

The Western Screech-Owl (macfarlanei subspecies) is Threatened in Canada. Managers are responsible for ensuring that they meet the requirements of the Species at Risk Act, the provincial Forest and Range Practices Act, and the Identified Wildlife

Photo by Arbyreed

HABITAT ECOLOGY

- The Western Screech-Owl has been subdivided into eight populations in BC, each of which has distinct habitat associations.
- This species is mainly found in lowland riparian habitats including black cottonwood, water birch, and trembling aspen.² These riparian habitats are usually within a landscape matrix that contains mixed coniferous stands (e.g., Douglas fir or ponderosa pine) where they forage.³
- Western Screech-Owls nest in tree cavities, including natural cavities and old Northern Flicker and Pileated Woodpecker nests.² Nest trees are >25 cm dbh,² decay class ^{2–6,1} and have cavity openings >7.5 cm in diameter.⁴
 - Nesting habitats include a moderate to dense understory of shrubs >2 m tall, with open ground, high tree cover (>70%), and multiple large-diameter trees for both nesting and roosting.⁵
- Important foraging habitats include fields, pastures, rivers, streams, open woodlands, and other open habitats provided there are perches from which owls may hunt.⁴

RESPONSE TO FOREST MANAGEMENT

- The primary causes of Western Screech-Owl declines include habitat conversion for residential and agricultural developments. However, the continued removal of existing or potential habitats through harvest and fuel management (e.g., thinning) have the potential for severe negative effects.⁵
- While Western Screech-Owl territories normally occur within riparian areas, these are often small, non-fish-bearing streams and wetlands, meaning they are not subject to riparian buffers by default.¹

STAND-LEVEL RECOMMENDATIONS

- Prior to all activities, managers are encouraged to review known Western Screech-Owl occurrences to determine whether planned operations are near or within recorded nesting territories. Targeted surveys (e.g., nocturnal call-playback surveys) are recommended in areas near known locations to improve provincial inventories and better protect nesting habitats.
- Suitable wildlife trees and/or nesting sites (see Habitat Ecology) within known or potential nesting habitats should be prioritized for retention, most likely but not exclusively through voluntary riparian buffers. Wildlife tree areas should be >2.5 ha and prioritize retention of black cottonwood/trembling aspen/water birch trees >35 cm dbh and Douglas-fir >75 cm dbh.¹
- Minimum 50-m buffers are suggested for low-impact activities near occupied nests. Larger buffers for high-impact activities are advisable, however this species is very tolerant of human disturbance.^{5,6}

Western Screech-Owl

(Megascops kennicottii macfarlanei)

STATUS SARA Alberta

NEST TYPE

STAND LEVEL

PRIMARY HABITAT

Riparian/Deciduous

Cavity (secondary)

Retention patches >2.5 ha containing

large-diameter aspen, cottonwood,

water birch, or Douglas fir.

THREATENED British Columbia



TERRITORY SIZE ~20 ha during breeding season; 65–77

NEST REUSE

LANDSCAPE LEVEL

Riparian habitats around non-fishbearing waters and landscapes with openings for foraging.



RANGE MAP

