



The Northern Pygmy-Owl is, as its name suggests, one of the smallest owls in North America. It is secretive and hard to detect during the breeding season, making it a hard species to study.

Northern Pygmy-Owl

(Glaucidium gnoma)

STATUS

SARA NO STATUS
 Alberta SENSITIVE

British Columbia YELLOW
 Saskatchewan ABSENT

PRIMARY HABITAT

Coniferous

TERRITORY SIZE

>75 ha

NEST TYPE

Cavity

NEST REUSE

Some

STAND LEVEL

Retention of large-diameter deciduous trees/snags when harvesting coniferous/mixed stands.

LANDSCAPE LEVEL

Large, old, conifer-leading forest stands with natural gaps and openings.

BREEDING WINDOW



HABITAT ECOLOGY

- The Northern Pygmy-Owl occupies a wide range of habitats, including spruce-fir, cottonwood bottomlands, aspen/poplar, mixed pine, deciduous-coniferous mixedwood, Douglas fir, western hemlock, and western larch.^{1,2}
 - Important habitat features for this species include large trees containing cavities. They are mainly known to nest in cavities excavated by Black-backed Woodpeckers, Hairy Woodpeckers, Northern Flickers, and Pileated Woodpeckers.²
 - Nests are typically observed within old forest but near openings including waterbodies and clearings.²
- This species is associated with older forests (e.g., >80 years in the Alberta Foothills) and high crown closure, tree height, slope, and terrain variability.³

RESPONSE TO FOREST MANAGEMENT

- Few studies have looked at Northern Pygmy-Owl responses to forest management, but it is expected to be sensitive to even-aged management and clear-cutting (removal of existing and potential cavity trees).^{1,2}
- Retention harvesting may benefit this species by retaining nest trees and creating openings for hunting. However, there have been few studies to confirm this and study results have been mixed.^{3,4}

STAND-LEVEL RECOMMENDATIONS

- Unharvested forest patches on steep, inoperable slopes may improve foraging habitat value, particularly in conifer-leading forests.³
- Managers should include large-diameter live deciduous trees in patches where available, as these will provide suitable hunting perches and future nest cavities while increasing structural diversity.³ Where deciduous cover is sparse, dispersed retention of trees, snags and stubs may be beneficial,⁵ however research to determine minimum and optimal retention level and pattern is needed.

RANGE MAP

