.^{3,4}
- This species begins laying eggs as early as February or March, meaning it may be at risk of incidental take or nest disruption during winter operations. Nests should be protected from early February (BC) or March (Alberta) to the end of July.^{2,5}

RESPONSE TO FOREST MANAGEMENT

- Large clear-cuts without retention and even-aged management are considered important threats to this species as they remove potential nest trees.⁶
- Retention harvesting or small entries that maintain high densities of cavity trees and hunting perches may have a neutral or potentially positive effect:
 - This species hunts from forest edges out into openings and clearings, and has shown positive responses to landscapes containing many openings within dry mixed-conifer forests.⁷
 - Low levels of fragmentation and/or forest clearing may increase prey densities and foraging habitat, but these benefits can be easily outweighed by the negative impacts of perch removal, nest tree removal, and increased predation where fragmentation is high.⁸
 - A nest box study with a low sample size (4 Northern Saw-whet Owls) found this species nesting in deciduous and mixedwood harvested stands with between 20% and 75% dispersed and patch retention.³

RANGE MAP



STAND-LEVEL RECOMMENDATIONS

- Managers should retain patches containing large-diameter trees and snags with cavities, multiple vegetation layers, and natural openings.²
- In dry mixed-conifer forests (e.g., Douglas fir/ponderosa pine), retention patches located on south-facing aspects may provide greater benefits.⁷
- Nests that are encountered and found to be occupied should be protected using nest buffers of up to 25 m or wider during the critical breeding period (e.g., Feb./Mar. to July).⁹