



The Great Gray Owl is a large, majestic owl that resides in northern coniferous forests, where it hunts for rodents in openings, meadows, and bogs.

Great Gray Owl

(Strix nebulosa)

STATUS

SARA

NO STATUS

Alberta

SENSITIVE

British Columbia

YELLOW

Saskatchewan

NO STATUS

PRIMARY HABITAT

Old coniferous/wet areas

TERRITORY SIZE

Home range ~4.5 km² (may overlap)

NEST TYPE

Old stick nest, broken top, mistletoe

NEST REUSE

Common

STAND LEVEL

Residual trees/patches every ~100 m for foraging; patches >6 ha for nesting (see below for anchors).

LANDSCAPE LEVEL

Heterogeneous landscapes containing openings/wet areas and large patches of old forest.

BREEDING WINDOW



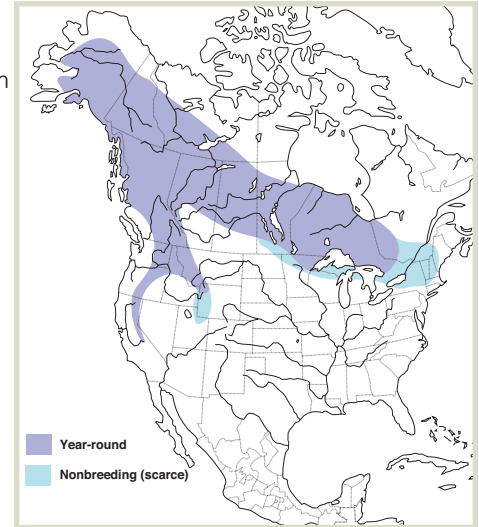
HABITAT ECOLOGY

- The Great Gray Owl is a year-round resident found in open and mature coniferous forests, including dry pine stands,¹ treed muskeg and black spruce/tamarack bogs,¹ mature/old lodgepole pine and ponderosa pine forests near meadows,² and riparian white spruce forest.³
- They often nest in old stick nests, broken-topped snags, or mistletoe brooms. Nests are located in forest patches larger than six hectares with ≥35% (preferably ≥60%) crown closure and leaning trees.²
- Great Gray Owls forage in open forests (≤40% closure of trees, saplings and shrubs),² where they hunt for mice and voles from perches on trees or snags.⁴

RESPONSE TO FOREST MANAGEMENT

- Intensive forest management that removes large-diameter trees and snags, leaning trees, and opens the canopy is expected to negatively affect Great Gray Owls by reducing suitable nesting habitat.¹
- However, Great Gray Owls are known to hunt in areas harvested using selective harvesting and clear-cutting.¹
- Pathogen outbreaks, insect outbreaks, fire, and dwarf mistletoe infestations create high-value natural nest sites and patches of important nesting habitat features.⁴

RANGE MAP



STAND-LEVEL RECOMMENDATIONS

- Nesting habitat: Retention patches >6 ha are recommended within the harvested matrix, anchored around one or more stick nests, large-diameter broken-topped snags, and/or large mistletoe brooms. Patches should have >60% crown closure and contain leaning trees (which can be knocked over if not naturally occurring).²
- Great Gray Owl hunting flights are typically within 50 m of their perch. Planners and operators can increase the amount of available foraging habitat in a recent cut by leaving residual trees and patches roughly every 100 m.^{2,4}
- Silviculture that reduces shrub cover may improve foraging habitat, but the rapid return of cover by seedlings or saplings will reduce available foraging area as the harvest block regenerates.^{2,4}