

Note: Operations within Spotted Owl range may be recommended to discourage Barred Owl occupancy, rather than promoting it. See Spotted Owl.

# Barred Owl

# (Strix varia)

STATUS SARA Alberta

NO STATUS SENSITIVE

PRIMARY HABITAT Old deciduous, mixedwood

NEST TYPE Cavity (natural)

STAND LEVEL Old, large deciduous snags in large patches (>10 ha).

#### **BREEDING WINDOW**

British Columbia Saskatchewan

YELLOW NO STATUS

TERRITORY SIZE 300-1,000 ha

NEST REUSE Frequent

#### LANDSCAPE LEVEL

Old, large mixedwood forest stands and upland forests.



# HABITAT FCOLOGY

- Barred owls are associated with large trees and snags in old (>80 years) mixedwood forests and, in BC, upland mature and old conifer forests.<sup>1</sup>
  - Aspen and poplars provide nest trees, while white spruce and balsam fir provide cover for owlets.<sup>2</sup>
  - Structural diversity, including partially fallen trees, is important near nest trees.<sup>3</sup>
  - They also use Douglas fir, western hemlock, western larch, and black cottonwood forests (coniferous or mixed), often near water.<sup>4</sup>
- Barred Owls mainly nest in large-diameter deciduous trees in natural cavities formed by disease, broken branches, or broken tops. Woodpecker cavities are too small for this large-bodied species. They will readily use nest boxes.<sup>1</sup>

# **RESPONSE TO FOREST MANAGEMENT**

- Barred Owls require large, contiguous mature forest habitat and have been negatively impacted by severe fragmentation and habitat loss in parts of their range.<sup>2</sup>
- Where the Barred Owl's range overlaps with that of the Great Horned Owl, fragmentation negatively affects Barred Owls by creating habitat for this aggressive predator and competitor.<sup>2</sup>
- Clear-cutting without retention is considered an important threat due to loss of cavity trees and snags for nesting.<sup>1</sup>
- Barred owls have been observed nesting in retention patches and within 50 m of cutblock edges in landscapes with a low amount of harvested area (7%).<sup>5</sup>

### STAND-LEVEL RECOMMENDATIONS

- Managers should prioritize old (>100 years), large-diameter (>36 cm) deciduous trees and snags as anchor points for retention patches, particularly those with large existing cavities, and/or broken tops.<sup>6</sup> If these are scarce or unavailable, some large deciduous trees may be retained to provide future nest trees. Unmerchantable timber should be retained near large retention trees, including spruce or fir if available, to provide cover for owlets.<sup>2,3</sup>
- Patch retention more effectively provides nesting habitats within harvest sites for this species, while dispersed retention trees • provide hunting perches for Barred Owl and other species while the harvest block regenerates.<sup>7</sup>
- Patches should be 10–20 ha or larger if possible, and contain high densities of large-diameter aspen and poplar trees/snags for nesting.⁵
- Recommended activity buffers around known, active nests range from 50 m (low-impact activities) to 200 m (high-impact activities, e.g., road building). An unharvested forest patch of at least 20 m radius is recommended around the nest tree.<sup>8</sup>

