

Bird	Breeding Bird Survey shows declining at ecoregion or state scales that overlap with Blue Mountains	Climate threatened	Climate endangered	Relies on large (>20" dbh) large trees for key portion(s) of life history	Associated, at least in part, with mixed-conifer and Grand fir for reproduction and feeding	Habitat use includes mature or OG forests	Relies on snags, at least in part, for reproduction	Other habitat notes
Bufflehead	X (decreasing in Oregon; increasing at other scales)		X	X	X	X	X	Relies on riparian and subalpine fir for reproduction and feeding
Common merganser	X (decreasing in Oregon, N. Rockies, Nationally, and Survey-wide; increasing in Great Basin)	X		X			X (snags and logs; relies on natural cavities created by decay)	Relies on riparian and PP forests; Nests in tree cavities along forest edges
Barrow's goldeneye	X	X		X	X	X	X	Relies on MC, deciduous vegetation, snags, and logs
Wood duck	X (decreasing in Oregon; stable or increasing at other scales)	X		X		X		Relies on riparian (deciduous) for reproduction and feeding; shrubs, aspen, PP, and MC for feeding
Red crossbill	X (declining survey wide, nationally, Washington, and N. Rockies; stable or increasing in Oregon)		X	X	X	X		Relies on large MC, GF
White-winged crossbill		X		X	X	X		Relies on large MC, GF
Brown creeper	X (declining in N. Rockies; increasing at other scales)		X	X	X	X		Relies on large MC, GF
Vaux's swift	X (decreasing at all scales with the exception of coastal California)	X	X	X	X	X	X	Relies on snags and cliffs for reproduction
Williamson's sapsucker	X (decreasing in N. Rockies and Oregon; increasing in other portions of Oregon and Nationally)		X	X	X	X	X	Relies on riparian thickets, PP, MC, and GF for reproduction and feeding
Lewis' woodpcker	X	X		X	X	X (can also use younger forests)	X	Relies on riparian, PP, MC, and GF for reproduction and feeding
Western screech owl	X	X		X	X			Relies on multiple forest types including MC; juniper and riparian (deciduous) for reproduction and feeding
Great grey owl	N/A		X	X	X	X	X	Relies on MC for feeding; relies on LP for reproduction; can use live trees as well as snags for reproduction
Boreal owl	N/A		X	X	X	X		Associated with older forests at higher elevations (subalpine fir, MC, ES, DF)
Long-eared owl	N/A		X	X	X			Relies on riparian (deciduous) or aspen, MC, GF, LP, or subalpine fir for feeding and reproduction
Flammulated owl	N/A	N/A	N/A	X	X	X (can also use younger forests)		Relies on PP and MC for reproduction and feeding
Hooded merganser			X	X	X	X	X	Relies on a variety of forest types, including MC. Deciduous veg, snags, and logs for reproduction

Pileated woodpecker				X	X	X	X	
American three-toed woodpecker			X	X	X	X (can also use younger forests)	X	Prefers snag clumps
Black-backed woodpecker			X	X	X	X (can also use younger forests)	X	Prefers snag clumps
Northern saw-whet owl			X	X	X	X (also use younger forests for reproduction)		Relies on riparian, PP, MC, GF for reproduction and feeding
Bald eagle			X	X	X	X		relies on riparian, PP, and MC for reproduction and feeding
Golden eagle			X	X	X	X		relies on PP, MC for reproduction and feeding
Osprey			X	X	X	X	X	relies on riparian, PP, and MC for reproduction and feeding
Harlequin duck	N/A				X (for reproduction)	X (can also use younger forests)		relies on MC, GF, LP, and subalpine fir for reproduction only (feeds in riparian (deciduous))
Evening grosbeak	X	X			X	X		relies on mid to high elevation forests, esp. ES, GF, and MC.
Pine grosbeak	X		X		X	X		relies on MC, GF, LP, and subalpine fir for reproduction and feeding
Hermit thrush	X	X			X	X		relies on MC, GF, LP, and subalpine fir for reproduction and feeding
Swainson's thrush	X		X		X			relies on shrubs, aspen, riparian, MC, GF, subalpine fir for reproduction and feeding
Varied thrush	X		X		X	X		relies on MC, GF, LP, and subalpine fir for reproduction and feeding
Pine siskin	X	X			X	X (prefers LOS but can also use younger forests)		prefers LOS, DF, GF, ES, hemlock, MC
Cordilleran flycatcher	X	X			X			prefers moister, denser parts of forests in shaded canyon bottoms, often near streams
Olive-sided flycatcher	X				X			prefers forests with uneven canopy, esp. with tall snags left from fires. Open forests preferred by occupies a variety of forests. On east slope of the Cascades, most nests found in
Golden-crowned kinglet	X	X			X	X (can also use younger forests)		relies on MC, GF, LP, and subalpine fir for reproduction and feeding

Ruby-crowned kinglet	X		X		X		relies on MC, GF, LP, and subalpine fir for reproduction and feeding
Black-capped chickadee	X		X				relies on riparian and mixed-deciduous conifer forests.
Chestnut-backed chickadee	X		X			X	relies on MC, GF, LP for reproduction and feeding; can also use subalpine fir. Relies on moist dense forests, DF, hemlock, GF, usually at mid-elevations
Mountain chickadee	X		X				relies on MC, GF, LP for reproduction and feeding. Mid to high elevation PP, DF, GF, hemlock, ES, and MC.
MacGillivray's warbler	X		X				relies on shrubs, aspen, riparian, MC, GF, LP for reproduction and feeding
Townsend's warbler	X	X	X			X	relies on MC, GF, subalpine forests for reproduction and feeding
Yellow-rumped warbler	X		X		X (can also use younger forests)		relies on MC, GF, subalpine fir for reproduction and feeding.
Mountain bluebird	X (decreasing in Oregon, nationwide, and survey-wide; increasing in N. Rockies and Great Basin)	X	X				relies on aspen or MC for reproduction; riparian and PP for reproduction and feeding
Calliope hummingbird	X		X				relies on MC and subalpine fir for reproduction and feeding
Rufous hummingbird	X		X	X			relies on riparian, MC, GF, LF, subalpine fir for reproduction and breeding
Red-breasted nuthatch	X (decreasing in Oregon and N. Rockies, stable or increasing at some other scales)	X	X		X (can also use younger forests)	X	relies on MC, GF, LP for reproduction and feeding
Pygmy nuthatch	X (decreasing in N. Rockies, Oregon, nationally, survey wide; increasing or stable at other nearby scales)		X		X	X	relies on mature PP forests, MC dominated by PP
White-breasted nuthatch	X (decreasing in Oregon; stable or increasing at other scales)	X	X		X	X	relies on PP in Cascades, PP and MC in the Blue Mountains; deciduous, open, PP, juniper
Clark's nutcracker	X (decreasing in N. Rockies, Washington nationally, survey wide; increasing or stable in Oregon and at other nearby scales)		X		X		relies on MC; spruce and pine forests near timberline
Hairy woodpecker	X (declining in Oregon, Washington, and Idaho; increasing at other scales)	X	X		X (can also use younger forests)	X	more common in older forests, readily uses burned areas/forest edges for foraging. Coniferous forests, MC, riparian woodlands at all elevations.
Downy woodpecker	X (declining in Oregon, N. Rockies, and Great Basin, survey-wide scale and nationally; increasing at regional scales in some parts of the country)		X		X (can also use younger forests)	X	prefers MC deciduous and riparian areas
American kestrel	X	X	X			X	relies on riparian and MC for reproduction

Winter wren	X	X	X	relies on MC, GF, LP, subalpine fir for reproduction and feeding
Western tanager	X	X	X (can also use younger forests)	relies on PP, MC, GF, LP, subalpine fir, aspen, riparian for reproduction and feeding
Hammond's flycatcher	X	X	X	relies on PP, MC, GF, LP, subalpine fir, aspen for reproduction and feeding
Northern pygmy owl	X	X	X (can also use younger forests)	relies on juniper, aspen, riparian, PP, MC forests for reproduction and feeding
Merlin	X	X	X	relies on MC, GF, LP, subalpine fir for reproduction and feeding
Peregrine falcon	X	X		relies on GF, LP, subalpine fir, alpine meadows for reproduction and feeding
Northern goshawk		X	X	relies on MC, GF, LP for reproduction and feeding

Key to abbreviations:

DF= Douglas fir
 ES = Englemann Spruce
 GF = Grand fir
 LOS = Late Old Structure
 LP = Lodgepole pine
 OG = Old growth
 MC = Mixed Conifer
 PP = Ponderosa pine

Citations:

USGS North American Breeding Bird Survey Results and Analysis 1966-2017. Accessed online 9/2020 at: <https://www.mbr-pwrc.usgs.gov/>

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Dr. Craig Miller has studied birds and related avian habitat in Oregon since moving to Bend in 1981. He was co-author of the "Preliminary Draft: Oregon County Checklists and Maps" published by the Oregon Field Ornithologist in 1993. He contributed technical expertise for the Oregon Breeding Bird Atlas, and authored 11 species accounts in *Birds of Oregon a General Reference*. He is the regional eBird reviewer for Lake County, Oregon. He has served as a member of the Oregon Bird Records Committee most years since 1996. He has conducted up to four Breeding Bird Surveys annually since 1993. He found and identified the first Red-throated Pipit to be verified in Oregon. He has studied birds extensively throughout the United States, especially Alaska, California, Texas, Arizona, Florida, Ohio, and Michigan. He has studied birds throughout the world, including all 7 continents.