



Oregon Forest
Resources Institute



A GUIDE TO

Priority Plant and Animal Species

IN OREGON FORESTS



DESIGNED FOR FOREST LANDOWNERS AND MANAGERS

Wildlife in Managed Forests – Project Overview

This publication is part of a series from the Oregon Forest Resources Institute that aims to make information available to foresters, wildlife managers and landowners as well as interested parties such as conservation organizations, regulators and policymakers. As part of the Wildlife in Managed Forests Outreach Project, information is disseminated through publications such as this one, as well as workshops, tours and conferences.

PROJECT PARTNERS:

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National Council for Air and Stream Improvement
Northwest Habitat Institute
Oregon Biodiversity Information Center
Oregon Department of Fish and Wildlife
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A Guide to Priority Plant and Animal Species in Oregon Forests

Oregonians care about forest-dwelling wildlife and plants, and they have concerns about forest loss. Actively managing Oregon's forests mitigates habitat loss resulting from development, mining and other non-forest uses. Through the use of specific forestry techniques, landowners can maintain, enhance and even create habitat for birds, mammals and amphibians, while managing lands for timber production. This updated publication can help forest landowners and land managers identify and manage for priority species that may inhabit their lands.

What is a priority species?

A priority species in Oregon is one that has a special status. It is either state- or federally listed under the Endangered Species Act, protected by the Oregon Forest Practices Act, included in the Oregon Conservation Strategy, or has a global status of G1, G2 or G3 through the Oregon Biodiversity Information Center.

It is important to understand the needs of priority species and where they're likely to be found, in order to create and/or maintain habitats for them. *A Guide to Priority Plant and Animal Species in Oregon Forests* aims to help. The guide:

- focuses on species with special status (e.g., threatened and endangered and state-sensitive, or part of the Oregon Conservation Strategy or Oregon Forest Practices Act) that are found in Oregon's forested habitats, and groups them by taxa
- may be used by landowners and land managers to help determine what species to include in their management plans that are required for various certifications, including American Tree Farm System and Sustainable Forestry Initiative
- provides general management guidelines for each taxa
- is designed to be used in conjunction with OFRI's Wildlife in Managed Forests series of publications, available online at KnowYourForest.org
- describes the specific habitat requirements of priority species found in forested habitats across all ecoregions in Oregon
- is a tool for landowners and land managers to use in their goal of providing wildlife habitat in managed forests

A Guide to Priority Plant and Animal Species in Oregon Forests is recommended for all forest managers. It will prove useful for anyone working to understand specific species requirements and the forested habitat in which these species live.

Paul Barnum, Executive Director
Oregon Forest Resources Institute

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COLUMBIA TORRENT SALAMANDER

Organization and how to use this book

What species are in this book?

Species included in this book include all priority species in Oregon that are found in forested habitats. A priority species in Oregon is one that has a special status. Due to the large quantity of invertebrates and plants that are priority species in Oregon, some of these species are not described individually, but are included in a list.

What status can a species have?

Federal status:

Threatened (T), Endangered (E), Proposed (P), Candidate (C), Delisted (D) or Species of Concern (SOC)

- **Threatened species** are those listed as likely to become endangered within the foreseeable future unless conservation measures are enacted.
- **Endangered species** are those that are listed as in danger of becoming extinct within the foreseeable future throughout all or a significant portion of their range.
- **Proposed species** are those species for which the U.S. Fish and Wildlife Service has published a proposal in the Federal Register to list as endangered or threatened.
- **Candidate species** are those on which there is sufficient information to support a threatened or endangered listing proposal under state or federal law.
- **Delisted species** are species that have been removed from the federal list of endangered and threatened wildlife and plants.
- **Species of Concern** are those whose conservation status is of concern to the USFWS but for which further information is still needed.

State status:

Threatened (T), Endangered (E), Sensitive (S), or Sensitive - Critical (SC)

- **Threatened** means an animal that could become endangered within the foreseeable future within all or a portion of its range.
- **Endangered** means an animal threatened with extinction within all or a significant portion of its range.
- **Sensitive** refers to wildlife species, subspecies or populations that are facing one or more threats to their populations, habitat quantity or habitat quality. Sensitive species may also be subject to a decline in number of sufficient magnitude that they may become eligible for listing on the state Threatened and Endangered Species List.

- **Sensitive - Critical** subcategory refers to Oregon sensitive species that have current or legacy threats that are significantly impacting their abundance, distribution, diversity and/or habitat. They may decline to the point of qualifying for threatened or endangered status if conservation actions are not taken.

NatureServe or ORBIC status:

The Oregon Biodiversity Information Center (ORBIC) lists and ranks rare, threatened and endangered species in Oregon. The rankings apply to the species through their entire range (global status), and were developed by The Nature Conservancy. Species have a ranking of G1-G5 (defined below). Only species with a ranking of G1, G2 or G3 that are found in forests are included in this book.

- **G1 species** are those identified by NatureServe as being “critically imperiled” because they are extremely rare or are highly vulnerable to extinction.
- **G2 species** are those identified by NatureServe as “imperiled” because of rarity or factors making them vulnerable to extinction.
- **G3 species** are those identified by NatureServe as “rare, uncommon or threatened,” but not immediately imperiled.
- **G4 species** are those identified by NatureServe as “not rare” and apparently secure, but with cause for long-term concern.
- **G5 species** are those identified by NatureServe as “demonstrably widespread,” abundant and secure.
- **GH species** are those identified by NatureServe as “historical ... with the implied expectation that it may be rediscovered.”

The NatureServe conservation status system was developed by The Nature Conservancy as a means for ranking or categorizing the relative imperilment of species of plants and animals on global levels. These are the same ranks as ORBIC, and are the standard of ranking used by the Sustainable Forestry Initiative.

Oregon Conservation Strategy Species

Species of Greatest Conservation Need (SGCN) in Oregon are identified as “Strategy Species” by the Oregon Conservation Strategy (ODFW 2016), the official State Wildlife Action Plan for Oregon. The Oregon Conservation Strategy is a framework created by the Oregon Department of Fish and Wildlife and conservation partners to provide long-term conservation of Oregon’s native species. Fish, wildlife, invertebrates and plants are given the status of “Strategy Species” if they have small or declining populations, or are otherwise considered at risk. Species are designated in this publication with a “Yes” or “No.”

Oregon Forest Practices Act species

Several bird species have been specifically called out in the Oregon Forest Practices Act, and receive special considerations and protections as a result. Species specifically protected by the Forest Practices Act include the bald eagle, band-tailed pigeon, golden eagle, great blue heron, marbled murrelet, northern spotted owl and osprey.

Can a species have more than one status?

Species often have more than one status. For example, the western bluebird is not listed on the federal endangered species list, but it is classified as “Sensitive” by the state of Oregon. It is also a G5 species, but is a “Strategy Species” under the Oregon Conservation Strategy. The acorn woodpecker is a federal Species of Concern, has an Oregon Sensitive listing and is a Strategy Species. Most species have both a federal and state status in addition to an ORBIC status.

How do I use the range maps?

The thumbnail range maps included in this book are areas where these species are known to occur or could potentially occur, based on available habitat and supported by museum records, county occurrences, field observations and inventories. Ranges are shown in orange for animals and red for plants. It is important to understand that this book is not a complete or comprehensive listing of all priority species in Oregon. Rather, we have focused on priority species found in forested habitats.

Resources for additional information

Forest landowners and land managers have a unique opportunity to help keep common species common. Although this resource focuses on the priority species in Oregon, there are many other species that will benefit from the management guidelines described for each taxa.

For more information regarding all species in Oregon, including fish species, please see the website for the Oregon Department of Fish and Wildlife: <http://www.dfw.state.or.us/wildlife/diversity/species/index.asp>.

Other helpful websites include:

- Oregon Conservation Strategy:
<http://www.dfw.state.or.us/conservationstrategy/>
- BioDiversity Explorer:
<http://oregonexplorer.info/content/biodiversity-map-viewer>
- Institute for Natural Resources: <http://inr.oregonstate.edu/>
- OFRI: KnowYourForest.org
- Northwest Habitat Institute:
<http://www.habitatinstitute.org/nwhi-landing/>
- Woodland Fish and Wildlife Group:
<http://woodlandfishandwildlife.com/>

KnowYourForest.org

KnowYourForest.org is a one-stop shop where forest landowners can get information related to tending their forestlands. In addition to contact information for professionals and organizations, the site features videos, publications and instructions on a range of forest topics. This includes a “Habitat for Wild Animals” page that contains a variety of wildlife resources such as videos, publications, booklets and fact sheets that are part of OFRI’s Wildlife in Managed Forests series.

The following sites offer more detailed information on at-risk species:

- Rare, Threatened and Endangered Plants and Animals of Oregon Guide: <http://inr.oregonstate.edu/orbic/rare-species>
- USFWS Species Information: <http://www.fws.gov/endangered/>
- NatureServe Explorer: <http://www.natureserve.org/explorer/>

More information on bird species:

- Cornell Online Bird Guide: <http://www.birds.cornell.edu/AllAboutBirds/>

More information on amphibians and reptiles:

- AmphibiaWeb: <http://www.amphibiaweb.org/>
- Northwest Partners in Amphibian and Reptile Conservation Habitat Management Guide: <http://www.nwparc.org/hmg.html>
- Guidance for Conserving Oregon's Native Turtles including Best Management Practices: http://www.dfw.state.or.us/wildlife/living_with/docs/ODFW_Turtle_BMPs_March_2015.pdf

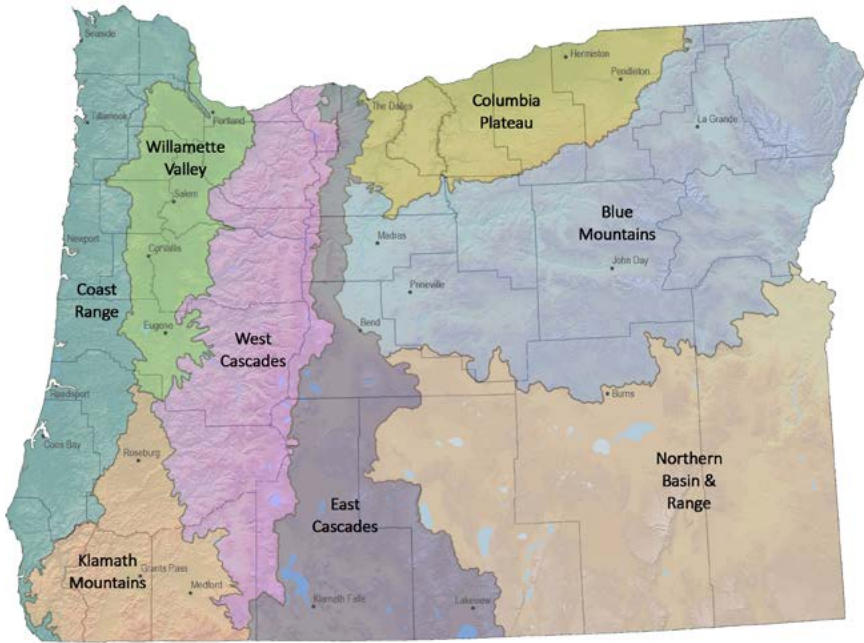
More information on invertebrates:

- Xerces Society: <http://www.xerces.org/>

Forest BioDiversity Explorer

The Oregon Forest BioDiversity Explorer provides data on species occurrences and modeled distributions for Oregon's important forest species and habitats. The data are aggregated and available for download from Oregon State University: <http://outreach.oregonstate.edu/programs/forestry/node/299>.

Ecoregion Index



Ecoregions of Oregon

OREGON IS DIVIDED INTO NINE ECOREGIONS: Northern Basin and Range, Blue Mountains, Coast Range, Columbia Plateau, East Cascades, Klamath Mountains, West Cascades, Willamette Valley and Marine and Estuarine. All animal and plant species included in this book are listed within their ecoregion type in the Ecoregion Index. Many species are found in multiple ecoregions and are therefore listed in each relevant index, but only described one time. The Marine and Estuarine Ecoregion is not described in this book since it does not contain forested habitats.

Note: Priority forest-associated plants generally are not found in the Northern Basin and Range, Blue Mountains and Columbia Plateau ecoregions. The range maps shown with the animal descriptions primarily show breeding ranges and may not include winter and migration ranges.

Northern Basin and Range Ecoregion



NORTHERN BASIN AND RANGE: This ecoregion is sagebrush country. Its name describes its landscape: flat basins separated by isolated mountain ranges. It is the driest ecoregion in the state, and is marked by extreme ranges of daily and seasonal temperatures. Conservation issues of concern include invasion of non-native species, uncontrolled grazing, spread of western juniper, and water quality and quantity. High Conservation Value forest types found here include Aspen Woodlands and Riparian Forests.

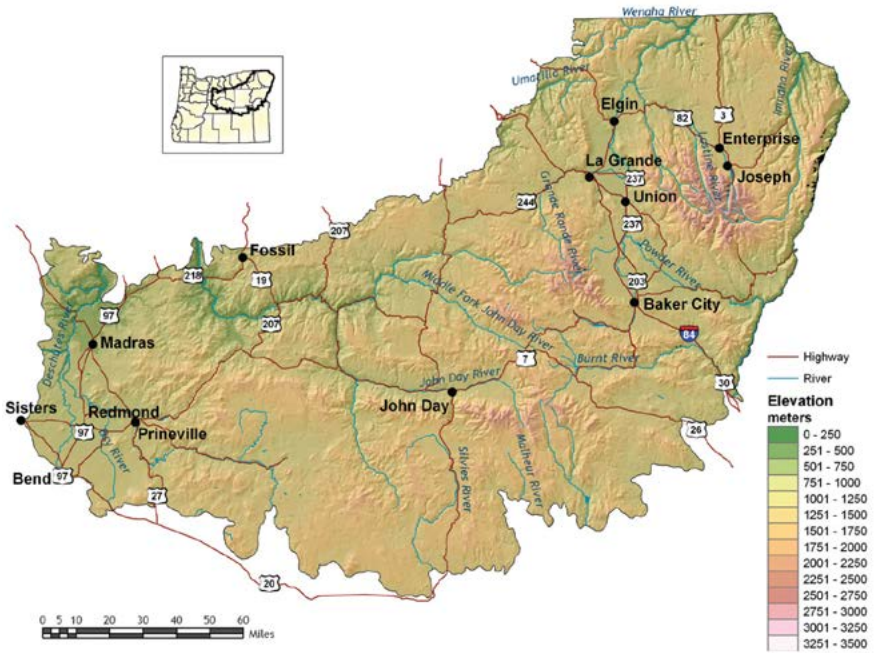


WHITE-TAILED JACKRABBIT

Northern Basin and Range Ecoregion

Bat, California myotis	72	Goshawk, northern	46
Bat, fringed myotis	72	Heron, great blue	47
Bat, hoary	73	Jackrabbit, black-tailed	81
Bat, little brown	73	Jackrabbit, white-tailed	81
Bat, long-eared myotis	74	Lizard, northern sagebrush	30
Bat, long-legged myotis	74	Nighthawk, common	49
Bat, pallid	75	Osprey	50
Bat, silver-haired	75	Owl, flammulated	51
Bat, spotted	76	Pika, American	83
Bat, Townsend's western big-eared	76	Quail, mountain	53
Bat, western small-footed myotis	77	Rabbit, pygmy	83
Bat, Yuma myotis	77	Shrew, Preble's	85
Bee, western bumble	62, 64	Shrike, loggerhead	53
Bluebird, western	42	Snake, western rattlesnake	36
Butterfly, monarch	62, 65	Sparrow, chipping	54
Chat, yellow-breasted	42	Titmouse, juniper	55
Cuckoo, yellow-billed	43	Toad, western	37
Eagle, bald	44	Wolf, gray	87
Falcon, American peregrine	44	Wolverine	87
Flycatcher, willow	46	Woodpecker, black-backed	56
Frog, Columbia spotted	27	Woodpecker, Lewis'	57
Frog, northern leopard	28		

Blue Mountains Ecoregion



BLUE MOUNTAINS: This ecoregion has many mountain ranges, valleys and plateaus. The climate varies over broad temperature and precipitation ranges because of drastic elevation differences. Wood products and cattle production dominate the economy, and wheat and alfalfa are important in the river valleys. Habitats in the ecoregion have been impacted by invasive species, uncontrolled grazing, fire suppression and land-use changes. High Conservation Value forest types found here include Aspen Woodlands, Riparian Forests, Late Successional Mixed Conifer Forests and Ponderosa Pine Woodlands.



GRAY WOLF

Blue Mountains Ecoregion

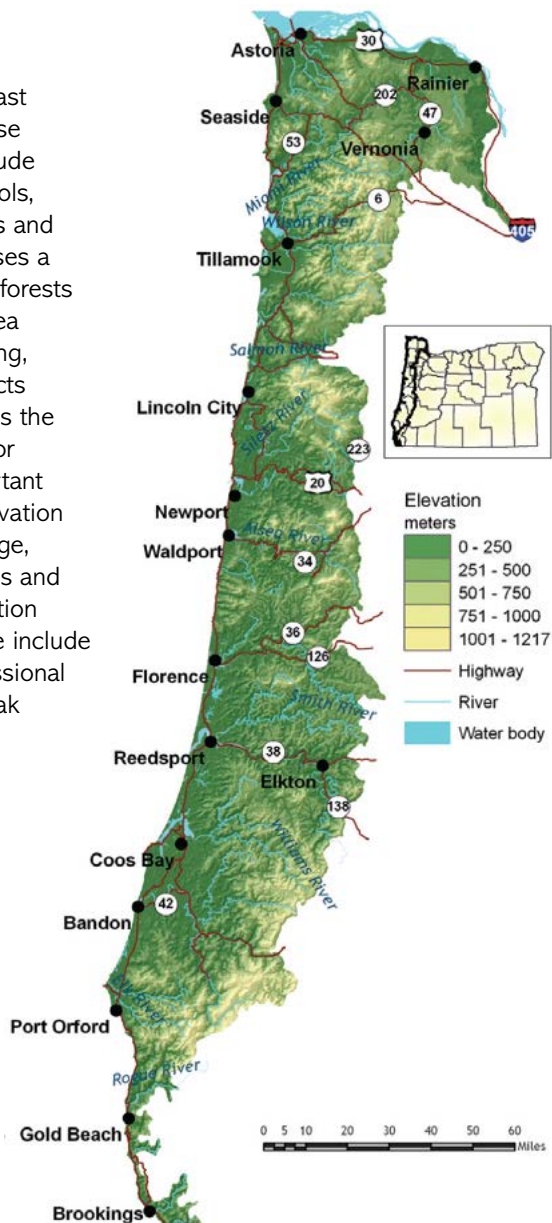
Bat, California myotis	72	Jackrabbit, white-tailed	81
Bat, fringed myotis	72	Lizard, northern sagebrush	30
Bat, hoary	73	Lynx, Canada	82
Bat, little brown	73	Marten, American	82
Bat, long-eared myotis	74	Milkvetch, South Fork John Day	91, 100
Bat, long-legged myotis	74	Nighthawk, common	49
Bat, pallid	75	Nuthatch, slender-billed	50
Bat, silver-haired	75	Osprey	50
Bat, spotted	76	Owl, flammulated	51
Bat, Townsend's western big-eared	76	Owl, great gray	51
Bat, western small-footed myotis	77	Pika, American	83
Bat, Yuma myotis	77	Pine, whitebark	92, 100
Bee, western bumble	62, 64	Quail, mountain	53
Bluebird, western	42	Rabbit, pygmy	83
Butterfly, monarch	70, 73	Shrew, Preble's	85
Chat, yellow-breasted	42	Shrike, loggerhead	53
Cuckoo, yellow-billed	43	Snake, western rattlesnake	36
Duck, harlequin	43	Sparrow, chipping	54
Eagle, bald	44	Swift, black	54
Falcon, American peregrine	44	Thelypody, arrow-leaf	92, 101
Fisher	78	Toad, western	37
Flycatcher, olive-sided	45	Turtle, western painted	37
Flycatcher, willow	46	Wolf, gray	87
Frog, Columbia spotted	27	Wolverine	87
Frog, northern leopard	28	Woodpecker, American three-toed	56
Frog, Rocky Mountain tailed	29	Woodpecker, black-backed	56
Goshawk, northern	46	Woodpecker, Lewis'	57
Grouse, spruce	47	Woodpecker, pileated	57
Heron, great blue	47	Woodpecker, white-headed	58
Jackrabbit, black-tailed	81		

Coast Range Ecoregion

COAST RANGE: Oregon's Coast Range Ecoregion has a diverse range of habitats. These include sandy dunes, forests, tide pools, mountain streams, grasslands and oak woodlands. It encompasses a rich coastline, temperate rainforests and steep mountains. The area is a hub for fishing, shellfishing, fish processing, forest products and transportation. Forestry is the primary industry in the interior portion, and tourism is important to local communities. Conservation issues include land-use change, development, invasive species and water quality. High Conservation Value forest types found here include Riparian Forests, Late Successional Mixed Conifer Forests and Oak Woodlands.



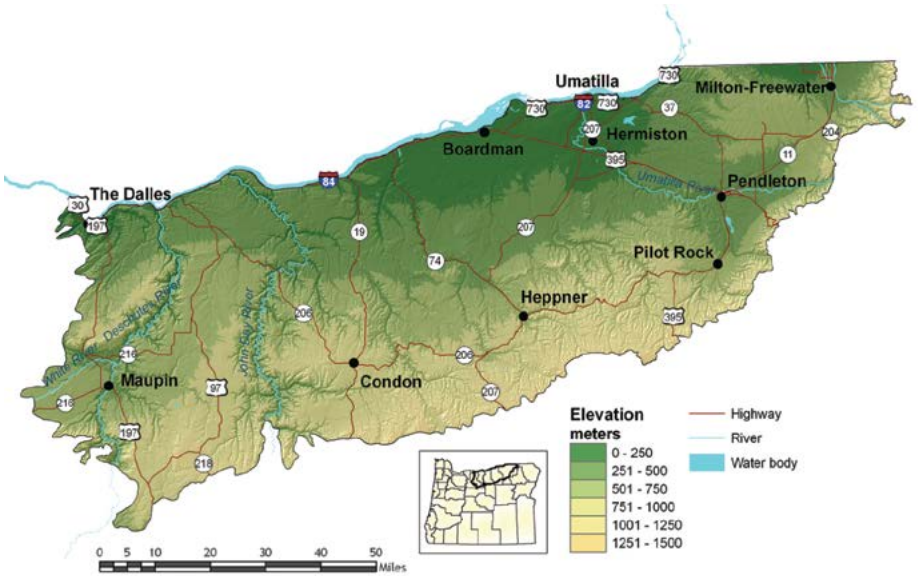
AMERICAN MARTEN



Coast Range Ecoregion

Bat, California myotis	72	Jackrabbit, black-tailed	81
Bat, fringed myotis	72	Lark, streaked horned	48
Bat, hoary	73	Lizard, northern sagebrush	30
Bat, little brown	73	Marten, American	82
Bat, long-eared myotis	74	Martin, purple	48
Bat, long-legged myotis	74	Murrelet, marbled	49
Bat, pallid	75	Nighthawk, common	49
Bat, silver-haired	75	Nuthatch, slender-billed	50
Bat, Townsend's western big-eared	76	Osprey	50
Bat, Yuma myotis	77	Owl, northern spotted	52
Bee, western bumble	62, 64	Pigeon, band-tailed	52
Beetle, Roth's blind ground	62, 64	Quail, mountain	53
Bluebird, western	42	Ringtail	84
Butterfly, monarch	62, 65	Salamander, clouded	31
Butterfly, Oregon silverspot	62, 66	Salamander, Columbia torrent	32
Chat, yellow-breasted	42	Salamander, Cope's giant	32
Checkermallow, Nelson's	90, 93	Salamander, Del Norte	33
Deer, Columbian white-tailed	78	Salamander, southern torrent	35
Duck, harlequin	43	Shrew, Pacific	84
Eagle, bald	44	Snake, western rattlesnake	36
Falcon, American peregrine	44	Sparrow, chipping	54
Fawn lily, Coast range	90, 94	Swift, black	54
Fisher	78	Squirrel, western gray	85
Flycatcher, little willow	45	Toad, western	37
Flycatcher, olive-sided	45	Turtle, western painted	37
Flycatcher, willow	46	Turtle, western pond	38
Frog, coastal tailed	26	Vole, red tree	86
Frog, foothill yellow-legged	27	Vole, white-footed	86
Frog, northern red-legged	28	Wolf, gray	87
Gopher, Gold Beach western pocket	80	Woodpecker, acorn	55
Gopher, Pistol River pocket	80	Woodpecker, Lewis'	57
Goshawk, northern	46	Woodpecker, pileated	57
Heron, great blue	47		

Columbia Plateau Ecoregion



COLUMBIA PLATEAU: This ecoregion is made up entirely of lowlands and is greatly influenced by the Columbia River. The ecoregion produces the vast majority of Oregon’s grain and is vital to Oregon’s agricultural economy. Almost all of the ecoregion is privately owned. Conservation issues include water quality and quantity, invasive species, soil erosion and habitat fragmentation. High Conservation Value forest types found here include Riparian Forests.



WESTERN TOAD

Columbia Plateau Ecoregion

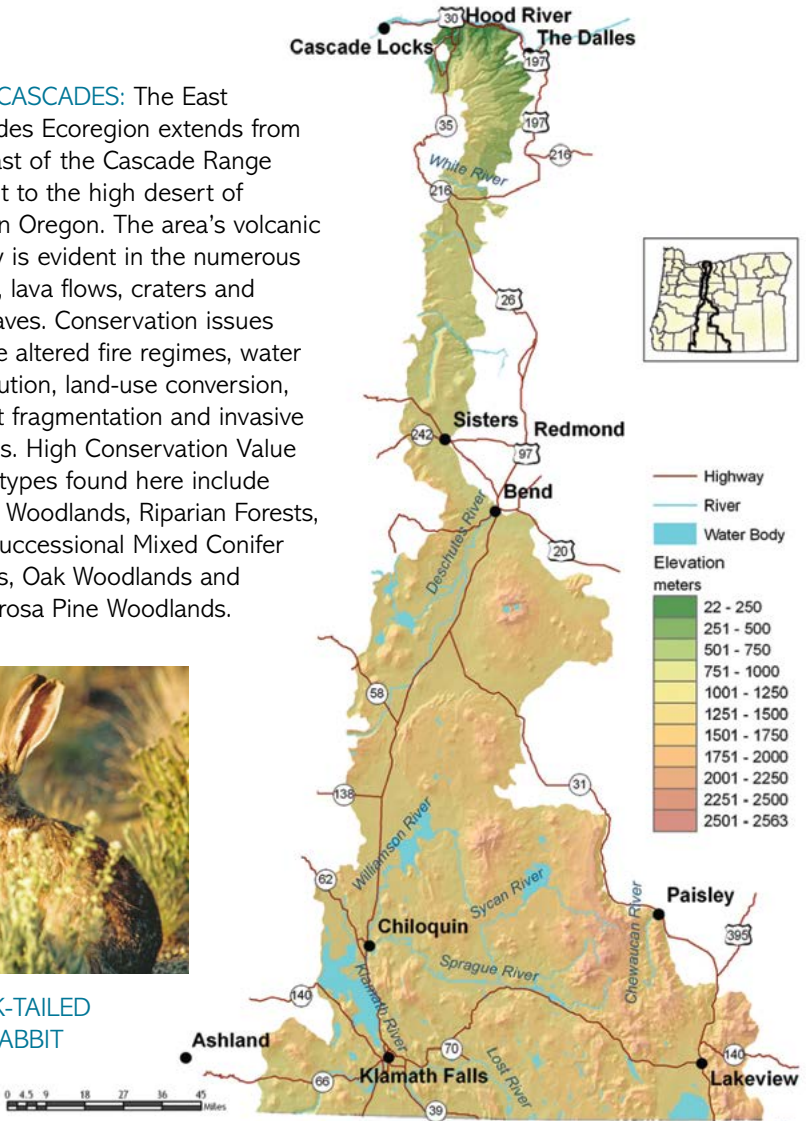
Bat, California myotis	72	Heron, great blue	47
Bat, fringed myotis	72	Jackrabbit, black-tailed	81
Bat, hoary	73	Jackrabbit, white-tailed	81
Bat, little brown	73	Lizard, northern sagebrush	30
Bat, long-eared myotis	74	Nighthawk, common	49
Bat, long-legged myotis	74	Nuthatch, slender-billed	50
Bat, pallid	75	Osprey	50
Bat, silver-haired	75	Owl, great gray	51
Bat, spotted	76	Quail, mountain	53
Bat, Townsend's western big-eared	76	Rabbit, pygmy	83
Bat, western small-footed myotis	77	Shrike, loggerhead	53
Bat, Yuma myotis	77	Snake, western rattlesnake	36
Bee, western bumble	62, 64	Sparrow, chipping	54
Bluebird, western	42	Toad, western	37
Butterfly, monarch	62, 65	Turtle, western painted	37
Chat, yellow-breasted	42	Turtle, western pond	38
Eagle, bald	44	Wolf, gray	87
Falcon, American peregrine	44	Wolverine	87
Flycatcher, willow	46	Woodpecker, black-backed	56
Frog, northern leopard	28	Woodpecker, Lewis'	57
Goshawk, northern	46	Woodpecker, pileated	57

East Cascades Ecoregion

EAST CASCADES: The East Cascades Ecoregion extends from just east of the Cascade Range summit to the high desert of eastern Oregon. The area's volcanic history is evident in the numerous buttes, lava flows, craters and lava caves. Conservation issues include altered fire regimes, water distribution, land-use conversion, habitat fragmentation and invasive species. High Conservation Value forest types found here include Aspen Woodlands, Riparian Forests, Late Successional Mixed Conifer Forests, Oak Woodlands and Ponderosa Pine Woodlands.



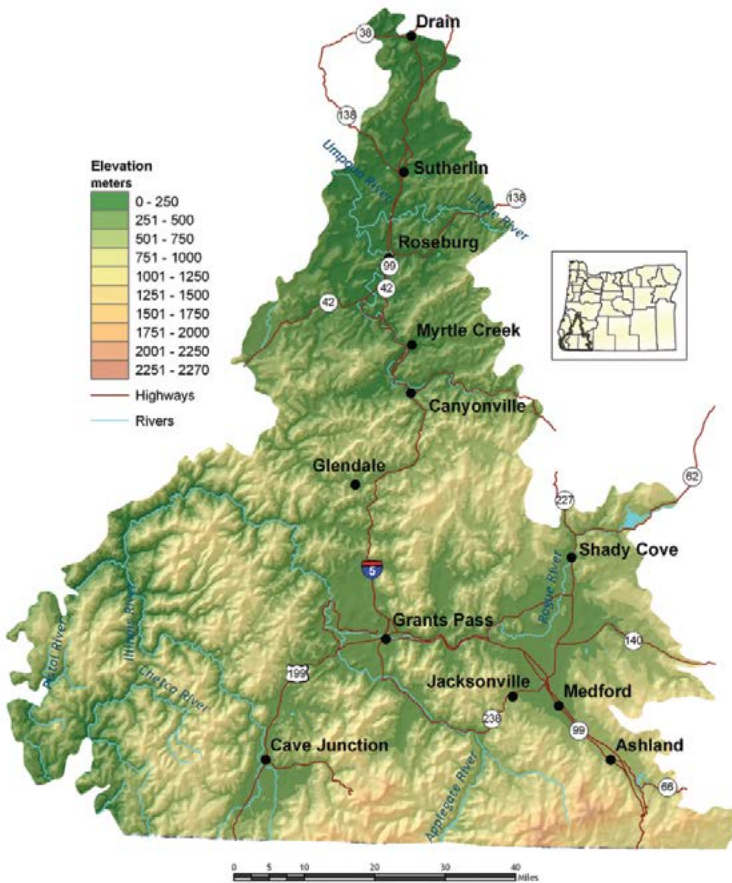
BLACK-TAILED JACKRABBIT



East Cascades Ecoregion

Bat, California myotis	72	Lynx, Canada	82
Bat, fringed myotis	72	Marten, American	82
Bat, hoary	73	Milkvetch, Peck's	91, 99
Bat, little brown	73	Nighthawk, common	49
Bat, long-eared myotis	74	Nuthatch, slender-billed	50
Bat, long-legged myotis	74	Osprey	50
Bat, pallid	75	Owl, flammulated	51
Bat, silver-haired	75	Owl, great gray	51
Bat, spotted	76	Owl, northern spotted	52
Bat, Townsend's western big-eared	76	Pika, American	83
Bat, western small-footed myotis	77	Pine, whitebark	92, 100
Bat, Yuma myotis	77	Quail, mountain	53
Bee, western bumble	62, 64	Rabbit, pygmy	83
Bluebird, western	42	Ringtail	84
Butterfly, monarch	62, 65	Salamander, Cope's giant	32
Chat, yellow-breasted	42	Salamander, Oregon slender	34
Cuckoo, yellow-billed	43	Shrew, Preble's	85
Duck, harlequin	43	Shrike, loggerhead	53
Eagle, bald	44	Snake, common kingsnake	36
Falcon, American peregrine	44	Snake, western rattlesnake	36
Fisher	78	Sparrow, chipping	54
Flycatcher, olive-sided	45	Squirrel, western gray	85
Flycatcher, willow	46	Titmouse, juniper	55
Fox, Sierra Nevada red	79	Toad, western	37
Frog, Cascades	26	Turtle, western painted	37
Frog, coastal tailed	26	Turtle, western pond	38
Frog, northern leopard	28	Wolf, gray	87
Frog, Oregon spotted	29	Wolverine	87
Goshawk, northern	46	Woodpecker, acorn	55
Grape-fern, pumice	90, 95	Woodpecker, American three-toed	56
Heron, great blue	47	Woodpecker, black-backed	56
Jackrabbit, black-tailed	81	Woodpecker, Lewis'	57
Jackrabbit, white-tailed	81	Woodpecker, pileated	57
Lizard, northern sagebrush	30	Woodpecker, white-headed	58

Klamath Mountains Ecoregion



KLAMATH MOUNTAINS: The Klamath Mountains Ecoregion has a high diversity of species, including many that are found only in this part of Oregon. Conservation issues include changed fire regimes, land-use changes, development and invasive species. Loss of habitat connectivity and mineral extraction are also of concern in this ecoregion. High Conservation Value forest types found here include Riparian Forests, Late Successional Mixed Conifer Forests, Oak Woodlands and Ponderosa Pine Woodlands.



GENTNER'S FRITILLARY

Klamath Mountains Ecoregion

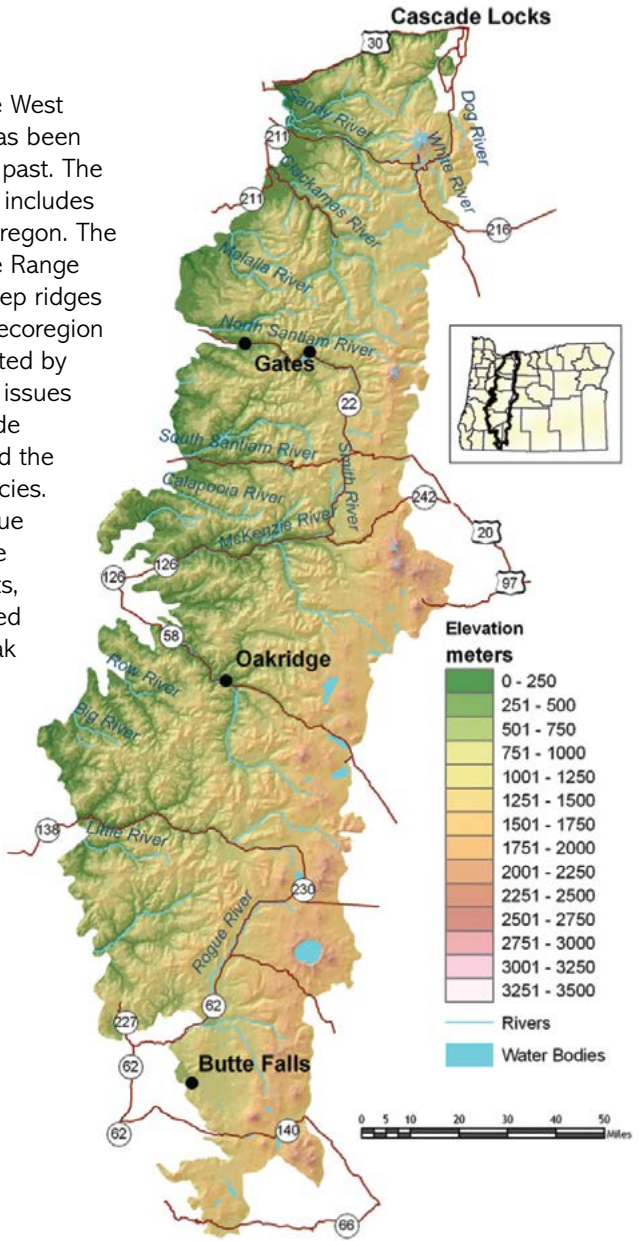
Aster, wayside	90, 93	Murrelet, marbled	49
Bat, California myotis	72	Nighthawk, common	49
Bat, fringed myotis	72	Nuthatch, slender-billed	50
Bat, hoary	73	Osprey	50
Bat, little brown	73	Owl, flammulated	51
Bat, long-eared myotis	74	Owl, great gray	51
Bat, long-legged myotis	74	Owl, northern spotted	52
Bat, pallid	75	Pigeon, band-tailed	52
Bat, silver-haired	75	Pine, whitebark	92, 100
Bat, Townsend's western big-eared	76	Quail, mountain	53
Bat, Yuma myotis	77	Ringtail	84
Bee, western bumble	62, 64	Rockcress, McDonald's	92, 101
Bluebird, western	42	Salamander, black	30
Butterfly, monarch	62, 65	Salamander, clouded	31
Chat, yellow-breasted	42	Salamander, Del Norte	33
Deer, Columbian white-tailed	78	Salamander, Siskiyou Mountains	34
Eagle, bald	44	Salamander, southern torrent	35
Falcon, American peregrine	44	Shrew, Pacific	84
Fisher	78	Shrike, loggerhead	53
Flycatcher, little willow	45	Shrimp, vernal pool fairy	63, 67
Flycatcher, olive-sided	45	Snail, minor Pacific sideband	63, 68
Flycatcher, willow	46	Snake, California mountain kingsnake	35
Fritillary, Gentner's	90, 94	Snake, common kingsnake	36
Frog, coastal tailed	26	Snake, western rattlesnake	36
Frog, foothill yellow-legged	27	Sparrow, chipping	54
Frog, northern red-legged	28	Squirrel, western gray	85
Goshawk, northern	46	Swift, black	54
Grasshopper, Siskiyou short-horned	63, 67	Toad, western	37
Heron, great blue	47	Turtle, western pond	38
Jackrabbit, black-tailed	81	Vole, red tree	86
Lizard, northern sagebrush	30	Vole, white-footed	86
Lupine, Kincaid's	91, 97	Wolf, gray	87
Mariposa-lily, Cox's	91, 97	Wolverine	87
Mariposa-lily, Umpqua	91, 98	Woodpecker, acorn	55
Martin, purple	48	Woodpecker, black-backed	56
Meadowfoam, Dwarf	91, 98	Woodpecker, Lewis'	57
Microseris, Howell's	91, 99	Woodpecker, pileated	57
Milkvetch, Peck's	91, 99	Woodpecker, white-headed	58

West Cascades Ecoregion

WEST CASCADES: The West Cascades Ecoregion has been shaped by its volcanic past. The younger volcanic crest includes the highest peaks in Oregon. The older western Cascade Range is characterized by steep ridges and wide valleys. The ecoregion is almost entirely forested by conifers. Conservation issues in this ecoregion include altered fire regimes and the spread of invasive species. High Conservation Value forest types found here include Riparian Forests, Late Successional Mixed Conifer Forests and Oak Woodlands.



NORTHERN SPOTTED OWL



West Cascades Ecoregion

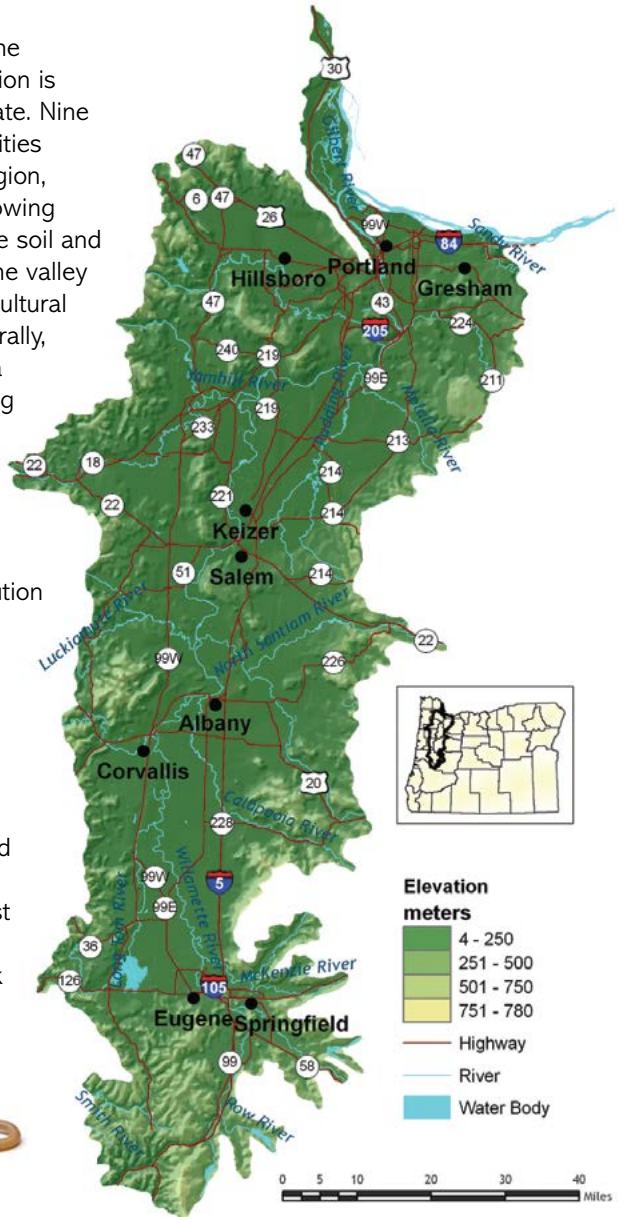
Aster, wayside	90, 93	Martin, purple	48
Bat, California myotis	72	Nighthawk, common	49
Bat, fringed myotis	72	Nuthatch, slender-billed	50
Bat, hoary	73	Osprey	50
Bat, little brown	73	Owl, flammulated	51
Bat, long-eared myotis	74	Owl, great gray	51
Bat, long-legged myotis	74	Owl, northern spotted	52
Bat, pallid	75	Pigeon, band-tailed	52
Bat, silver-haired	75	Pika, American	83
Bat, Townsend's western big-eared	76	Pine, whitebark	92, 100
Bat, Yuma myotis	77	Quail, mountain	53
Bee, western bumble	62, 64	Ringtail	84
Bluebird, western	42	Salamander, Cascade torrent	31
Butterfly, monarch	62, 65	Salamander, clouded	31
Chat, yellow-breasted	42	Salamander, Cope's giant	32
Duck, harlequin	43	Salamander, Larch Mountain	33
Eagle, bald	44	Salamander, Oregon slender	34
Earthworm, Oregon giant	63, 66	Salamander, southern torrent	35
Falcon, American peregrine	44	Shrew, Pacific	84
Fisher	78	Snake, California mountain kingsnake	35
Flycatcher, little willow	45	Snake, common kingsnake	36
Flycatcher, olive-sided	45	Snake, western rattlesnake	36
Flycatcher, willow	46	Sparrow, chipping	54
Fox, Sierra Nevada red	79	Squirrel, western gray	85
Frog, Cascades	26	Swift, black	54
Frog, coastal tailed	26	Toad, western	37
Frog, foothill yellow-legged	27	Turtle, western painted	37
Frog, northern red-legged	28	Turtle, western pond	38
Frog, Oregon spotted	29	Vole, red tree	86
Goshawk, northern	46	Vole, white-footed	86
Grape-fern, pumice	90, 95	Wolf, gray	87
Heron, great blue	47	Woodpecker, American three-toed	56
Jackrabbit, black-tailed	81	Woodpecker, black-backed	56
Lizard, northern sagebrush	30	Woodpecker, Lewis'	57
Lynx, Canada	82	Woodpecker, pileated	57
Mariposa-lily, Umpqua	91, 98	Woodpecker, white-headed	58
Marten, American	82		

Willamette Valley Ecoregion

WILLAMETTE VALLEY: The Willamette Valley Ecoregion is the most urban in the state. Nine of Oregon's 10 largest cities are located in this ecoregion, and it has the fastest growing human population. Fertile soil and abundant rainfall make the valley the most important agricultural region in the state. Culturally, the Willamette Valley is a land of contrasts. Bustling urban areas are nestled within productive farmland. Pressure on valley ecosystems from population growth, land-use conversion and pollution is likely to increase as more people make the valley their home. As a result, conservation issues include land-use conversion, urbanization, altered floodplains, habitat fragmentation and invasive species. High Conservation Value forest types found here include Riparian Forests and Oak Woodlands.



OREGON GIANT EARTHWORM



Willamette Valley Ecoregion

Aster, wayside	90, 93	Jackrabbit, black-tailed	81
Bat, California myotis	72	Lark, streaked horned	48
Bat, fringed myotis	72	Larkspur, peacock	91, 96
Bat, hoary	73	Larkspur, white rock	91, 96
Bat, little brown	73	Lupine, Kincaid's	91, 97
Bat, long-eared myotis	74	Martin, purple	48
Bat, long-legged myotis	74	Nighthawk, common	49
Bat, pallid	75	Nuthatch, slender-billed	50
Bat, silver-haired	75	Osprey	50
Bat, Townsend's western big-eared	76	Owl, northern spotted	52
Bat, Yuma myotis	77	Pigeon, band-tailed	52
Bee, western bumble	62, 64	Quail, mountain	53
Bluebird, western	42	Salamander, clouded	31
Butterfly, Fender's blue	62, 65	Salamander, Larch Mountain	33
Butterfly, monarch	62, 65	Salamander, Oregon slender	34
Chat, yellow-breasted	42	Salamander, southern torrent	35
Checkermallow, Nelson's	90, 93	Shrew, Pacific	84
Deer, Columbian white-tailed	78	Shrike, loggerhead	53
Eagle, bald	44	Snake, western rattlesnake	36
Earthworm, Oregon giant	63, 66	Sparrow, chipping	54
Falcon, American peregrine	44	Squirrel, western gray	85
Fisher	78	Toad, western	37
Flycatcher, little willow	45	Turtle, western painted	37
Flycatcher, olive-sided	45	Turtle, western pond	38
Flycatcher, willow	46	Vole, red tree	86
Frog, foothill yellow-legged	27	Vole, white-footed	86
Frog, northern red-legged	28	Wolf, gray	87
Gopher, Camas pocket	79	Woodpecker, acorn	55
Goshawk, northern	46	Woodpecker, Lewis'	57
Heron, great blue	47	Woodpecker, pileated	57
Howellia	90, 95		

Amphibians/Reptiles

Many species of amphibians and reptiles depend on forested habitats for foraging, over-wintering and dispersal. There are many ways to provide habitat for amphibians and reptiles within working forests. Here are a few suggestions:

- Maintain stream buffers on all sizes of streams, where practicable.
- Retain vegetated buffers at headwaters, seeps and springs.
- Retain large-diameter logs within all forest age classes.
- Control invasive species like the bullfrog.
- Maintain a vegetative buffer around known locations of priority amphibians and reptiles.
- Avoid disturbance to talus slopes.
- Maintain a vegetative buffer around wetlands.
- Create and maintain slash piles to provide moist refugia.

OREGON SLENDER SALAMANDER

ECOREGION: All ecoregions where the species occurs will be listed here.

STATUS (FEDERAL/STATE/NATURESERVE/OCS/FPA):

The status of the species will be listed here. Species may be classified at the Federal level as Threatened (T), Endangered (E), Candidate (C) or Species of Concern (SOC). At the state level they may be listed a Threatened (T), Endangered (E), Candidate (C), Sensitive (S) or Sensitive - Critical (SC). NatureServe rankings (G1-5 and GH) are included. Species inclusions to the Oregon Conservation Strategy (OCS) are denoted. Several bird species also receive protections under the Forest Practices Act (FPA); if applicable, this protection is denoted here. Example: (None/None/G5/Yes/FPA)

PHYSICAL DESCRIPTION: A brief description of the species.

DIET/HABITAT REQUIREMENTS: A brief description of what they eat and specific habitat requirements.

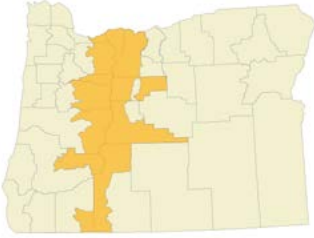
PRIMARY PREDATORS/THREATS: A brief description of predators and threats.

REPRODUCTION: A brief description of nesting/denning habits and/or requirements.

PREFERRED FOREST HABITAT: A brief description of which forested environments they're most likely to be found in.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): A brief description of where they are found in Oregon.

Frog, Cascades (*Rana cascadae*)



ECOREGIONS: West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G3-G4/Yes

PHYSICAL DESCRIPTION: Cascades frogs have golden-colored eyes that look to the side. Their backs are spotted with black, and their hind legs are long. The undersides of Cascades frogs are a yellow-tan that is nearly translucent.

DIET/HABITAT REQUIREMENTS: Feeds primarily on terrestrial and aquatic invertebrates, but will also prey on larvae of Pacific chorus frogs.

PRIMARY PREDATORS/THREATS: Threats to the species include habitat loss and degradation, and climatic events such as late freezes and long, cold winters. Predators include fish, garter snakes, birds, mammals (such as river otters) and other amphibians. Cascades frogs are also susceptible to disease.

REPRODUCTION: Breeding occurs in early spring, shortly after snowmelt, with egg masses deposited from April through July. Egg masses are found in still-water environments and are often laid in communal groups. Tadpoles generally hatch in June and July, and metamorphosis to adult frogs generally occurs in late August and September.

PREFERRED FOREST HABITAT: Inhabits aquatic environments such as lakes, wet meadows and streams. Breeding occurs in still-water environments only.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the Cascade mountain range, generally at elevations ranging from 2,500 feet to 6,000 feet above sea level, and occasionally down to 1,600 feet elevation.

Frog, coastal tailed (*Ascaphus truei*)



ECOREGIONS: Coast Range, Klamath Mountains, West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 2 inches in length.

DIET AND HABITAT REQUIREMENTS: Larvae feed on diatoms, algae and pollen; adults feed on a wide range of small invertebrates. Requires fast-running headwater streams, preferably colder streams. Requires rocks for cover in cold streams.

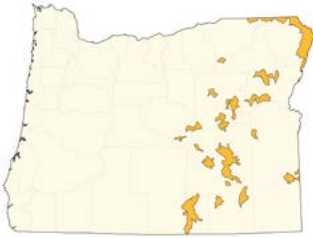
PRIMARY PREDATORS/THREATS: Preyed upon by the Pacific giant salamander. Loss of riparian vegetation and sedimentation are threats to this species.

REPRODUCTION: Breeds in the fall, while eggs are laid the following spring. Clutch sizes average 40 eggs that hatch in about six weeks. Dependent on water temperatures, tadpoles will transform after one to four years.

PREFERRED FOREST HABITAT: Riparian areas within various forest types.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in streams from near sea level to higher-mountain elevations.

Frog, Columbia spotted (*Rana luteiventris*)



ECOREGIONS: Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): C/S-SC/G4/Yes

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on algae, bacteria and plant material (larvae); adults feed on invertebrates such as ants, beetles, mosquitoes, spiders and snails. Requires lakes, ponds, marshes and slow streams.

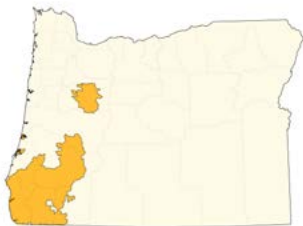
PRIMARY PREDATORS/THREATS: Preyed upon by garter snakes, numerous birds (e.g., ravens, herons and American kestrels) and mammals. The Columbia spotted frog is threatened by loss and degradation of habitat, specifically wetlands, and bullfrog predation.

REPRODUCTION: Begins breeding in February, with females producing clutches of 200 to 800 eggs every other year. It takes less than three months for larvae to transform, with males reaching sexual maturity in four years and females in six years.

PREFERRED FOREST HABITAT: Ponds, marshes and streams within coniferous or mixed forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in calm water bodies throughout eastern Oregon.

Frog, foothill yellow-legged (*Rana boylei*)



ECOREGIONS: Coast Range, Klamath Mountains, West Cascades and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S-SC/G3/Yes

PHYSICAL DESCRIPTION: Averages 3 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on algae, plant tissue and organic debris (tadpoles); adults consume a variety of invertebrates such as grasshoppers, hornets, ants, flies, beetles and mosquitoes. Requires streams and rivers with rocky bottoms and riparian vegetation for cover.

PRIMARY PREDATORS/THREATS: Preyed upon by the garter snake. Introduced aquatic species, grazing and impoundments may contribute to the decline of this species.

REPRODUCTION: Begins breeding in April, with females producing clutch sizes of 1,000 eggs that hatch in five days. Tadpoles transform in three to four months.

PREFERRED FOREST HABITAT: Slow-running streams and rivers within coniferous forests and woodlands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the Cascade Mountains and southwest portion of the state within the Coast Range and Klamath Mountains.

Frog, northern leopard (*Lithobates pipiens*)



PREFERRED FOREST HABITAT: Avoids areas without sufficient cover. Usually found in a variety of habitats that provide access to slow-running waters, including marshes, wet meadows, ponds and reservoirs.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Generally found in northeastern Oregon along the Columbia and Snake rivers.

ECOREGIONS: Blue Mountains, Northern Basin and Range, Columbia Plateau, and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G5/No

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Larvae consume algae, plant tissue and other organic debris, and adults feed on a wide variety of invertebrates and vertebrates, including spiders, insects, snails, birds, tadpoles, fish, and small frogs and snakes. Requires water for hibernation during cold weather.

PRIMARY PREDATORS/THREATS: Predation by introduced bullfrogs places an extreme stressor on northern leopard frog populations. Other predators include garter snakes, birds and small carnivores. Oregon populations are declining due to disease, environmental stressors (e.g., changes in microclimates) and introduced fish and bullfrogs.

REPRODUCTION: Produces clutch sizes of several thousand eggs that hatch in one month. After two months, tadpoles transform and reach sexual maturity at 2 to 3 years.

Frog, northern red-legged (*Rana aurora*)



ECOREGIONS: Coast Range, Willamette Valley, Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 3.5 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on organic debris (larvae); adults consume invertebrates, including beetles, insect larvae and other aquatic insects. Requires areas with sufficient water sources, such as ponds, marshes and streams, which provide dense ground cover. Also requires aquatic vegetation in slower waters for laying eggs.

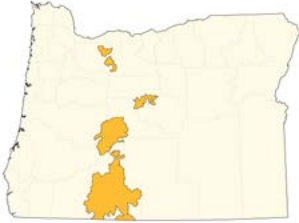
PRIMARY PREDATORS/THREATS: Preyed upon by fish, salamanders, garter snakes, herons and raccoons. Populations are declining due to habitat loss and predation from bullfrogs.

REPRODUCTION: Begins breeding in late December in higher-elevation habitats, with females producing an average of 2,000 eggs per clutch that hatch after one month. At 4 months, the tadpoles transform, and young become sexually mature at 3 to 4 years old.

PREFERRED FOREST HABITAT: Cooler humid forests and wetlands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in western Oregon.

Frog, Oregon spotted (*Rana pretiosa*)



ECOREGIONS: West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/SC/G2/Yes

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on beetles, flies, spiders and other insects; tadpoles feed on plant material, detritus and algae. Requires various water bodies that contain abundant aquatic vegetation. For laying eggs, adult frogs require shallow water.

PRIMARY PREDATORS/THREATS: Preyed upon by garter snakes, diving beetles, sandhill cranes, salamanders, giant water bugs, raccoons, great blue herons, kingfishers, bullfrogs, foxes and skunks. Habitat loss and alteration, as well as fertilizer, herbicide and pesticide pollution in non-forested settings, threaten this species.

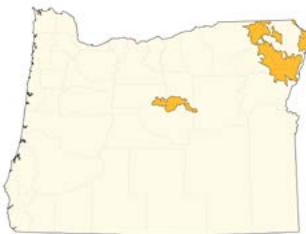
REPRODUCTION: Begins breeding in February and produces about 600 to 1,000 eggs. The eggs hatch after two to four weeks depending on temperature, with tadpoles transforming in three to four months. While females become sexually mature at 3 years old, males are sexually mature at 2 years.

PREFERRED FOREST HABITAT: Wetlands located near ponds, lakes and slow-running streams.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Found in south-central Oregon and in a few wetland pockets along the eastern slopes of the Cascade Mountains.

Frog, Rocky Mountain tailed (*Ascaphus montanus*)



ECOREGION: Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 2 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on diatoms, algae and pollen (larvae); adults feed on a wide range of small invertebrates. Requires fast-running headwater streams, preferably colder streams. Requires rocks for cover in cold streams.

PRIMARY PREDATORS/THREATS: Preyed upon by western terrestrial garter snakes, common garter snakes and trout. Populations are threatened by loss of habitat (e.g., riparian vegetation loss and increased stream sedimentation).

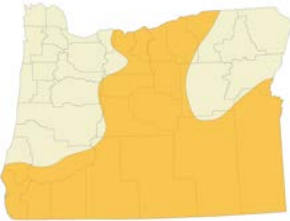
REPRODUCTION: Breeds in the fall, while eggs are laid the following spring. Clutch sizes average 40 eggs that hatch in about six weeks. Dependent on water temperatures, tadpoles will transform after one to four years.

PREFERRED FOREST HABITAT: Fast-running cold streams in forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Found in the Blue Mountains.

Lizard, northern sagebrush (*Sceloporus graciosus*)



ECOREGIONS: East Cascades, West Cascades, Coast Range, Blue Mountains, Columbia Plateau, Klamath Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 5.5 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on small invertebrates such as crickets, beetles, flies, ants, wasps, bees, mites, ticks and spiders. Requires loose, well-aerated soils for laying clutches. This ground dweller needs well-lit and open ground with some debris, including rocks and down logs, for cover and perching sites.

PRIMARY PREDATORS/THREATS: Preyed upon by snakes and various birds. This lizard is locally threatened by habitat degradation from human development.

REPRODUCTION: Produces up to two clutches per year with an average of four eggs per clutch that hatch in mid-August. Young reach sexual maturity in two years.

PREFERRED FOREST HABITAT: Sagebrush, but is also found in chaparral, juniper woodlands and coniferous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found primarily throughout southeastern Oregon.

Salamander, black (*Aneides flavipunctatus*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/No

PHYSICAL DESCRIPTION: Slate-black with small spots of white, bronze or olive. Adults may reach about 4 inches in length from snout to vents. Their legs are relatively short, and larger adults have triangular-shaped heads.

DIET/HABITAT REQUIREMENTS: Feeds on invertebrates. Requires rocks, down wood and other cover for survival.

PRIMARY PREDATORS/THREATS: Little is known about the threats to this species, but suspected threats include habitat alterations, especially those that may impact microhabitat and microclimate conditions.

REPRODUCTION: Little is known about the reproductive behaviors of black salamanders. It is thought that breeding occurs in fall or spring, with eggs deposited in early summer.

PREFERRED FOREST HABITAT: Found in coniferous and mixed forests, deciduous woodlands and talus, and along streams. Uses down wood and rocks for surface cover.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in southwestern Oregon, within the Siskiyou Mountains of Jackson and Josephine counties.

Salamander, Cascade torrent (*Rhyacotriton cascadae*)



ECOREGION: West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G3/Yes

PHYSICAL DESCRIPTION: Brown, tan or olive in color, and often heavily spotted with black marks. They have large, protruding eyes and can measure between 0.5 and 1.75 inches from snout to vent.

DIET/HABITAT REQUIREMENTS: Feeds on aquatic and semi-aquatic insects, worms and snails.

PRIMARY PREDATORS/THREATS: Little is known about the threats to this species, but suspected threats include habitat alterations, especially those that may impact water temperatures and sedimentation.

REPRODUCTION: Courtship occurs from October to July, and the majority of eggs are laid during the spring and early summer months. Eggs are thought to be laid in narrow cracks in rock or under boulders and logs.

PREFERRED FOREST HABITAT: Found in or near steep, cold-water sources, including waterfalls, seeps, headwaters and the edges of larger streams. May also be found under leaf litter or small logs away from streams in periods of heavy rain.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found from the western slopes of the Cascades south to the Middle Fork Willamette River.



Salamander, clouded (*Aneides ferreus*)



ECOREGIONS: Coast Range, Willamette Valley, Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G3/Yes

PHYSICAL DESCRIPTION: Averages 5 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on small invertebrates, such as ants, beetles, mites, spiders and springtails. Requires down logs and other debris as cover, and may utilize cleared areas provided down logs are available.

PRIMARY PREDATORS/THREATS: Preyed upon by smaller carnivorous mammals, woodland birds and snakes. Threatened by loss of habitat. Note that providing down logs in forests creates habitat for this species.

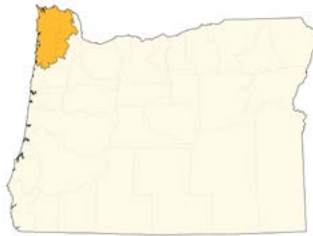
REPRODUCTION: Breeds every other year and lays clutches of about 14 eggs. The eggs hatch after two months of incubation.

PREFERRED FOREST HABITAT: Found in moist forested areas.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs throughout the Coast and Cascades mountain ranges.



Salamander, Columbia torrent (*Rhyacotriton kezeri*)



ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G3/Yes

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on a variety of aquatic invertebrates. Both adults and larvae require moss-covered rocks in shallow, well-shaded, cool streams for cover and laying eggs.

PRIMARY PREDATORS/THREATS: Sensitive to dessication due to limited dispersal capabilities. Larvae threatened by stream flow changes.

REPRODUCTION: Lays about two to 16 eggs in the late summer in slow-flowing headwater streams. Young spend three to four years in the larval phase.

PREFERRED FOREST HABITAT: Colder, permanent streams in coniferous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the northern areas of the Coast Range.

Salamander, Cope's giant (*Dicamptodon copei*)



ECOREGIONS: Coast Range, West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G3-G4/Yes

PHYSICAL DESCRIPTION: Medium-size and mottled gold and brown. They have a rounded snout and can reach lengths of about 4.5 inches from snout to vents. Can be very difficult to distinguish from the similar but more common Pacific giant salamander.

DIET/HABITAT REQUIREMENTS: Primarily feed on immature aquatic insects, but will also feed on fish eggs, small fish and tadpoles found within small to medium-size streams.

PRIMARY PREDATORS/THREATS: Little is known about the threats to this species, but suspected threats include habitat alterations that may impact microhabitat and microclimate conditions, including decreased down wood recruitment, increased erosion and increases in soil or water temperatures.

REPRODUCTION: Females lay between 25 and 115 eggs in small hidden nest chambers found under stones, banks and down wood, and remain in the chamber to guard the eggs until they hatch. Eggs may be laid throughout the spring, summer and fall months, although little is known about the specific reproductive behaviors of this species.

PREFERRED FOREST HABITAT: Prefers small, steeply sloped, rocky streams located in conifer or mixed conifer-deciduous forests. Often found under rocks, woody debris or other cover within streams.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in two distinct populations in Oregon – one in the Coast Range from the Oregon border with Washington south to the Nehalem River, and the other in the Cascades from the Oregon border with Washington south to Wasco County.

Salamander, Del Norte (*Plethodon elongatus*)



ECOREGIONS: Coast Range and Klamath Mountains
STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/
G4/Yes

PHYSICAL DESCRIPTION: Averages 6 inches in length.

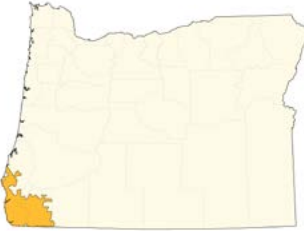
DIET AND HABITAT REQUIREMENTS: Adults feed on small invertebrates including adult and larval beetles, butterfly and moth larvae, leafhoppers and millipedes. Able to tolerate dry conditions, this salamander may occasionally be found on the forest floor in decaying logs and under litter. Requires moist crevices in rocks or cavities in logs for laying clutches.

PRIMARY PREDATORS/THREATS: Preyed upon by shrews, other small carnivorous mammals and garter snakes. This species is threatened by habitat fragmentation and loss of older forest stands.

REPRODUCTION: Produces an average clutch size of eight eggs in the spring, and tends to the nest throughout the summer until the eggs hatch in the fall.

PREFERRED FOREST HABITAT: Moist, rocky areas in old-growth forested habitats, including Douglas-fir forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the far southwestern portion of the state.



Salamander, Larch Mountain (*Plethodon larselli*)



ECOREGIONS: Willamette Valley and West Cascades
STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/
G3/Yes

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on smaller invertebrates, such as mites and springtails, and occasionally snails and earthworms. Moss-covered talus slopes provide adequate moist cover and nesting sites.

PRIMARY PREDATORS/THREATS: Preyed upon by Pacific giant salamanders and garter snakes. The Larch Mountain salamander may be threatened by disturbances, specifically of rocky slopes, that change vital microclimates along talus slopes.

REPRODUCTION: Breeds on land in spring and fall, laying clutches of about seven eggs.

PREFERRED FOREST HABITAT: Douglas-fir forests that contain talus slopes.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found only in the Columbia River Gorge.



Salamander, Oregon slender (*Batrachoseps wrighti*)



ECOREGIONS: West Cascades, East Cascades and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G3/ Yes

PHYSICAL DESCRIPTION: Averages 3.5 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on insects and insect eggs, mollusks and other invertebrates including spiders, snails and earthworms. For cover, this salamander uses bark, moss, rocks or logs. In higher-elevation areas of the Cascades, may be found under talus and lava fields.

PRIMARY PREDATORS/THREATS: Preyed upon by snakes, woodland birds and small carnivorous mammals. Threatened by competition with other animals that use the same habitat.

REPRODUCTION: Produces and guards three to 11 eggs per nest in the springtime, which hatch after three to four months.

PREFERRED FOREST HABITAT: Middle-aged and older mixed conifer-hardwood forest stands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Endemic to Oregon and inhabits the western slopes of the Cascade Mountains.

Salamander, Siskiyou Mountains (*Plethodon stormi*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G2G3/Yes

PHYSICAL DESCRIPTION: Averages 5 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on small invertebrates, including mites, spiders, ants and beetles. Uses bark and logs on the forest floor and talus as cover. Requires crevices along talus slopes for laying clutches.

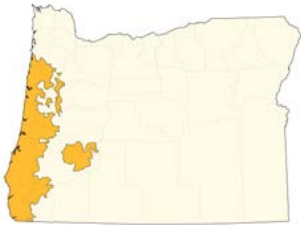
PRIMARY PREDATORS/THREATS: Preyed upon by shrews, other small carnivorous mammals and garter snakes. Like other salamander species dependent on the microhabitats found along talus slopes, the Siskiyou Mountains salamander is highly sensitive to disturbances of these rocky slopes.

REPRODUCTION: Produces an average clutch size of nine eggs in the spring, and tends to the nest throughout the summer until the eggs hatch in the fall.

PREFERRED FOREST HABITAT: Areas with loose rubble or talus near dense forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Endemic to the Siskiyou Mountains of southwestern Oregon.

Salamander, southern torrent (*Rhyacotriton variegatus*)



ECOREGIONS: Coast Range, Willamette Valley, West Cascades and Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G3G4/Yes

PHYSICAL DESCRIPTION: Averages 4 inches in length.

DIET AND HABITAT REQUIREMENTS: Feeds on aquatic and semi-aquatic invertebrates including amphipods, beetles, flies, millipedes, snails, spiders, wasps and worms. Adults require shallow, fast-running water and deep rock crevices for laying eggs. Larvae may be found in cobble or gravel areas in shallow water.

PRIMARY PREDATORS/THREATS: Preyed upon by the Pacific giant salamander, garter snakes and salmonid fishes. This species is threatened by habitat loss and habitat degradation.

REPRODUCTION: Breeding may occur throughout the entire year, but most eggs are laid from April through June. Females will lay an average of four to 16 eggs that hatch after five to six months.

PREFERRED FOREST HABITAT: Damp, old-growth coniferous forests with shallow, cold streams.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found along the Coast Range, with an isolated population along the western slopes of the Cascade Mountains in Douglas County.

Snake, California mountain kingsnake (*Lampropeltis zonata*)



ECOREGIONS: Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4G5/Yes

PHYSICAL DESCRIPTION: Easily identified by distinctive red, white and black banding. Snakes rarely exceed 4 feet in length. Heads are black and are only slightly wider than their bodies.

DIET/HABITAT REQUIREMENTS: Preys on small mammals, birds and eggs, amphibians, lizards and other snakes (including young rattlesnakes, as California mountain kingsnakes are immune to rattlesnake venom).

PRIMARY PREDATORS/THREATS: Predators include hawks and owls, and eggs are often predated on by mammals. Threats include habitat destruction and illegal snake collecting for the pet trade.

REPRODUCTION: Breeding occurs between March and May, with young born between June and October. Clutch sizes average five young, but may be as large as 12.

PREFERRED FOREST HABITAT: Found in pine forests, oak woodlands and shrublands. This species utilizes rotting logs for cover and is often found near streams.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in southwestern Oregon.

Snake, common kingsnake (*Lampropeltis getula*)



ECOREGIONS: East Cascades, West Cascades and Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G5/Yes

PHYSICAL DESCRIPTION: Averages 39 inches in length.

DIET AND HABITAT REQUIREMENTS: Consumes other snakes, but records show it will also eat small turtles, birds, bird eggs, frogs, lizards, reptile eggs and small mammals. Requires loose, well-aerated soil for laying clutches, and various debris including rocks, down logs and vegetation for cover.

PRIMARY PREDATORS/THREATS: Preyed upon by raccoons, hawks and other snakes. Locally threatened by human development that causes habitat fragmentation and degradation.

REPRODUCTION: Produces clutches (averaging nine eggs) that are laid in July and require two months of incubation.

PREFERRED FOREST HABITAT: Densely vegetated mixed coniferous woodlands with close access to watercourses.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout southwestern Oregon, along the Rogue and Umpqua river valleys.

Snake, western rattlesnake (*Crotalus oreganus*)



ECOREGIONS: Willamette Valley, Klamath Mountains, East Cascades, West Cascades, Columbia Plateau, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 31 inches in length.

DIET AND HABITAT REQUIREMENTS: Consumes mice, gophers, squirrels, rabbits, birds, lizards and amphibians. Requires rocks, cliffs and down logs for cover, and south-facing rocky dens for hibernation.

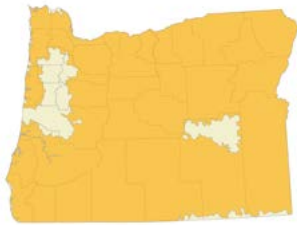
PRIMARY PREDATORS/THREATS: Preyed upon by other snakes, carnivorous mammals and raptors. Local populations are threatened by habitat loss and degradation due to various forms of human development.

REPRODUCTION: Breeds every other fall (after emerging from hibernation); females produce three to 12 live young.

PREFERRED FOREST HABITAT: Uses a variety of habitats that provide access to over-wintering sites.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout Oregon with the exception of the Coastal and Cascade mountain ranges.

Toad, western (*Anaxyrus boreas*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 4.5 inches in length.

DIET AND HABITAT REQUIREMENTS: Tadpoles feed on algae and detritus, and adults feed on small invertebrates, including ants, beetles, spiders, earthworms and crayfish. Adult female toads require shallow water for laying eggs.

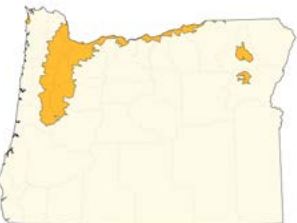
PRIMARY PREDATORS/THREATS: Preyed upon by garter snakes, coyotes, raccoons and birds such as ravens, gray jays, spotted sandpipers and mallard ducks. Primary threats include loss of wetlands.

REPRODUCTION: Occurs from February through July (dependent on elevation), with females producing a wide range of clutch sizes (30 to 16,000 eggs) that hatch in 3 to 10 days. Tadpoles only take a couple months to reach adulthood.

PREFERRED FOREST HABITAT: Found within a wide diversity of habitats, including grasslands, woodlands, forests, mountain meadows and desert flats, that provide suitable water sources.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout Oregon, except for portions of the Willamette Valley and eastern Oregon.

Turtle, western painted (*Chrysemys picta*)



ECOREGIONS: Willamette Valley, West Cascades, Blue Mountains, Columbia Plateau, Coast Range and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 8 inches in length.

DIET AND HABITAT REQUIREMENTS: Consumes a variety of plant and animal matter, including algae, bulrush, spiders, beetles, earthworms, fish, frogs and tadpoles. Requires mud substrates in slow and shallow water bodies for hibernation, soft and vegetated ground for nesting, and adequate sites such as logs for basking.

PRIMARY PREDATORS AND THREATS: Preyed upon by the raccoon. Populations are threatened by disease, introduced bullfrog predation, habitat loss and degradation, and competition with non-native turtles.

REPRODUCTION: Breeds from May to July with average clutch sizes of five to eight eggs. Climate-dependent, hatchlings sexually mature by 4 to 6 years old.

PREFERRED FOREST HABITAT: Water bodies surrounded by various vegetation types.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the Willamette Valley into the Coast Range, and in small pockets in the northeastern portion of the state.

Turtle, western pond (*Actinemys marmorata*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades, East Cascades and Columbia Plateau
STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G3G4/Yes

PHYSICAL DESCRIPTION: Averages 7 inches in length.

DIET AND HABITAT REQUIREMENTS: Consumes a variety of plant and animal matter, including algae, insects, earthworms, mollusks, crayfish, tadpoles and frogs. Requires slow water bodies that provide muddy substrates for hibernation, adequate basking sites including logs, rocks and cattail mats, and sparse vegetation for nesting.

PRIMARY PREDATORS AND THREATS: Preyed upon by the raccoon. Populations are threatened by disease, introduced bullfrog and bass predation, habitat loss and degradation, and competition with non-native turtles.

REPRODUCTION: Breeds from May through August, laying clutches of about five to 13 eggs that hatch after 12 weeks. This long-lived turtle, reaching up to 40 years or more, becomes sexually mature around 10 years old.

PREFERRED FOREST HABITAT: Quiet water bodies with a variety of surrounding vegetation.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the Willamette Valley and into the Coast Range, in the eastern and western Cascade Mountains and the Klamath Mountains.

Birds

Birds are found in all forest types in Oregon, from young plantations (early seral) to mature forests. Maintaining a diversity of forest age classes across the landscape will go a long way toward providing habitat for many bird species. However, many species of birds have specific habitat requirements. Here are some general suggestions that can be implemented across many forest age classes to benefit birds:

- Maintain or plant a diversity of fruit-bearing shrubs and trees.
- Retain or create snags in all forest age classes.
- Retain legacy trees for future snag and down wood recruitment.
- Retain legacy structures such as stumps and logs.
- Protect and maintain unique sites such as oak woodlands, grasslands, riparian areas and wetlands.
- Maintain or create perches for raptors.
- Protect known nest sites and trees.



AMERICAN PEREGRINE FALCON

ECOREGION: All ecoregions where the species occurs will be listed here.

STATUS (FEDERAL/STATE/NATURESERVE/OCS/FPA):

The status of the species will be listed here. Species may be classified at the Federal level as Threatened (T), Endangered (E), Candidate (C) or Species of Concern (SOC). At the state level they may be listed a Threatened (T), Endangered (E), Candidate (C), Sensitive (S) or Sensitive - Critical (SC). NatureServe rankings (G1-5 and GH) are included. Species inclusions to the Oregon Conservation Strategy (OCS) are denoted. Several bird species also receive protections under the Forest Practices Act (FPA); if applicable, this protection is denoted here. Example: (None/None/G5/Yes/FPA)

PHYSICAL DESCRIPTION: A brief description of the species.

DIET/HABITAT REQUIREMENTS: A brief description of what they eat and specific habitat requirements.

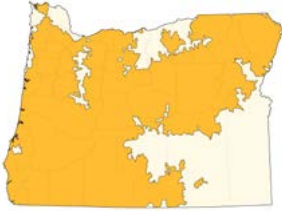
PRIMARY PREDATORS/THREATS: A brief description of predators and threats.

REPRODUCTION: A brief description of nesting/denning habits and/or requirements.

PREFERRED FOREST HABITAT: A brief description of which forested environments they're most likely to be found in.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): A brief description of where they are found in Oregon.

Bluebird, western (*Sialia mexicana*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 6 to 7.5 inches in length, with an average wingspan of 13.5 inches. Weighs about 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, including beetles, ants, moth larvae and grasshoppers during the summer. For hunting summer prey, requires perches. Feeds on fruits and seeds during the winter. Requires either natural tree cavities or vacant woodpecker holes for nesting, and uses a variety of materials to build nests, such as grass, straw, conifer needles, fur and bark. May also use nest boxes.

PRIMARY PREDATORS/THREATS: Preyed upon by cats and raccoons. Introduced European starlings and house sparrows compete with this bluebird for nest sites in western Oregon.

REPRODUCTION: Begins breeding in May and can produce up to two broods per year, with clutch sizes of two to eight eggs. The female incubates the clutch for about 2 weeks, and the chicks are able to leave the nest at about 17 days old. At this time, the male continues feeding the young while the female prepares for the second brood of the season.

PREFERRED FOREST HABITAT: Young and open forest stands that include wooded riparian and burned areas and forest edges for feeding and nesting. Cavities in riparian, mixed conifer, ponderosa pine, white oak and mixed conifer-hardwood forest types for nesting and brooding the young.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Widespread throughout the state, but more commonly found in the foothills of western Oregon during the breeding season.

Chat, yellow-breasted (*Icteria virens*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 7 inches in length, with an average wingspan of 10 inches. Weighs about 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on small invertebrates and fruit. Requires dense shrubs for nesting, and builds nest cups using a variety of materials including grasses, leaves, bark, weed stems, pine needles, roots and fur.

PRIMARY PREDATORS/THREATS: Preyed upon by snakes, blue jays and chipmunks. In portions of population range, has declined as a result of riparian habitat loss.

REPRODUCTION: Begins breeding in May and produces clutch sizes of one to six eggs that are incubated for about two weeks. The chicks are ready to leave the nest at 8 to 11 days old.

PREFERRED FOREST HABITAT: Dense young forests with riparian thickets and dense brush. Can also be found in the understory of deciduous or mixed deciduous-coniferous forests that contain brush.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in valleys west of the Cascade Mountains and in valley riparian areas in the southeast and northeast portions of the state.

Cuckoo, yellow-billed (*Coccyzus americanus*)



ECOREGIONS: East Cascades, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/None/G5/Yes

PHYSICAL DESCRIPTION: Adult averages 10 to 12 inches in length, with an average wingspan of 15 to 17 inches. Weighs about 1 to 2 ounces.

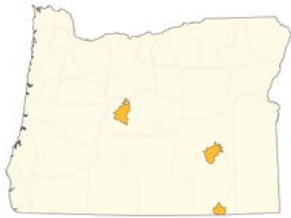
DIET AND HABITAT REQUIREMENTS: Feeds mainly on hairy caterpillars and will occasionally consume other insects, fruit, small lizards and frogs. Nests in willows, using twigs, vines, grass and various other plant materials for building its nest.

PRIMARY PREDATORS/THREATS: Preyed upon by falcons, hawks and other raptors; eggs and chicks are preyed on by chipmunks and snakes. Adults are nest hosts for the brown-headed cowbird.

REPRODUCTION: Produces clutches of one to five eggs that are incubated for about two weeks by both parents. Even though the chicks are still flightless, they leave the nest when a week old.

PREFERRED FOREST HABITAT: Recent reports suggest it is found in riparian areas dominated by willows and cottonwoods. However, historically it has mostly been found in habitats of large, riparian forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Though no verified breeding population exists in the state, individual cuckoos are sighted every year along riparian areas east of the Cascade Mountains.



Duck, harlequin (*Histrionicus histrionicus*)



ECOREGIONS: Coast Range, East Cascades, West Cascades and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Adult ranges from 13 to 21.3 inches in length, with an average wingspan of 22 to 26 inches. Weighs about 1 to 1.5 pounds.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, fish and marine invertebrates. Requires fast-flowing streams for breeding, and rocky coastlines for wintering. Will use leaves, lichen and feathers for building nests, preferably under shrubs near streams.

PRIMARY PREDATORS/THREATS: Preyed upon by bald eagles, minks, martens, hawks and great horned owls (adults); minks and squirrels prey on eggs. Easily disrupted by natural and human disturbances, especially when nesting. Remote riparian areas are especially important for this species.

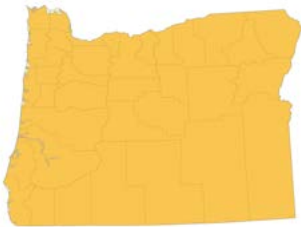
REPRODUCTION: Begins breeding in April and produces a clutch size of three to nine eggs. The female incubates the clutch for about 30 days and the chicks fledge by August.

PREFERRED FOREST HABITAT: Slower-flowing streams in remote montane forests during the breeding season. Fast-flowing waters and rapids in forested mountain habitats through the rest of the year.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): During the breeding season, more commonly seen along various tributaries west of the Cascades and in the Hood River Basin. Commonly found wintering along the Oregon coast, though nonbreeding individuals can be found along the coast year-round.



Eagle, bald (*Haliaeetus leucocephalus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G5/No/FPA*

PHYSICAL DESCRIPTION: Adults average between 28 and 38 inches in length, with an average wingspan of 80 inches. Weighs about 6 to 13 pounds.

DIET AND HABITAT REQUIREMENTS: Though an opportunistic feeder, it prefers fish. Other prey includes large birds, mammals and carrion. Prefers forested areas near large bodies of water for breeding, and requires large trees for nesting.

PRIMARY PREDATORS/THREATS: Young are preyed upon by gulls, ravens, crows, black bears, raccoons, hawks, owls and bobcat.

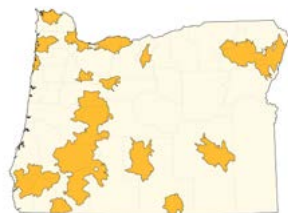
REPRODUCTION: Breeds in January and produces a clutch size of one to three eggs. Both parents incubate the clutch for 35 to 46 days, and chicks usually fledge at three months old. The adult breeding pair will reuse the large platform nest for many years.

PREFERRED FOREST HABITAT: Large inland lakes, marshes and other areas that provide tall trees or cliffs suitable for nesting, along the coast and the Columbia River.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Commonly found throughout the state during non-breeding seasons. Frequent sightings of breeding pairs occur in Upper Klamath Lake, along the Columbia River and at the Crane Prairie and Wickiup reservoirs.

NOTE: *Receives federal protection under the Bald and Golden Eagle Protection Act.

Falcon, American peregrine (*Falco peregrinus anatum*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/Yes

PHYSICAL DESCRIPTION: Adults average between 14 and 19 inches in length, with a wingspan of 39 to 43 inches. Weighs about 1 to 3.5 pounds.

DIET AND HABITAT REQUIREMENTS: Hunts medium-size birds during flight, including shorebirds, ducks, grebes, gulls, songbirds and pigeons. Requires high perches to aid in hunting, and prefers high, inaccessible ledges on cliffs for nesting sites.

PRIMARY PREDATORS/THREATS: Preyed upon by great horned owls, eagles and other peregrines.

REPRODUCTION: Breeds in March and may produce a clutch size of two to five eggs. Clutches are incubated for about 29 to 33 days, and chicks fledge by the end of August. During incubation and chick-rearing, the male will likely bring food to the female.

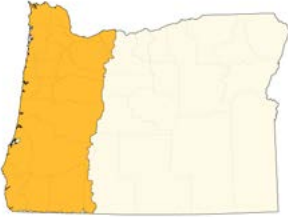
PREFERRED FOREST HABITAT: Suitable nesting sites are its most critical habitat resources. Therefore, this falcon may be found nesting in areas close to high cliffs and water. Such places include high-elevation montane habitats, riparian corridors, marshes, lakes and coastal areas.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in arid habitats of eastern Oregon, marine areas of western Oregon and high-elevation montane habitats. Has been seen more recently in the lower Willamette and Columbia rivers near urban areas.

Flycatcher, little willow (*Empidonax traillii brewsteri*)



Photo is of the willow flycatcher.
This species looks similar, but is smaller.



ECOREGIONS: Coast Range, Willamette Valley, Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S-SC/G5/No

PHYSICAL DESCRIPTION: Averages 5 to 7 inches in length, with an average wingspan of 7.5 to 9.5 inches, and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds mostly on insects throughout the year and will consume some berries in the fall. Requires moist, shrubby areas with water for breeding. Uses weed stems, pine needles, bark, grasses, feathers, fur and other fine materials to build a cup-shaped nest low in a bush or a small tree near water.

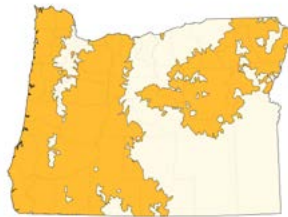
PRIMARY PREDATORS/THREATS: Preyed upon by snakes, Cooper's hawks, great horned owls, red squirrels and skunks. Availability of riparian habitat is a limiting factor for this species.

REPRODUCTION: Produces a clutch size of three to five eggs in June that are incubated by the female for 12 to 15 days. At two weeks old, chicks are ready to fledge.

PREFERRED FOREST HABITAT: Shrubby thickets composed primarily of willows. May also be seen in riparian areas with high shrub densities and young conifer-dominated forests in low-elevation valleys.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found west of the Cascade Mountains at various elevations.

Flycatcher, olive-sided (*Contopus cooperi*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades, East Cascades and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S-SC/G4/Yes

PHYSICAL DESCRIPTION: Averages 7 to 8 inches in length and weighs around 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on a variety of flying insects, but prefers bees. Requires high perches for hunting prey and viewing its territory. Prefers nesting on tree limbs, where it builds a nest cup of various plant materials.

PRIMARY PREDATORS/THREATS: Preyed upon by jays, peregrine falcons, Douglas and northern flying squirrels, and ravens.

REPRODUCTION: Breeds in May and produces a clutch size of two to five eggs that are incubated for about 17 days by the female. At two to three weeks old, young are fully independent.

PREFERRED FOREST HABITAT: Coniferous forests that provide uneven canopies useful for high perches. Also associated with burned forests that have many snags, which improve hunting success.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in conifer-forested habitats from sea level to the timberline of the Coast Range and Cascade and Blue mountains. During migration, may occupy a wide variety of habitats throughout the state.

Flycatcher, willow (*Empidonax traillii*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S-SC/G5/Yes

PHYSICAL DESCRIPTION: Adult averages 5 to 7 inches in length, with an average wingspan of 7.5 to 9.5 inches. Weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds mostly on insects throughout the year, supplemented with some berries in the fall. Requires moist, shrubby areas with water for breeding. Uses weed stems, pine needles, bark, grasses, feathers, fur and other fine materials to build a cup nest low in a bush or a small tree near water.

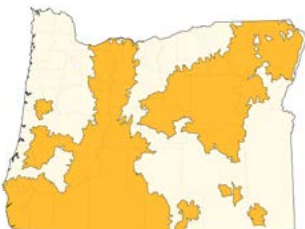
PRIMARY PREDATORS/THREATS: Preyed upon by snakes, Cooper's hawks, great horned owls, red squirrels and skunks. Channelization, overgrazing, dam construction and urbanization threaten this flycatcher's riparian habitat.

REPRODUCTION: Produces clutch sizes of three to five eggs in June that are incubated by the female for 12 to 15 days. At two weeks old, chicks are ready to fledge.

PREFERRED FOREST HABITAT: Wet, brushy areas with standing or running water for breeding grounds. Winters in brushy clearings of early successional growth.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found at various elevations throughout the state.

Goshawk, northern (*Accipiter gentilis*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G5/Yes

PHYSICAL DESCRIPTION: Adult ranges from 21 to 25 inches in length, with an average wingspan of 40 to 46 inches. Weighs about 1 to 3 pounds.

DIET AND HABITAT REQUIREMENTS: Preys on large birds, squirrels, rabbits and hares. Requires large trees for nesting, and uses sticks to build its nest.

PRIMARY PREDATORS/THREATS: Preyed upon by hawks and owls (eggs and chicks).

REPRODUCTION: Produces clutch sizes of one to five eggs that are incubated by the female for about 33 days. The male supplies food during incubation and brooding.

PREFERRED FOREST HABITAT: Found in a variety of forest habitats, mostly in mature dense coniferous forests for foraging.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Commonly found in higher-elevation forested habitats of the Cascade, Blue and Klamath mountains. Occasionally found nesting in the Coast Range. During the winter, can be seen statewide in a variety of habitats.

Grouse, spruce (*Falcpennis canadensis*)



ECOREGION: Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/
None/G5/No

PHYSICAL DESCRIPTION: Adult averages about 15 inches in length, with an average wingspan of 22 inches. Weighs around 14 to 23 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on conifer needles, primarily spruce and pine needles, and on small invertebrates during the summer. Requires conifer needles, vegetable material, leaves and feathers for ground nests, and trees for nesting cover.

PRIMARY PREDATORS/THREATS: Preyed upon by squirrels, coyotes, red foxes, hawks and owls. This species is threatened by habitat loss.

REPRODUCTION: Begins breeding in May and produces a clutch size of five to 10 eggs that are incubated by the female for about 24 days.

PREFERRED FOREST HABITAT: Mixed coniferous forests that are dominated by dense Engelmann spruce, lodgepole pine or subalpine fir stands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Uncommon. Found in northeastern Oregon in the Willowa Mountains.



Heron, great blue (*Ardea herodias*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/
None/G5/No/FPA

PHYSICAL DESCRIPTION: Stands approximately 4 feet tall, with a wingspan of 5.5 to 6.5 feet. Weighs about 5 or 6 pounds.

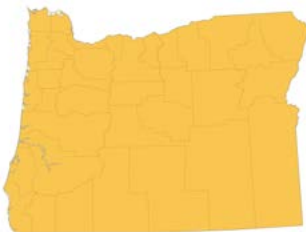
DIET/HABITAT REQUIREMENTS: Will eat nearly any small animal within striking distance, including fish, amphibians, reptiles, small mammals, insects and even other birds. Mostly feed in wetlands, ponds, streams and pastures.

PRIMARY PREDATORS/THREATS: Compete with increasing bald eagle populations. Especially sensitive to disturbances at their rookeries. Timber harvest, log hauling, road construction and low-flying aircraft are also threats.

REPRODUCTION: Are colonial nesters, which means they nest in a group of nests called a rookery. Typically nest in live trees. Rookeries can be as small as a single nest or upward of 500 individual nests. Nests are constructed mainly by the female, with materials brought by the males, and are typically used year after year.

PREFERRED FOREST HABITAT: Prefers mixed conifer forests near water that support suitable nesting.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Fairly common throughout the state along estuaries, streams, marshes and lakes. Most common in the Coast Range, the Willamette Valley and along the Columbia River.



Lark, streaked horned (*Eremophila alpestris strigata*)



ECOREGIONS: Willamette Valley and Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 6 to 8 inches in length, with an average wingspan of 12 to 13.5 inches. Weighs around 1 to 2 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, mollusks and spiders during the spring and summer, and switches to seeds in the winter. Feeds insects to chicks. Utilizes open areas with either bare ground or short grasses for breeding and foraging, and requires fine grass and other plant material for ground nests that it may line with pebbles.

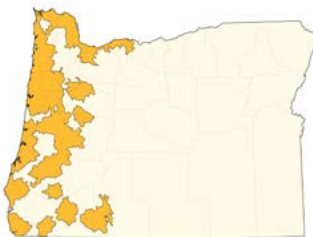
PRIMARY PREDATORS AND THREATS: Preyed upon by peregrine falcons, loggerhead shrikes, weasels, skunks, ground squirrels, raccoons and domestic cats.

REPRODUCTION: Begins breeding in March and produces two or more broods per year with average clutch sizes of two to seven eggs. The female incubates the clutch for about 10 to 14 days, and the chicks fledge at three weeks old.

PREFERRED FOREST HABITAT: Open habitats with little to no ground cover for nesting.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in small pockets within the Willamette Valley during the breeding season. Can also be seen along the far northern coast of Oregon.

Martin, purple (*Progne subis*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 7.5 to 8 inches in length, with an average wingspan of 15.5 to 16 inches. Weighs around 1.5 to 2 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, including beetles, flies, dragonflies, grasshoppers, butterflies, moths, bees and spiders. Requires holes in trees, such as those created by woodpeckers, for nesting, and open areas in woodlands, such as lake or river shores, for foraging. Will also use nest boxes.

PRIMARY PREDATORS AND THREATS: Preyed upon by owls, snakes, house cats, raccoons and squirrels. This species is limited by availability of nesting cavities due to competition with introduced species including European starlings and house sparrows. Providing nesting structures or snags creates habitat for these species.

REPRODUCTION: Initiates breeding in early spring, and females produce a clutch of about four to five eggs. The

female incubates the clutch for about 15 to 18 days, with the male filling in while she is away from the nest. Chicks usually fledge after 28 to 29 days.

PREFERRED FOREST HABITAT: Forests or woodlands that are open and provide appropriate nesting areas, such as holes in trees.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in the state during the summer and is found primarily in the Coast Range and the Willamette Valley.

Murrelet, marbled (*Brachyramphus marmoratus*)



ECOREGIONS: Coast Range and Klamath Mountains
STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G3/Yes/FPA

PHYSICAL DESCRIPTION: Adult averages 9.5 to 10 inches in length, with an average wingspan of 16 inches. Weighs around 9 to 12.5 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on fish including Pacific sand lance, northern anchovy, Pacific herring and surf smelt, and invertebrates such as mollusks. Feeds in near-shore areas of the ocean and prefers older trees for nesting as it builds nests on large, sturdy branches. Winters at sea.

PRIMARY PREDATORS/THREATS: Preyed upon by falcons and owls (adults); jays and squirrels consume eggs. Growing trees with nesting platforms (large limbs) provide habitat for this species.

REPRODUCTION: Produces a clutch of one egg by June in a nest lined with moss or conifer needles. The egg is incubated for a period of about 28 days, and the chick fledges by early fall.

PREFERRED FOREST HABITAT: Older forests, including Douglas-fir, western red cedar, western hemlock and Sitka spruce, that provide large moss-covered tree limbs for nests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occupies forested areas in the Coast Range during the breeding season. During nonbreeding seasons, stays in close proximity to the ocean.



Nighthawk, common (*Chordeiles minor*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S-SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 8.5 to 9.5 inches in length, with an average wingspan of 21 to 22.5 inches. Weighs about 2.5 to 3.5 ounces.

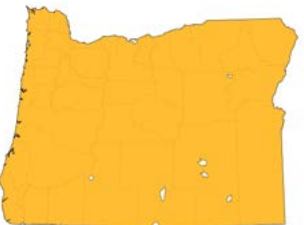
DIET AND HABITAT REQUIREMENTS: Feeds on flying insects such as ants, mosquitoes, grasshoppers, flies and moths. Requires bare ground for nesting.

PRIMARY PREDATORS/THREATS: Preyed upon by domestic cats, crows, gulls, owls, skunks, coyotes, foxes and snakes.

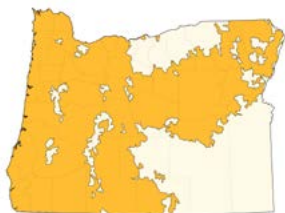
REPRODUCTION: Breeds in June and produces a clutch size of one to two eggs. While the female spends 19 days incubating the clutch, the male will bring food for the chicks. Chicks fledge at 23 days old.

PREFERRED FOREST HABITAT: Can be found in a variety of habitats including open areas with little ground cover, such as riparian, open water, forested and high desert country.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the state during breeding and migration. More commonly seen in and east of the Cascade Mountains.



Nuthatch, slender-billed (*Sitta carolinensis*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades, East Cascades, Blue Mountains and Columbia Plateau

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Adult averages 5 to 5.5 inches in length, with an average wingspan of 8 to 10.5 inches. Weighs about 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on insects such as beetles, ants and caterpillars, and large seeds and nuts including acorns and sunflower seeds. Forages in multiple positions along tree trunks and large branches. Requires a variety of materials for building nests, including grass, feathers, fur, bark and dirt, and will reuse nests in subsequent years. Uses natural tree cavities or abandoned woodpecker holes for nests.

PRIMARY PREDATORS/THREATS: Preyed upon by small hawks, owls and woodpeckers. A common predator of nuthatch eggs is the house wren. Sensitive to heavy pruning or felling of

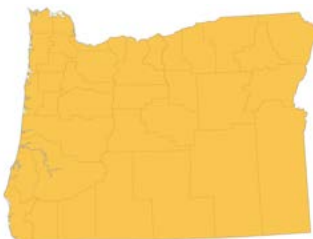
dead wood, which reduces nesting sites. Leaving down logs and snags creates habitat for this species.

REPRODUCTION: Initiates breeding in April and produces clutch sizes of five to nine eggs that are incubated for 13 to 14 days by the female. During this time the male brings the female food. At 26 days old, the chicks fledge, but are likely to remain with their parents for another two weeks.

PREFERRED FOREST HABITAT: Mature open woodlands that include oak, ponderosa pine and juniper stands, and deciduous and mixed coniferous-deciduous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the state, but most commonly seen in the southwestern interior valleys and the Willamette Valley. May also be found breeding in the Blue Mountains.

Osprey (*Pandion haliaetus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G5/No/FPA

PHYSICAL DESCRIPTION: Large hawks with slender bodies and long, narrow wings and legs. When in flight, have a distinctive kink in their wings, which makes an "M" shape when seen from below. Have brown upperparts and white underparts. Heads are white with a brown stripe through the eye.

DIET/HABITAT REQUIREMENTS: Feeds almost exclusively on fish. Can be found along almost any expanse of water with fish, including rivers, lakes and marshes.

PRIMARY PREDATORS/THREATS: Human disturbance, habitat loss, chemical contamination and electrocution.

REPRODUCTION: Nest near water, in large prominent snags or trees with broken tops. Will also nest on artificial platforms, including power line poles. Nest trees are generally large snags, up to 60 inches in diameter and 100 to 150 feet in height. Nest trees are generally taller than the surrounding forest, and must be able to support a large nest (4 to 6 feet in diameter and 1 to 2 feet deep). Ospreys prefer nest sites with easy access to open water areas.

PREFERRED FOREST HABITAT: Mixed conifer forests within 2 miles of water that support nesting habitat.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found statewide except in arid, treeless regions of southeastern Oregon and Columbia Plateau grasslands.

Owl, flammulated (*Psiloscopus flammeolus*)



ECOREGIONS: Blue Mountains, Northern Basin and Range, East Cascades, Klamath Mountains and West Cascades.

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/Yes

PHYSICAL DESCRIPTION: Adult averages 6 to 7 inches in length, with an average wingspan of 16 inches. Weighs about 1.5 to 2 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on nocturnal insects, including crickets, moths and beetles. Prefers ponderosa pine forests for breeding; requires natural tree cavities or vacant woodpecker holes for nesting, and open grasslands and meadows for foraging.

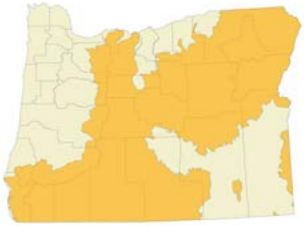
PRIMARY PREDATORS/THREATS: Preyed upon by raptors and great horned owls. The northern flying squirrel is a documented nest predator. Competes with squirrels and other avian species for tree cavities for nesting. May also compete with bats for insect prey. This species is limited by the availability of mature ponderosa pine forests.

REPRODUCTION: Begins breeding in May and produces a clutch size of two to four eggs. The female incubates the nest for about 21 days while the male brings her food. The chicks fledge three weeks after hatching.

PREFERRED FOREST HABITAT: Montane ponderosa pine

forests that provide large trees for roosting near open meadows.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found during the breeding season on eastern slopes of the Cascade Mountains and in the Blue and Willowa mountains. Less commonly found breeding in southwest Oregon mountains.



Owl, great gray (*Strix nebulosa*)



ECOREGIONS: Klamath Mountains, West Cascades, East Cascades, Blue Mountains and Columbia Plateau

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 24 to 33 inches in length, with an average wingspan of 54 to 60 inches. Weighs about 1.5 to 4 pounds.

DIET AND HABITAT REQUIREMENTS: Preys on small rodents such as voles and pocket gophers. Requires natural tree cavities, snags or existing nests built by other species, such as raptors or squirrels, for nesting.

PRIMARY PREDATORS/THREATS: Preyed upon by northern goshawks, great horned owls and lynx.

REPRODUCTION: Produces one clutch per year of three to five eggs with an incubation time of about 30 days. At four to five months of age, chicks are fully independent.

PREFERRED FOREST HABITAT: Mature montane coniferous, ponderosa pine and lodgepole pine forests that contain open areas for foraging.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Rare. Found in high-elevation mountains including the Cascade, Blue and Willowa mountains. A population was recently sighted in the Siskiyou Mountains.



Owl, northern spotted (*Strix occidentalis caurina*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G/3/Yes/FPA

PHYSICAL DESCRIPTION: Adult averages 18.5 to 19 inches in length, with an average wingspan of 40 inches. Weighs about 1 to 1.5 pounds.

DIET AND HABITAT REQUIREMENTS: Preys on flying squirrels and woodrats, and will occasionally take bats and other owls. Requires tree cavities, broken-topped trees or nests built by raptors or squirrels as high as 200 feet above the ground for nesting. Prefers nesting within close proximity to small streams.

PRIMARY PREDATORS/THREATS: Preyed upon by great horned owls, barred owls and northern goshawks. Squirrels, other rodents and jays feed on eggs. The barred owl and loss of habitat (e.g., large-scale wildfires) pose the greatest risk to this species.

REPRODUCTION: Begins breeding in March and produces a clutch size of one to three eggs that are incubated by the female. The male remains close by to supply the female with food. Chicks fledge at about six weeks of age.

PREFERRED FOREST HABITAT: Older coniferous forests that are usually dominated by Douglas-fir.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found year-round in forested habitats of western Oregon except for low-elevation valleys.

Pigeon, band-tailed (*Patagioenas fasciata*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G4/No/FPA

PHYSICAL DESCRIPTION: Adult averages 13 to 16 inches in length and weighs about 12 to 13 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on seeds, fruit, acorns, pine nuts and flowers. Known to forage on red and blue elderberry. Nests in forested montane areas, but ventures into valleys to forage. Requires sturdy branches high in trees near water for nesting. Known to utilize mineral springs (natural and man-made).

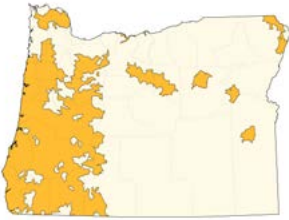
PRIMARY PREDATORS/THREATS: Preyed upon by hawks, owls and squirrels.

REPRODUCTION: Produces clutch sizes of one to two eggs in flat nests, usually near water, between May and June. Both parents spend time incubating the clutch for 18 to 20 days.

PREFERRED FOREST HABITAT: Humid coniferous forests along the coast and mixed evergreen forests for breeding, avoiding higher-elevation forests of the Cascade Mountains. Also found in dry montane coniferous forests and urban and suburban areas.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Commonly found in forested areas of western Oregon throughout the summer.

Quail, mountain (*Oreortyx pictus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 10 to 12 inches in length and weighs around 7 to 9 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on leaves, buds, flowers and bulbs during the spring and summer. Also consumes fruits and insects. However, switches to seeds and nuts in the winter. Requires bare ground for constructing nests, where it makes a shallow depression in the ground and uses grasses, leaves and other material for thick cover.

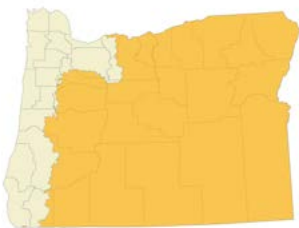
PRIMARY PREDATORS/THREATS: Coyotes are a natural predator; this species is declining in the eastern mountains of Oregon due to habitat loss, fragmentation and alteration.

REPRODUCTION: Produces clutch sizes of about seven and 10 eggs that are incubated on the ground, primarily by the female, for about 25 days. The male stays near the nest and may share incubation and brooding responsibilities with the female.

PREFERRED FOREST HABITAT: Shrub-dominated communities in higher-elevation montane areas such as open forests with sufficient vegetative undergrowth.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the various mountain ranges of the state, though less frequently east of the Cascade Mountains. During the winter, may move to lower valley elevations west of the Cascades.

Shrike, loggerhead (*Lanius ludovicianus*)



ECOREGIONS: East Cascades, Columbia Plateau, Klamath Mountains, Willamette Valley, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 7 to 9 inches in length, with an average wingspan of 11 to 12.5 inches. Weighs around 1 to 2 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, amphibians, small reptiles, small mammals and birds. Requires perches for hunting prey and builds nest cups in dense bushes using a variety of plant materials.

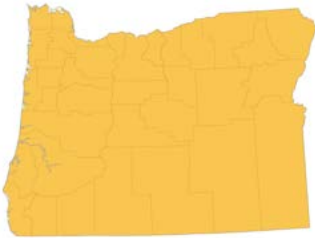
PRIMARY PREDATORS/THREATS: Preyed upon by hawks and owls, snakes, jays and domestic cats.

REPRODUCTION: Breeds in early May and produces a clutch size of three to six eggs. The chicks fledge after about three weeks and are fully self-sufficient by seven weeks.

PREFERRED FOREST HABITAT: Open habitats that provide suitable perches or nesting sites, including grasslands, juniper woodlands, open pine and oak woodlands, and mountain shrub communities.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Often found during the breeding season east of the Cascade Mountains in open habitats. Less commonly found on the western side of the state, but several sightings are reported each year during non-breeding seasons in open coastal habitats and in the Willamette, Umpqua and Rogue valleys.

Sparrow, chipping (*Spizella passerina*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/
G5/Yes

PHYSICAL DESCRIPTION: Slender, with a fairly long tail and a medium-size bill. After nesting season both the male and female lose their distinctive bright cap, replaced by a streaky, dull-brown head pattern.

DIET/HABITAT REQUIREMENTS: Mainly eats seeds of grasses and herbs. During the breeding season also eats insects. Will also eat small fruits such as cherries.

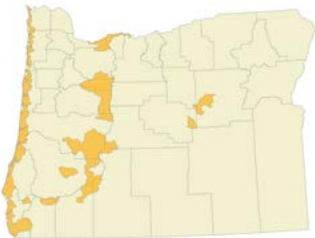
PRIMARY PREDATORS/THREATS: Populations are declining in Oregon. The decline is thought to be due to habitat loss and competition with other species for food and space.

REPRODUCTION: Nesting usually occurs in late May and June. Females build the nests between 3 and 10 feet off the ground, typically in evergreen trees.

PREFERRED FOREST HABITAT: Prefers open coniferous forests or stands, interspersed with grassy spaces or areas with low shrubs for ground foraging.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in open forests and drier woodland edges throughout the state.

Swift, black (*Cypseloides niger*)



ECOREGIONS: Coast Range, West Cascades, Klamath Mountains and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/
G4/Yes

PHYSICAL DESCRIPTION: A large, dark swift with a slightly forked tail.

DIET/HABITAT REQUIREMENTS: Feeds while flying above both forested and open areas. Eats insects and spiders.

PRIMARY PREDATORS/THREATS: No known threats.

REPRODUCTION: Known to nest on steep cliffs and behind waterfalls. Nesting occurs in late May and June.

PREFERRED FOREST HABITAT: Prefers canyons and waterfalls within mature forests. Forest type is less important than temperature.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Rare. Known to occur only in isolated pockets across the state.

Titmouse, juniper (*Baeolophus ridgwayi*)



ECOREGIONS: East Cascades, and Northern Basin and Range
STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: A small grey bird with a tuft on its head.

DIET/HABITAT REQUIREMENTS: Uses mature western juniper habitat, and stands with small trees mixed with mature trees.

PRIMARY PREDATORS/THREATS: The loss or modification of mature western juniper stands within their range by development or wildfire.

REPRODUCTION: They use mature juniper stands with cavities for nesting. Feeds on insects and juniper berries (in the winter).

PREFERRED FOREST HABITAT: Prefers mature juniper forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in scattered, isolated populations east of the Cascades, and in populations east of Lakeview.



Woodpecker, acorn (*Melanerpes formicivorus*)



ECOREGIONS: Coast Range, East Cascades, Klamath Mountains and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G5/Yes

PHYSICAL DESCRIPTION: Adult averages between 7.5 and 9 inches in length and has an average wingspan of 14 to 17 inches. Weighs about 2 to 3 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects, including grasshoppers, ants, beetles and flies during the summer. Also feeds on tree sap and fruit. Feeds on acorns and other nuts in the winter. Stores its winter food supply in holes drilled in trees. Digs and nests in tree cavities and may roost communally year-round. Nests may contain wood chips in the bottom of the cavity.

PRIMARY PREDATORS/THREATS: Preyed upon most commonly by the Cooper's hawk. Other predators include other hawks, falcons, owls, bobcats and foxes. Nesting adults and their eggs and young are susceptible to predation by snakes. Competes for food with the Lewis' woodpecker. Limited by the availability of oak forests.

REPRODUCTION: Raises chicks in a group of two to 16 related individuals where only one female will lay eggs. Produces two to three broods per year, with a clutch size of four to eight eggs.

Eggs are incubated for 14 days by different members of the group. Chicks fledge after about one month, and usually stay with their natal group throughout their life.

PREFERRED FOREST HABITAT: White oak forests and semi-open habitats including farmlands and pasturelands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Common in the Rogue Valley and nearby hills, and portions of the Klamath Mountains and the Willamette Valley.

Woodpecker, American three-toed (*Picoides dorsalis*)



ECOREGIONS: West Cascades, East Cascades, Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G5/Yes

PHYSICAL DESCRIPTION: A medium-size black-and-white woodpecker that is more black than white. Has a black head with a white mustache stripe and a thin white line behind the eye. Throat, breast and belly are white. About 8 inches tall.

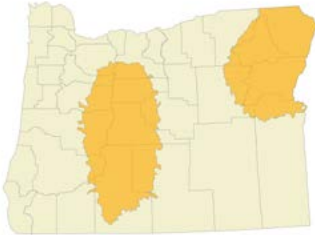
DIET/HABITAT REQUIREMENTS: Eats the larvae of bark beetles and wood-boring beetles. Found in mixed conifer forests that have a prevalence of snags or insect-infested, dying trees.

PRIMARY PREDATORS/THREATS: Habitat loss and food availability.

REPRODUCTION: Builds cavity nests in the trunks of trees, with wood chips lining the nest.

PREFERRED FOREST HABITAT: Usually found in mixed conifer forests. The forest type isn't as important as the presence of bark beetles.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Rare. Locally found near the Cascade summit and in the Blue Mountains.



Woodpecker, black-backed (*Picoides arcticus*)



ECOREGIONS: Klamath Mountains, West Cascades, East Cascades, Blue Mountains, Columbia Plateau, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Adult averages 9 inches in length and weighs about 2 to 3 ounces.

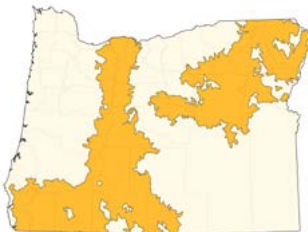
DIET AND HABITAT REQUIREMENTS: Forages on bark beetles and wood-boring beetle larvae. Requires trunks and down logs for foraging. Nests in excavated holes in dead or diseased lodgepole pine, ponderosa pine or western larch tree trunks, usually located by clearing edges and water.

PRIMARY PREDATORS/THREATS: Preyed upon by Cooper's hawks and squirrels. Primary threat is habitat conversion.

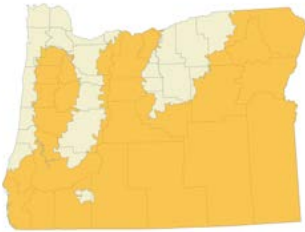
REPRODUCTION: Begins breeding in April and produces a clutch size of three to six eggs. Both parents contribute to incubation of the clutch for about 14 days.

PREFERRED FOREST HABITAT: Recently burned lower-elevation montane coniferous forests dominated by lodgepole pine or ponderosa pine.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Rare. Generally found on the east slope of the Cascades and into the northeast portion of the state. Can also be found in lodgepole pines forest between Bend and Klamath Falls, east of the Cascades.



Woodpecker, Lewis' (*Melanerpes lewis*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/
G4/Yes

PHYSICAL DESCRIPTION: Adult averages 10 to 11 inches in length, with an average wingspan of 19 to 20.5 inches. Weighs around 3 to 5 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects and spiders in the spring and summer, but consumes acorns and berries in the fall. Stores acorns for winter food supply and requires dead trees or pole tops for sighting prey. Though capable of excavating its own nest cavity in dead or diseased trees, prefers nesting in vacant holes excavated by other woodpecker species.

PRIMARY PREDATORS/THREATS: Preyed upon by red-tailed hawks and American kestrels. May compete for food with the acorn woodpecker. This species is limited by the availability of suitable habitat.

REPRODUCTION: Initiates breeding in April and produces a clutch size of five to nine eggs that are incubated by both parents for about two weeks. The chicks fledge at about one month old.

PREFERRED FOREST HABITAT: White oak-ponderosa pine forests for breeding and oak savannah for wintering. Also uses recently burned areas around the forests of the Cascade Mountains.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Commonly found east of Mt. Hood in the white oak-ponderosa pine forest. During the breeding season, can be found in open areas along river and stream valleys in eastern Oregon.

Woodpecker, pileated (*Dryocopus pileatus*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades, East Cascades, Blue Mountains and Columbia Plateau

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/
G5/Yes

PHYSICAL DESCRIPTION: Adult averages 16 to 19 inches in length, with an average wingspan of 26 to 29.5 inches. Weighs around 9 to 12 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects such as carpenter ants, beetles, termites and other invertebrates, plus seeds, nuts, fruit and berries. Prefers nesting in large trees 2 to 3 feet in diameter, where it excavates large holes.

PRIMARY PREDATORS/THREATS: Preyed upon by squirrels, tree-climbing snakes and hawks.

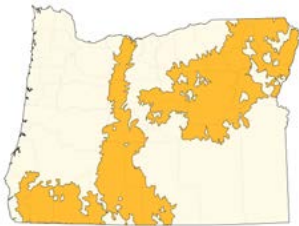
REPRODUCTION: Begins breeding in April and produces a clutch size of one to six eggs that are incubated by both parents for about 12 days. For some time after the chicks fledge, the family group, including the parents and the young birds, remains together.

PREFERRED FOREST HABITAT: Older forest stands with large trees that may occur in old-growth Douglas-fir stands in the western side of the state, and old-growth ponderosa pine-mixed conifer stands in eastern Oregon.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

A year-round resident of the Cascade, Blue and Klamath mountains, the Willamette, Umpqua and Rogue valleys, and the Coast Range.

Woodpecker, white-headed (*Picoides albolarvatus*)



ECOREGIONS: Klamath Mountains, West Cascades, East Cascades and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G4/Yes

PHYSICAL DESCRIPTION: Adult averages 8 to 9 inches in length and weighs around 2 to 2.5 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on insects in the spring and summer. In winter, switches to consuming ponderosa pine seeds. Prefers making holes for nests in snags, stumps or leaning and down logs.

PRIMARY PREDATORS/THREATS: Preyed upon by chipmunks, Cooper's hawks and great horned owls. With mature ponderosa pine forests declining in Oregon's Blue Mountains, population has also declined.

REPRODUCTION: Begins breeding between April and May and produces clutch sizes of two to nine eggs. Eggs are incubated by both parents for about two weeks. The chicks fledge by August.

PREFERRED FOREST HABITAT: Mature ponderosa pine and ponderosa pine-mixed conifer forests located in montane areas.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Uncommon. Found in the Ochoco, Blue and Willowa mountains and the eastern slopes of the Cascade Mountains. Also found just west of the Cascades in the Umpqua River basin and the Siskiyou Mountains.



Invertebrates

Priority insects in Oregon have specific requirements. One of the best ways to manage for these species is to protect known locations and habitats. For example, the Oregon silver-spot butterfly requires the early blue violet for survival. Providing host plants and nectar plants for insects is a great way to incorporate them into your management plan.

NOTE: All special status invertebrates are included in the table starting on page 62. Aquatic invertebrates are included in the table only, as they are generally protected through stream and/or wetland buffers. All terrestrial invertebrates are described.

ECOREGION: All ecoregions where the species occurs will be listed here.

STATUS (FEDERAL/STATE/NATURESERVE/OCS/FPA):

The status of the species will be listed here. Species may be classified at the Federal level as Threatened (T), Endangered (E), Candidate (C) or Species of Concern (SOC). At the state level they may be listed a Threatened (T), Endangered (E), Candidate (C), Sensitive (S) or Sensitive - Critical (SC). NatureServe rankings (G1-5 and GH) are included. Species inclusions to the Oregon Conservation Strategy (OCS) are denoted. Several bird species also receive protections under the Forest Practices Act (FPA); if applicable, this protection is denoted here. Example: (None/None/G5/Yes/FPA)

PHYSICAL DESCRIPTION: A brief description of the species.

DIET/HABITAT REQUIREMENTS: A brief description of what they eat and specific habitat requirements.

PRIMARY PREDATORS/THREATS: A brief description of predators and threats.

REPRODUCTION: A brief description of nesting/denning habits and/or requirements.

PREFERRED FOREST HABITAT: A brief description of which forested environments they're most likely to be found in.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): A brief description of where they are found in Oregon.

SPECIES COMMON NAME (SCIENTIFIC NAME)	FEDERAL STATUS	STATE STATUS	NATURE- SERVE STATUS	OCS	PAGE NUMBER
Bee, western bumble (<i>Bombus occidentalis</i>)	None	None	G2G3	Yes	Pg 64
Beetle, Beller's ground (<i>Agonum belleri</i>)	SOC	None	G3	Yes	
Beetle, Roth's blind ground (<i>Pterostichus rothi</i>)	SOC	None	G2	No	Pg 64
Beetle, Siskiyou carabid (<i>Nebria gebleri siskiyouensis</i>)	SOC	None	G4G5	No	
Butterfly, Fender's blue (<i>Plebejus icarioides fenderi</i>)	E	None	G5	Yes	Pg 65
Butterfly, monarch (<i>Danaus plexippus</i>)	None	None	G4	Yes	Pg 65
Butterfly, Oregon silverspot (<i>Speyeria zerene hippolyta</i>)	T	None	G5	Yes	Pg 66
Caddisfly, Blue Mountains cryptochian (<i>Cryptochia neosa</i>)	SOC	None	G3	No	
Caddisfly, Cascades apatanian (<i>Apatania tavalala</i>)	SOC	None	G3	No	
Caddisfly, Columbia Gorge neothremman (<i>Neothremma andersoni</i>)	SOC	None	G1	Yes	
Caddisfly, Denning's agapetus (<i>Agapetus denningi</i>)	SOC	None	GH	No	
Caddisfly, Goeden's lepidostoman (<i>Lepidostoma astanea</i>)	SOC	None	G2	No	
Caddisfly, Green Springs Mountain farulan (<i>Farula davisii</i>)	SOC	None	GH	No	
Caddisfly, Haddock's rhyacophilan (<i>Rhyacophila haddocki</i>)	SOC	None	G1	No	
Caddisfly, Mt. Hood farulan (<i>Farula jewetti</i>)	SOC	None	G3	No	
Caddisfly, Mt. Hood primitive brachycentrid (<i>Eobrachycentrus gelidae</i>)	SOC	None	G3	No	
Caddisfly, O'brien rhyacophilan (<i>Rhyacophila colonus</i>)	SOC	None	G1	No	
Caddisfly, One-spot rhyacophilan (<i>Rhyacophila unipunctata</i>)	SOC	None	G3	No	
Caddisfly, Sagehen Creek goeracean (<i>Goeracea oregona</i>)	SOC	None	G3	No	
Caddisfly, Schuh's homoplectran (<i>Homoplectra schuhi</i>)	SOC	None	G3	No	
Caddisfly, Scott's apataninan (<i>Allomyia scotti</i>)	SOC	None	G1	No	
Caddisfly, Tombstone Prairie farulan (<i>Farula reaperi</i>)	SOC	None	G3	No	

SPECIES COMMON NAME (SCIENTIFIC NAME)	FEDERAL STATUS	STATE STATUS	NATURE- SERVE STATUS	OCS	PAGE NUMBER
Caddisfly, Tombstone Prairie oligophlebodes (<i>Oligophlebodes mostbento</i>)	SOC	None	G3	No	
Dragonfly, Lynn's clubtail (<i>Gomphus lynnae</i>)	SOC	None	G2	Yes	
Earthworm, Oregon giant (<i>Driloleirus macelfreshi</i>)	SOC	None	G1	No	Pg 66
Grasshopper, Siskiyou short-horned (<i>Chloaeltis aspasma</i>)	SOC	None	G1	No	Pg 67
Hesperian, Siskiyou (<i>Vespericola sierranus</i>)	None	None	G2	Yes	
Hesperian, Sisters (<i>Hochbergellus hirsutus</i>)	None	None	G1	Yes	
Lanx, highcap (<i>Lanx alta</i>)	None	None	G2	Yes	
Lanx, rotund (<i>Lanx subrotunda</i>)	None	None	G2	Yes	
Lanx, scale (<i>Lanx klamathensis</i>)	None	None	G1	Yes	
Lanx, shortface (<i>Fisherola nuttalli</i>)	None	None	G2	Yes	
Mussel, California floater (<i>Anodonta californiensis</i>)	SOC	None	G3	Yes	
Mussel, western ridged (<i>Gonidea angulata</i>)	None	None	G3	Yes	
Mussel, winged floater freshwater (<i>Anodonta nuttalliana</i>)	None	None	G4	Yes	
Pebblesnail, Columbia (<i>Fluminicola fuscus</i>)	SOC	None	G2	No	
Petaltail, black (<i>Tanypteryx hageni</i>)	None	None	G4	Yes	
Ramshorn, Great Basin (<i>Helisoma newberryi newberryi</i>)	None	None	G1	Yes	
Shoulderband, Oregon (<i>Helminthoglypta hertleini</i>)	None	None	G1	Yes	
Shrimp, vernal pool fairy (<i>Branchinecta lynchi</i>)	T	None	G3	Yes	Pg 67
Snail, minor Pacific sideband (<i>Monadenia fidelis minor</i>)	SOC	None	G4G5	No	Pg 68
Stonefly, no common name (<i>Capnia kersti</i>)	None	None	G1G2	Yes	
Tightcoil, Crater Lake (<i>Pristiloma crateris</i>)	None	None	G2	Yes	
Walker, Pacific (<i>Pomatiopsis californica</i>)	None	None	G1	Yes	
Walker, robust (<i>Pomatiopsis binneyi</i>)	None	None	G1	Yes	

Bee, western bumble (*Bombus occidentalis*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G2G3/Yes

PHYSICAL DESCRIPTION: Difficult to identify. The Xerces Society has created a pocket guide to help with identification: http://www.xerces.org/wp-content/uploads/2009/02/occidentalis_pocketid.pdf.

DIET/HABITAT REQUIREMENTS: Not reliant on one host plant for food; instead are often found in areas with sweet clover (*Melilotus*), clover (*Trifolium*), thistle (*Cirsium*), knapweed (*Centaurea*), rabbit brush (*Chrysothamnus*) and wild buckwheat (*Eriogonum*) species.

PRIMARY PREDATORS/THREATS: Vulnerable to reduced genetic diversity and pathogens from commercial bumblebees and other sources. Conifer encroachment, habitat conversion and habitat loss due to development are also threats.

REPRODUCTION: Most nest underground, often in abandoned holes made by ground squirrels, mice and rats. Occasionally use abandoned bird nests.

PREFERRED FOREST HABITAT: Found in areas where ample food and nesting habitat are available. Note that conifer encroachment is a threat to this species. Found in areas adjacent and within mixed conifer forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Historically found statewide. Still found statewide, but rare. May be locally common in some areas.

Beetle, Roth's blind ground (*Pterostichus rothi*)



ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G2/No

PHYSICAL DESCRIPTION: An eyeless and flightless soil-dwelling beetle, 8 to 9 mm in length. Shiny, pale brown-orange to reddish brown. Likely requires an expert to identify.

DIET/HABITAT REQUIREMENTS: Lives just beneath the soil surface or in the plant litter. Can be found under rocks and logs that are deeply embedded in the soil. Will build a network of tunnels under these structures. Are known to feed on insects, and will also consume seeds and other plant parts.

PRIMARY PREDATORS/THREATS: Populations are relatively stable. The primary limiting factor appears to be the presence of down wood and closed canopy stands.

REPRODUCTION: Active from October through January, and May and June.

PREFERRED FOREST HABITAT: Found in cool, moist, closed-canopy coniferous forests with well-drained, deep, coarse-crumb-structure soils.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Known to occur in Benton and Lincoln counties.

Butterfly, Fender's blue (*Plebejus icarioides fenderi*)



ECOREGION: Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): E/None/
G5/Yes

PHYSICAL DESCRIPTION: Average wingspan of 1 inch.

DIET AND HABITAT REQUIREMENTS: Feeds primarily on various lupine species (larvae). Native wildflowers, including wild onion, flax and pink checker-mallow, are the main source of nectar for adults. The main habitat requirement is the presence of the host plant, Kincaid's lupine (reference page 97 for complete lupine description).

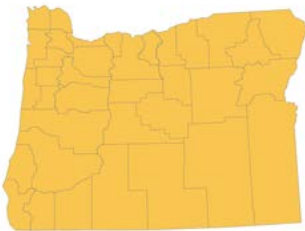
PRIMARY PREDATORS/THREATS: Preyed upon by songbirds and various herptiles such as lizards and frogs. Populations are threatened with habitat loss and degradation from human development, livestock and agricultural uses, tree planting and invasive weeds.

REPRODUCTION: Lays eggs that hatch and remain active as larvae from May through June. In fall and winter larvae hibernates, and by the following May they emerge as mature adult butterflies.

PREFERRED FOREST HABITAT: Native grasslands and upland prairies.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the Willamette Valley. Baskett Slough National Wildlife Refuge and Willow Creek Main Preserve are home to the largest remaining populations.

Butterfly, monarch (*Danaus plexippus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/
None/G4/Yes

PHYSICAL DESCRIPTION: Large orange and black butterfly.

DIET/HABITAT REQUIREMENTS: Caterpillars feed almost exclusively on milkweed (*Asclepias sp.*). Adults require nectar from flowering plants blooming in the spring and fall to fuel migration.

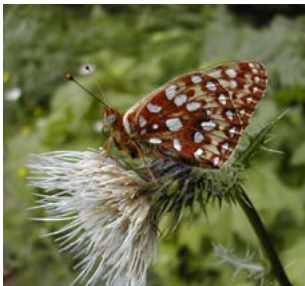
PRIMARY PREDATORS/THREATS: Availability of milkweed and nectar plants is a major threat. Mowing milkweed before caterpillars have developed, and the use of pesticides, can be harmful to monarchs.

REPRODUCTION: Undergoes complete metamorphosis, comprising four stages: egg, larva, pupa and adult. Cycle is completed in approximately 30 days. Migrating monarchs survive all winter, and live for approximately six to nine months.

PREFERRED FOREST HABITAT: Riparian areas, meadows, open forests, woodlands and roadsides, where it searches for milkweed, its host plant.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in suitable habitat statewide.

Butterfly, Oregon silverspot (*Speyeria zerene hippolyta*)



ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/None/
G5/Yes

PHYSICAL DESCRIPTION: Average wingspan of 1 inch.

DIET AND HABITAT REQUIREMENTS: Requires the early blue violet for larval food plant and nectar from various native wildflowers, including California aster, yarrow and Indian thistle, for adults. Prefers well-lit areas for laying eggs, with populations most dependent on the food plant presence and abundance. Other habitat requirements include a moderate grass cover for shelter, with adults occasionally moving to forests for cover from coastal winds.

PRIMARY PREDATORS/THREATS: Preyed upon by parasitic wasp larvae, spiders and ants. Spiders and some birds likely consume adult silverspots. Populations are threatened with habitat loss and degradation from invasive plants such as Scotch broom, as well as various human activities.

REPRODUCTION: Lays up to 200 eggs in early fall that hatch about 15 days later. During the following mid- to late-summer, individuals emerge as mature adults that begin breeding in later summer through early fall.

PREFERRED FOREST HABITAT: Coastal grasslands of various elevations.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):
Found along the coastal region of the state.



Earthworm, Oregon giant (*Driloleirus macelfreshi*)



Looks similar to earthworm shown above.

ECOREGION: Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS):
SOC/None/G1/No

PHYSICAL DESCRIPTION: Averages 6 inches in length, but can grow to up to 3 feet or more.

DIET AND HABITAT REQUIREMENTS: Feeds primarily on mosses, decaying conifer needles and grass seeds and stems. Requires adequate moisture in deep soils for permanent burrows, and sufficient ground vegetation for reproduction.

PRIMARY PREDATORS/THREATS: Preyed upon by songbirds, snakes and turtles. Habitat disturbances from human development and the introduction of European earthworms threaten populations.

REPRODUCTION: Cocoon production is most prevalent during late winter and into early spring.

PREFERRED FOREST HABITAT: Douglas-fir forests with undisturbed, moist soils.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):
Endemic to the Willamette Valley, with a few sightings in the Coast Range.



Grasshopper, Siskiyou short-horned (*Chloaeltis aspasma*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/
None/G1/No

PHYSICAL DESCRIPTION: Adults range between 17 and 24 mm in length and are brown to grey in color. Slanted face and wings that are smaller than their abdomen. Can be confused with the meadow grasshopper. Likely requires an expert to identify.

DIET/HABITAT REQUIREMENTS: Elderberry is thought to be the preferred host plant for females to lay their eggs. However, suspected to use other materials for egg laying, such as down wood and snowberry.

PRIMARY PREDATORS/THREATS: Not much is known about this species, but habitat alteration and loss appear to be the largest threats.

REPRODUCTION: Females lay their eggs in the summer, and juveniles forage in open meadows near the ground.

PREFERRED FOREST HABITAT: Clearcuts and naturally formed grassy meadows with grasses, forbs and blue elderberry.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Known to occur in Jackson County.



Shrimp, vernal pool fairy (*Branchinecta lynchi*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/None/
G3/Yes

PHYSICAL DESCRIPTION: Small, translucent crustacean less than 1 inch in total length. Has 11 pairs of swimming legs, and swim on its backs.

DIET/HABITAT REQUIREMENTS: Feeds on algae and plankton and reside only in ephemeral ponds known as vernal pools. Vernal pools are rare wetland habitats that are found in southern Oregon. These pools retain water due to a hardpan beneath the soil surface, and can range in size from several square feet to an acre. Vernal pools are generally found in open, un-vegetated areas, and are unlikely to be found in forested areas.

PRIMARY PREDATORS/THREATS: Loss of vernal pool habitat through development is the primary cause of species decline. Populations are also indirectly affected by activities that may alter the hydrology of the pools in which they reside, including construction of roads, trails, ditches or canals.

REPRODUCTION: Hatches from thick-shelled eggs, or cysts, shortly after the first precipitation events of the year, when vernal pools fill with water. Matures in 41 days, at which point females produce cysts that become buried in the mud at the bottom of vernal pools. Cysts are dried in summer when vernal pools empty of water, and are often frozen throughout portions of the winter. Adults only live for a single season.

PREFERRED FOREST HABITAT: Found in vernal pools in Southern Oregon, within/adjacent to mixed conifer forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Known only in Jackson County.



Snail, minor Pacific sideband (*Monadenia fidelis minor*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/
None/G4G5/No

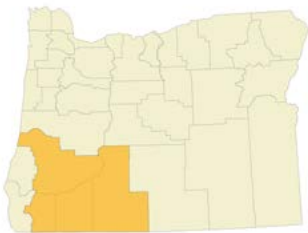
PHYSICAL DESCRIPTION: An Oregon endemic terrestrial snail is about 25-31 mm in diameter and 19.3 mm in height. Straw-colored or pinkish- to orange-brown. Base is dark brown. Likely requires an expert to identify.

DIET/HABITAT REQUIREMENTS: Little is known about this species, but thought to feed on a variety of fungi and plants.

PRIMARY PREDATORS/THREATS: Habitat alterations are likely a primary threat to the species.

PREFERRED FOREST HABITAT: Lives in talus areas near streams and springs. During the wet season also found in down wood, under rocks or in leaf litter. Will climb trees in riparian corridors.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Low to moderate elevations in Jackson, Douglas, Josephine and Klamath counties.





Notes:

Mammals

Managed forests provide great habitat for many mammal species. The following general management recommendations will improve habitat within working forests for many species:

- Maintain large-diameter down logs in harvest units and throughout all forest age classes.
- Maintain travel corridors between habitat types.
- Maintain special sites such as talus slopes, rocky outcroppings, seeps, springs and wetlands.
- Protect known den sites for priority species.
- Leave or create snags both in uplands and in riparian areas and in all forest age classes.
- Retain some snags in patches, in locations that receive lots of afternoon sun.
- Retain hardwood tree and shrub species.
- Leave legacy stumps.
- Maintain or create water sources such as ponds for fire protection, especially in areas lacking other water sources.

ECOREGION: All ecoregions where the species occurs will be listed here.

STATUS (FEDERAL/STATE/NATURESERVE/OCS/FPA):

The status of the species will be listed here. Species may be classified at the Federal level as Threatened (T), Endangered (E), Candidate (C) or Species of Concern (SOC). At the state level they may be listed a Threatened (T), Endangered (E), Candidate (C), Sensitive (S) or Sensitive - Critical (SC). NatureServe rankings (G1-5 and GH) are included. Species inclusions to the Oregon Conservation Strategy (OCS) are denoted. Several bird species also receive protections under the Forest Practices Act (FPA); if applicable, this protection is denoted here. Example: (None/None/G5/Yes/FPA)

PHYSICAL DESCRIPTION: A brief description of the species.

DIET/HABITAT REQUIREMENTS: A brief description of what they eat and specific habitat requirements.

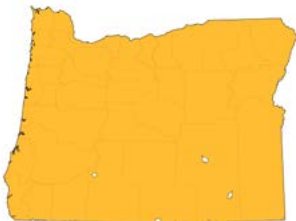
PRIMARY PREDATORS/THREATS: A brief description of predators and threats.

REPRODUCTION: A brief description of nesting/denning habits and/or requirements.

PREFERRED FOREST HABITAT: A brief description of which forested environments they're most likely to be found in.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): A brief description of where they are found in Oregon.

Bat, *California myotis* (*Myotis californicus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages between 3 and 3.5 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: In western Oregon, forages on mostly butterflies, small flies and occasionally beetles and moths, but in eastern Oregon feeds mostly on moths. Prefers forest edges and open water for foraging, and cliff faces, tree crevices, caves, mines and buildings for roosting sites during the winter.

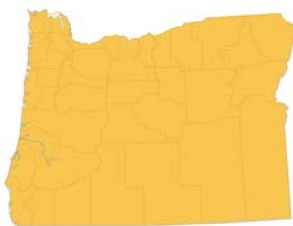
PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Primarily threatened by habitat loss (e.g., human disturbance of caves).

REPRODUCTION: Produces one young in the summer after joining a maternity colony in early summer.

PREFERRED FOREST HABITAT: Uses a variety of habitats including shrub-steppe, shrub desert, ponderosa pine forest, juniper-sagebrush, Douglas-fir and humid coastal forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs statewide, though only in localized areas within the Columbia Plateau ecoregion.

Bat, *fringed myotis* (*Myotis thysanodes*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Averages between 3.5 and 4 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on beetles, moths and occasionally spiders and crickets. Considered a "hovering gleaner," uniquely acquires prey by picking it from various surfaces. Utilizes a variety of habitats that are commonly located within flying distance of forested areas. Roosting sites include caves, mines, bridges, buildings, hollow trees, loose bark and rock faces.

PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Human disturbance in caves, such as mining and recreational mine exploration, is also a threat, especially for maternity colonies.

REPRODUCTION: Breeds in the fall, with fertilization delayed until spring; produces one young per litter in the summer.

PREFERRED FOREST HABITAT: Well adapted to forested and riparian areas of diverse vegetation communities.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs throughout the state, but most commonly found in the northeast and west portions of Oregon.

Bat, hoary (*Lasiurus cinereus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages between 4.5 and 6 inches in length and weighs about 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on flying insects such as flies, moths, mosquitoes, beetles and dragonflies. Utilizes tree branches for roosting and nesting sites, and forages near outdoor lights. Foraging activities usually occur over water and brushy areas along forest edges. Migrates north to Oregon in the spring and returns south for the winter.

PRIMARY PREDATORS/THREATS: Preyed upon by hawks, owls, weasels and snakes. Threatened by habitat loss and degradation, especially of roosting and nursery sites.

REPRODUCTION: Mates in the fall with delayed fertilization until spring, when it usually produces two young per litter.

PREFERRED FOREST HABITAT: Middle-age to older stands where nesting and roosting sites are available. Can be found foraging in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak or mixed conifer-hardwood forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Widespread throughout Oregon.

Bat, little brown (*Myotis lucifugus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G3/No

PHYSICAL DESCRIPTION: As the name implies, small – about 2 inches in length – with brown fur. Wingspans are approximately 9 inches.

DIET/HABITAT REQUIREMENTS: Insectivores, and consume vast quantities of night-flying insects such as moths, beetles, mosquitoes, termites and flies.

PRIMARY PREDATORS/THREATS: Threats include habitat destruction, predation (from snakes, birds of prey and small mammals), human-caused disturbance, and disease, including the spread of white nose syndrome.

REPRODUCTION: Breeding occurs in May and April, with pups born 45 days later. Pups learn to fly by 3 weeks of age, but stay with their mothers and nurse until they can successfully catch insects themselves.

PREFERRED FOREST HABITAT: All forested habitats near water.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Throughout Oregon, especially near water.

Bat, long-eared myotis (*Myotis evotis*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G5/No

PHYSICAL DESCRIPTION: Averages about 3.5 to 4 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Considered a “hovering gleaner” because it acquires prey, such as moths, flies and wasps, by picking it from various surfaces including foliage, trees, rocks and the ground. Requires open spaces in dense forests and near creeks for foraging. Roosting sites include caves, mines, bridges, hollow trees, loose bark and rock faces. May enter buildings to forage on moths and for day-roosting sites. Hibernates during winter.

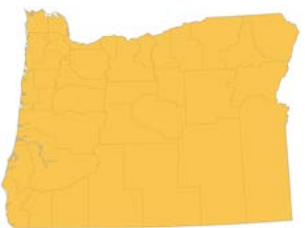
PRIMARY PREDATORS/THREATS: Preyed upon by many bird species, this bat is also threatened by disturbances to caves during breeding and hibernation that may cause young to fall. Additionally, loss of habitat threatens this species.

REPRODUCTION: Breeds in late summer into early fall, with fertilization delayed until spring; adult females produce one young in summer.

PREFERRED FOREST HABITAT: Variety of forested areas. Depending on the availability of suitable roosting sites, may also be found in arid shrublands. Studies suggest coniferous forests are the preferred forest habitat, though the species has been seen in regions of shrub-steppe.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs throughout the state, though not abundant.

Bat, long-legged myotis (*Myotis volans*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G5/Yes

PHYSICAL DESCRIPTION: Averages between 3.5 and 4 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Forages mostly on moths and occasionally termites, spiders, beetles and leafhoppers. When located in arid areas, may frequent riparian forests. Crevices in cliff faces, caves, mines, and deserted human structures provide a variety of roosting sites. Hibernates during winter.

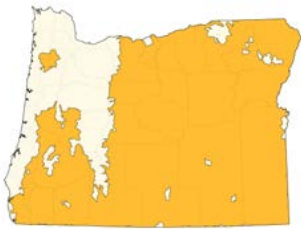
PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Primarily threatened by human disturbance of caves, especially for dependent young and hibernating adults.

REPRODUCTION: Breeds in the fall with fertilization delayed until spring, when it produces one young per litter in the summer.

PREFERRED FOREST HABITAT: Montane coniferous forests such as old-growth Douglas-fir and western hemlock stands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Commonly found throughout the state.

Bat, pallid (*Antrozous pallidus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/
G5/Yes

PHYSICAL DESCRIPTION: Averages between 4 and 5.5 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on ground insects, such as large beetles and crickets; has mastered the ability to walk on the ground. Immunity to scorpion stings also allows it to consume scorpions. Utilizes cliff-faces, caves, mines and buildings for roosting sites.

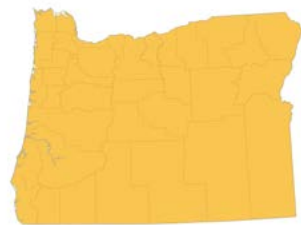
PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Threatened with habitat loss and degradation of roosting sites, especially through mine closure projects.

REPRODUCTION: Breeds in late fall and winter with fertilization delayed until spring, when it produces one to two young per litter in late spring and summer.

PREFERRED FOREST HABITAT: Arid regions in canyons with desert vegetation communities of sagebrush, juniper and salt-desert shrub.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Uncommon. Primarily found in southwestern and eastern Oregon.

Bat, silver-haired (*Lasionycteris noctivagans*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/
G5/Yes

PHYSICAL DESCRIPTION: Averages between 3.5 and 4.5 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on soft-bodied prey including moths, termites, flies, ants and beetles. Forages over ponds, streams, meadows and roads, and prefers loose tree bark for roosting.

PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Loss of older Douglas-fir forests poses a major threat through habitat loss and degradation.

REPRODUCTION: Breeds in fall with fertilization delayed until spring, when the females gather in maternity roosts in trees. Usually produces two young per litter in summer.

PREFERRED FOREST HABITAT: Older Douglas-fir and western hemlock forests; occasionally found in ponderosa pine forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs statewide.

Bat, spotted (*Euderma maculatum*)



ECOREGIONS: Northern Basin and Range, Blue Mountains, East Cascades and Columbia Plateau

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: Averages 4.5 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds mostly on moths. It utilizes high cliff crevices for roosting, which may be the most limiting factor for distribution.

PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Threatened by habitat disturbances, especially to roosting sites.

REPRODUCTION: Breeds in the spring and produces one young by mid-summer.

PREFERRED FOREST HABITAT: A wide range of dry habitat types.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Two primary pockets in Oregon east of the Cascade Mountains.

Bat, Townsend's western big-eared (*Corynorhinus townsendii*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G3/Yes

PHYSICAL DESCRIPTION: Averages between 3 and 4.5 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds mostly on moths and occasionally beetles, true bugs and flies. Usually active in full darkness, and requires caves, buildings, mines and bridges for roosting sites.

PRIMARY PREDATORS/THREATS: Preyed upon by many bird species. Species is sensitive to human disturbance and habitat loss.

REPRODUCTION: Breeds in late fall and winter with fertilization delayed until spring. Produces one young in June.

PREFERRED FOREST HABITAT: While found in forested areas, roosting-site availability plays a crucial role in distribution.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in forested regions west of the Cascades and in arid eastern Oregon.

Bat, western small-footed myotis (*Myotis ciliolabrum*)



ECOREGIONS: East Cascades, Columbia Plateau, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G5/No

PHYSICAL DESCRIPTION: A small brown to yellowish bat. Has black ears and a black mask across eyes and nose.

DIET/HABITAT REQUIREMENTS: Feeds on flying insects such as flies, small beetles and winged ants. Foraging mostly occurs in the early evening. Due to high maneuverability, can forage among boulders, along cliffs and in forested areas.

PRIMARY PREDATORS/THREATS: There are no major threats identified for this species.

REPRODUCTION: Little is known about reproductive behaviors. Pregnant females have been observed throughout June.

PREFERRED FOREST HABITAT: Inhabits dry habitats, including pine woodlands, rock outcrops and open grasslands. Roosts in tree bark, cliff faces, and mines and caves. Hibernates in winter in caves and mines.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found east of the Cascades.



Bat, Yuma myotis (*Myotis yumanensis*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G5/No

PHYSICAL DESCRIPTION: Averages between 3 and 4 inches in length and weighs less than 1 ounce.

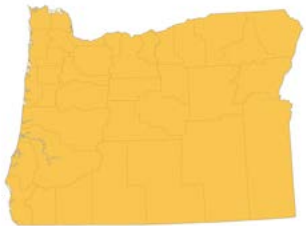
DIET AND HABITAT REQUIREMENTS: Feeds mainly on moths, midges, flies and termites. Will also eat bees, wasps, beetles, leafhoppers and lacewings. Forages over streams and ponds for insects, and migrates in the fall.

PRIMARY PREDATORS/THREATS: Preyed upon by many species of birds. Sensitive to human disturbances in caves and buildings where maternity colonies are found, and practices that cause loss of roosting sites in riparian areas.

REPRODUCTION: Joins a maternity colony in the spring and produces one young per litter in the summer.

PREFERRED FOREST HABITAT: Commonly found in older Douglas-fir, Sitka spruce, oak and ponderosa pine forests in Oregon.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the state; more common west of the Cascade Mountains.



Deer, Columbian white-tailed (*Odocoileus virginianus leucurus*)



ECOREGIONS: Coast Range, Klamath Mountains and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): E(Lower Columbia population)/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 62 to 76 inches in length, with an average weight of 100 pounds for females and 150 pounds for males.

DIET AND HABITAT REQUIREMENTS: Feeds mostly on grasses and forbs, and occasionally browses woody vegetation. Requires vegetative cover for bedding and overwintering sites.

PRIMARY PREDATORS/THREATS: Preyed on by wolves, coyotes and cougars. Black bears may prey on fawns. Threats include habitat degradation, hybridization with black-tailed deer and mule deer, extreme weather, disease, poaching and vehicle collisions.

REPRODUCTION: Breeds in November and produces one or two fawns in mid-June.

PREFERRED FOREST HABITAT: White-oak woodlands, and historically occurs in wet meadows, grasslands, and riparian and oak woodlands along the Willamette Valley.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

There are two populations of white-tailed deer within Oregon, located on a few Columbia River islands and around Roseburg.



Fisher (*Pekania pennanti*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades, East Cascades and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/SC/G5/Yes

PHYSICAL DESCRIPTION: Averages 28 to 46 inches in length and weighs between 4.5 and 15 pounds.

DIET AND HABITAT REQUIREMENTS: Forages on small rodents, rabbits, squirrels, mountain beavers, porcupines, amphibians, reptiles, birds and bird eggs, and occasionally carrion, fruits and berries. Habitat requirements include extensive and continuous canopies, and available sleeping sites such as hollow trees, logs and stumps, brush piles, ground burrows, abandoned beaver lodges and snow dens.

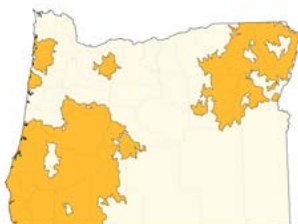
PRIMARY PREDATORS/THREATS: No common predators, but faces competition from coyotes, foxes, bobcats and large raptors. Threats include habitat fragmentation and loss, as well as direct mortality caused by vehicle collisions and disease.

REPRODUCTION: Breeds from February to April; about a year after breeding with delayed implantation, produces a litter of about three young.

PREFERRED FOREST HABITAT: Mature, closed-canopy coniferous forests; also frequently found along riparian corridors.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Occurs in northeast and southwest Oregon.



Fox, Sierra Nevada red (*Vulpes vulpes necator*)



ECOREGIONS: East Cascades and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Slightly smaller and darker fur than more common lowland sub-species of red fox. Black markings present on the back of ears and shins, with white tips on bushy tails. Thick fur can be yellowish-, reddish- or grayish-brown, or mostly black.

DIET/HABITAT REQUIREMENTS: Opportunistic hunters and foragers; diet is composed of small rodents, deer carrion and manzanita berries.

PRIMARY PREDATORS/THREATS: Numerous threats to have been identified, including the small and isolated nature of the population, habitat impacts (such as logging, fire suppression and grazing), disease, predation from coyotes, and hunting and trapping.

REPRODUCTION: Breeding occurs in late winter and early spring, with pups born in sheltered dens from March through May. Litters range in size from three to nine pups. Young disperse in the fall when they have fully grown.

PREFERRED FOREST HABITAT: High-elevation pine and spruce forests. Highly adapted to montane environments.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Range has recently been confirmed to include the Oregon Cascades. Has been documented in the Mt. Jefferson, Mt. Washington and Three Sisters wilderness areas, and may be present throughout the Oregon Cascades.



Gopher, Camas pocket (*Thomomys bulbivorus*)



ECOREGION: Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G3/No

PHYSICAL DESCRIPTION: Averages 11.5 inches in length, with an average weight of about 1 pound.

DIET AND HABITAT REQUIREMENTS: Feeds on the roots of false dandelion, vetch, grasses and wild onion. Diets in agricultural areas include vegetables such as carrots, parsnips and potatoes, and fruit and nut-tree roots. Requires grassy areas located in both lowlands and hills, including pastures, roadsides and agricultural areas.

PRIMARY PREDATORS/THREATS: Preyed upon by raptorial birds and carnivorous mammals. Well adapted to agricultural lands.

REPRODUCTION: Breeds from late April to early June, annually producing one litter with three to five young.

PREFERRED FOREST HABITAT: None.

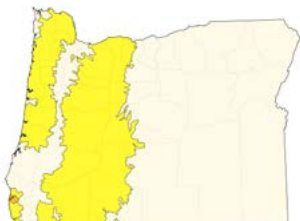
SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found only in the Willamette Valley tributary drainages of the Willamette River.



Gopher, Gold Beach western pocket (*Thomomys mazama helleri*)



* Generic pocket gopher photo



ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G4/No

PHYSICAL DESCRIPTION: Averages 7 to 9 inches in length and weighs between 1 and 3 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds on grasses, plant roots, tree bark, bulbs such as wild onion and garlic, and forbs including false dandelion, clover and lupine. Requires open, grassy meadows and wet pastures in mountain forests. Establishes extensive burrows.

PRIMARY PREDATORS/THREATS: Preyed upon by raptorial birds and carnivorous mammals.

REPRODUCTION: Produces a litter of four to six young between March and June.

PREFERRED FOREST HABITAT: Mountain forests.

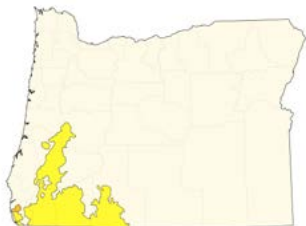
SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Found in a localized area around Gold Beach, Oregon (shown in orange on the map). A subspecies of the western pocket gopher, which occurs more widely along the Oregon Coast Range and in the Cascade Mountains (shown in yellow on the map).

Gopher, Pistol River pocket (*Thomomys bottae detumidus*)



* Generic pocket gopher photo



ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G5/No

PHYSICAL DESCRIPTION: Averages 9 inches in length, with males weighing 3.5 to 9 ounces and females weighing about 3 to 6 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds entirely on vegetable matter such as roots, tubers, bulbs, grasses, forbs, seeds and acorns. Due to burrowing behavior, requires deep soils.

PRIMARY PREDATORS/THREATS: Preyed upon by owls, coyotes, snakes, foxes and hawks. The population distribution may be most limited by suitable soils, competition with other gophers and vegetative structure.

REPRODUCTION: Breeds throughout the year, producing one to three litters per year with three to 12 young per litter.

PREFERRED FOREST HABITAT: Wet meadows, pastures, grasslands and riparian habitats, but may also be found in agricultural and suburban areas.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Found only in a localized area along the Pistol River in Curry County, Oregon (shown in orange on the map). A subspecies of the Botta's pocket gopher, which can be found throughout southwest Oregon (shown in yellow on the map).

Jackrabbit, black-tailed (*Lepus californicus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/
None/G5/No

PHYSICAL DESCRIPTION: Averages 22 inches in length and weighs between 5 and 7 pounds.

DIET AND HABITAT REQUIREMENTS: Forages on grasses and forbs during the summer, and buds, bark, woody plant leaves and sometimes crops and hay in the winter. Prefers open areas such as coastal valleys, pastures, fields and deserts with shrubs including sagebrush and greasewood, and can be found in pastures with light to moderate grazing and around forest edges. Requires sparse small shrubs for shade that do not obscure visibility. Constructs shelter in holes or burrows.

PRIMARY PREDATORS/THREATS: Preyed upon by coyotes, foxes, cougars, eagles, hawks and owls. Humans, forest fires and extreme weather pose threats to the population.

REPRODUCTION: Breeds from late winter to late summer, and annually produces one to four litters with two to four kits.

PREFERRED FOREST HABITAT: Forest stands of all ages.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Occurs throughout semi-arid and arid areas of eastern Oregon, and portions of western Oregon such as the Willamette Valley.



Jackrabbit, white-tailed (*Lepus townsendii*)



ECOREGIONS: Columbia Plateau, East Cascades, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/
G5/Yes

PHYSICAL DESCRIPTION: Averages 24 inches in length and weighs between 6 and 10 pounds.

DIET AND HABITAT REQUIREMENTS: Consumes mostly grasses and forbs during the spring and summer, and leaves and woody plant stems in winter. Diet may also include cultivated plants. Requires open areas that vary from sagebrush deserts and grasslands to coniferous forests and alpine meadows.

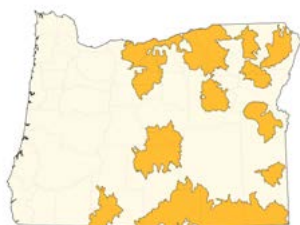
PRIMARY PREDATORS/THREATS: Preyed upon by coyotes, red foxes, martens, bobcats, eagles and hawks. Loss of native grassland habitats threatens this species.

REPRODUCTION: Breeds in spring, though breeding can vary according to climate. Produces litters of four or five young, and the number of litters per year is climate-dependent.

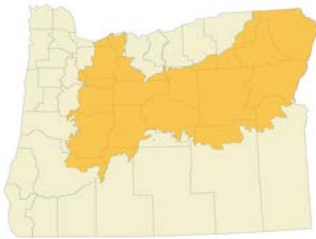
PREFERRED FOREST HABITAT: Forest stands of all ages.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION):

Occurs in eastern Oregon, and the Cascade Mountains are believed to serve as a barrier to expanding its population west.



Lynx, Canada (*Lynx canadensis*)



ECOREGIONS: Blue Mountains, East Cascades and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/None/G5/No

PHYSICAL DESCRIPTION: Slightly larger than bobcats, with long legs and long fur. In winter are grayish brown, but are more reddish in summer, with buffy white fur on the undersides and legs year-round. Ears have long black tufts, and tail is completely encircled by a black tip.

DIET/HABITAT REQUIREMENTS: Preys on mammals, primarily snowshoe hares and birds.

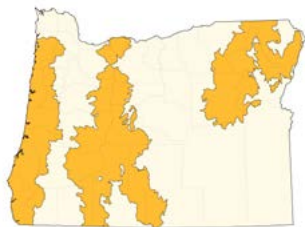
PRIMARY PREDATORS/THREATS: Mortality is influenced heavily by snowshoe hare populations; during periods of low snowshoe hare abundance, has higher starvation and dispersal rates. Other threats include habitat fragmentation and predation (by wolves, mountain lions and wolverines).

REPRODUCTION: Breeding occurs in late March to April, with kittens born 60 to 65 days later. Litters range between one and five young, and the young stay with their mother for about 9 or 10 months before dispersing.

PREFERRED FOREST HABITAT: May inhabit early, mid- and late-successional forests in mountainous areas where snowshoe hare can be found.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Has been found in the Cascade, Steens, Stinkingwater, Blue and Willowa mountains.

Marten, American (*Martes caurina*)



ECOREGIONS: Coast Range, West Cascades, East Cascades and Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G4/Yes

PHYSICAL DESCRIPTION: Averages between 20 and 29 inches in length, with males weighing about 1 to 3 pounds (65 percent larger than females, which weigh between 0.5 and 2 pounds).

DIET AND HABITAT REQUIREMENTS: Preys upon small mammals including shrews, voles, woodrats, rabbits, squirrels and mountain beavers, plus some birds, insects, fruit and berries, and carrion. Requires an understory that is well established for cover and provides lush shrubs and forbs for prey species. Snags, leaning trees, hollow tree stumps and logs provide hunting and denning sites.

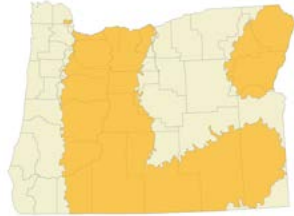
PRIMARY PREDATORS/THREATS: Preyed upon by great horned owls, eagles, coyotes, red foxes, lynx, cougars and fishers.

REPRODUCTION: Breeds in the summer; females produce a litter of two to four young the following spring.

PREFERRED FOREST HABITAT: Mature forests, such as old-growth spruce-fir, that provide cover through canopy, down logs and stumps. Also found in lodgepole pine forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs primarily in higher-elevation forested habitats in Oregon, but may also be present in relatively low abundance in low-elevation coastal forests.

Pika, American (*Ochotona princeps*)



ECOREGIONS: Blue Mountains, East Cascades, Northern Basin and Range and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Small mammal that ranges from 6 to 8 inches in length. Small, rounded bodies and ears, no tails, and thick brown fur that covers paws.

DIET/HABITAT REQUIREMENTS: Forages on plants, including thistle, sedges, wildflowers and grasses. Stores food for the winter in “haystacks” or “haypiles,” which can often be an indicator of its presence.

PRIMARY PREDATORS/THREATS: Is very sensitive to high temperatures, as its is adapted to high elevation and mountainous regions. Climate change could be a factor in this species' decline. Other threats include predators, such as birds of prey, coyotes, bobcats, foxes and weasels.

REPRODUCTION: Breeding occurs in March or April, with litters born 30 days later. Litters range between two and four young, and young stay with their mother for about 4 weeks before dispersing. Females will sometimes give birth to a second litter in the same breeding season.

PREFERRED FOREST HABITAT: Inhabit talus, creviced rocks and other similar microhabitats where suitable forage vegetation can be found nearby, often in forested mountain environments. Cool climates or microclimates are important to this species.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout the mountainous regions of the central and eastern portion of the state, and the Columbia River Gorge, where suitable habitat occurs.

Rabbit, pygmy (*Brachylagus idahoensis*)



ECOREGIONS: East Cascades, Columbia Plateau, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/S/G4/Yes

PHYSICAL DESCRIPTION: About 11 inches in length, and weighs about 1 pound.

DIET AND HABITAT REQUIREMENTS: Consumes sagebrush leaves, with grass contributing almost half of diet in summer. Commonly found in tall, dense areas of sagebrush, and occasionally visits areas mostly comprised of greasewood.

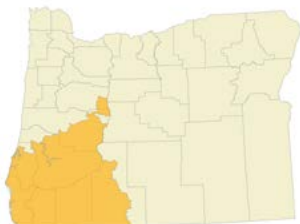
PRIMARY PREDATORS/THREATS: Preyed upon by weasels, coyotes and owls. Habitat loss to agriculture, over-grazing and sagebrush habitat conversion to exotic grassland species pose threats. Its dispersal is easily disrupted by roads and cleared areas.

REPRODUCTION: Local habitat quality determines initiation of the breeding season, which can range from February to March. Annually produces about three litters, with an average of six young per litter.

PREFERRED FOREST HABITAT: Forest stands of all ages.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in eastern Oregon and throughout the Great Basin.

Ringtail (*Bassariscus astutus*)



ECOREGIONS: Coast Range, West Cascades, East Cascades and Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 24 to 32 inches in length and weighs between 2 and 2.5 pounds.

DIET AND HABITAT REQUIREMENTS: Feeds on small mammals in winter and reptiles, insects, birds, bird eggs, fruits and berries throughout the year. Requires denning sites such as rock crevices, boulder piles, burrows, hollow trees and brush piles.

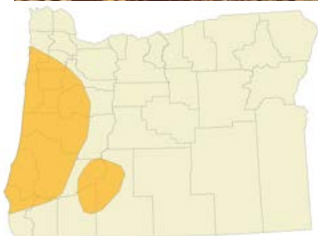
PRIMARY PREDATORS/THREATS: Preyed upon by great horned owls, coyotes, raccoons and bobcats. Threatened with habitat loss and habitat degradation.

REPRODUCTION: Breeds in spring and annually produces one litter with three to four young in May or June.

PREFERRED FOREST HABITAT: Tanoak woodlands located near rivers and rocky areas. May be found along riparian areas and in coniferous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found throughout southwestern Oregon.

Shrew, Pacific (*Sorex pacificus*)



ECOREGIONS: West Cascades, Klamath Mountains, Coast Range and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/None/G3/No

PHYSICAL DESCRIPTION: Small mammal with long, pointed snout. Large for a shrew, and has brown fur. Difficult to distinguish from other shrews without examining the dental pattern.

DIET/HABITAT REQUIREMENTS: Feeds primarily on insects, but may also feed on small invertebrates, worms, mollusks, centipedes, small amphibians and plant material. Down wood and brushy vegetation in forested environments provide habitat for its prey.

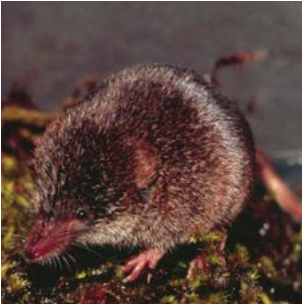
PRIMARY PREDATORS/THREATS: No major threats have been identified for this species.

REPRODUCTION: Breeding occurs from February to August, with litters born from April to November. Females may produce more than one litter in a year, with litter sizes ranging from two to six.

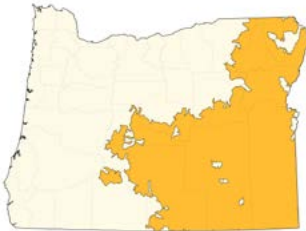
PREFERRED FOREST HABITAT: Moist, forested environments, including riparian areas, with down wood and brushy vegetation.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in two separate populations, the first being in the coast range from Tillamook County south to Coos Bay and east to Philomath and Sutherlin. The second population is found in the Cascades from Linn County to Jackson County.

Shrew, Preble's (*Sorex preblei*)



Generic shrew photo



ECOREGIONS: East Cascades, Blue Mountains, and Northern Basin and Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/G4/No

PHYSICAL DESCRIPTION: Averages 3.5 inches in length. The smallest shrew in Oregon; weighs about 0.1 ounce – less than a dime.

DIET AND HABITAT REQUIREMENTS: Feeds on small invertebrates and soft-bodied prey such as worms, mollusks and centipedes. Shrews in Oregon utilize a variety of habitats including dry bunchgrass, sagebrush dominated habitats and marsh habitats.

PRIMARY PREDATORS/THREATS: There are no documented predators; the primary threat is conversion of habitat from forestry to other land uses (agriculture).

REPRODUCTION: As this shrew is challenging to trap, little is known about its reproductive biology, but it likely breeds throughout the year, producing about four young per litter.

PREFERRED FOREST HABITAT: Mainly found near streams in arid and semi-arid shrub and grassland areas, and high-elevation, dense coniferous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in eastern Oregon.

Squirrel, western gray (*Sciurus griseus*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley, West Cascades and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/S/G5/Yes

PHYSICAL DESCRIPTION: Averages 18 to 23 inches in length and weighs about 1 to 2 pounds.

DIET AND HABITAT REQUIREMENTS: Forages on fungi, acorns, conifer seeds including Douglas-fir, Sitka spruce, sugar pine and true fir species, and occasionally fruit, berries, green vegetation and insects. Prefers tree cavities, usually constructed by woodpeckers, for nesting, or will construct nests from sticks.

PRIMARY PREDATORS/THREATS: Preyed upon by house cats, hawks, eagles, owls, martens, fishers and coyotes. Threats contributing to the species' decline may include competition with the introduced eastern fox and gray squirrels, loss of older trees and decreases in oak woodlands.

REPRODUCTION: Breeds early in the year and produces one litter with two to three young between February and May.

PREFERRED FOREST HABITAT: Deciduous and broadleaf evergreen woodlands mainly comprised of oak and occasionally mixed pines, and associated with transition zone forests along the Cascade Mountains. May frequent riparian areas and mixed forests. Occasionally found in urban parks and orchards located near natural habitat.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in western Oregon, and is easily confused with the introduced eastern gray squirrel.

Vole, red tree (*Arborimus longicaudus*)



ECOREGIONS: Coast Range, Willamette Valley, Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): C/S/G3/ Yes

PHYSICAL DESCRIPTION: Averages 6 to 8 inches in length and weighs about 1 to 1.5 ounces.

DIET AND HABITAT REQUIREMENTS: Feeds almost exclusively on Douglas-fir needles, but also eats needles of other conifer species and the bark off twigs. Requires conifers to construct nests. Water limitations on the east side of the Cascades play a large role in the species' eastern distribution.

PRIMARY PREDATORS/THREATS: Preyed upon by owls, hawks and snakes. Threatened by activities that pose dispersal barriers, and are sensitive to habitat fragmentation.

REPRODUCTION: Breeds throughout the year and has two to three young per litter.

PREFERRED FOREST HABITAT: Middle-age to old conifer forest stands.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Endemic to Oregon, and found in the state's moist western coniferous forests, in middle-age and older stands.

Vole, white-footed (*Arborimus albipes*)



ECOREGIONS: Coast Range, Klamath Mountains, Willamette Valley and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/None/ G3/No

PHYSICAL DESCRIPTION: Averages 6 to 7 inches in length and weighs less than 1 ounce.

DIET AND HABITAT REQUIREMENTS: Feeds on a variety of green plants, most commonly shrub and forb leaves. Associated with riparian areas because it forages on riparian and forest vegetation.

PRIMARY PREDATORS/THREATS: Preyed upon by owls, weasels, minks, spotted skunks and domestic cats.

REPRODUCTION: Breeds anytime throughout the year and produces three young per litter.

PREFERRED FOREST HABITAT: Deciduous forests as well as a variety of coniferous forests.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Occurs in western Oregon, commonly along the Coast Range, with a pocket reaching into the Cascade Mountains.

Wolf, gray (*Canis lupus*)



ECOREGIONS: Statewide

STATUS (FEDERAL/STATE/NATURESERVE/OCS): E (western Oregon)/E/G4/Yes

PHYSICAL DESCRIPTION: Males range in weight from about 45 to 175 pounds. Females weigh slightly less than males.

DIET AND HABITAT REQUIREMENTS: Preys on large mammals including deer and elk, and occasionally smaller mammals such as beaver. Associated with forest habitats that also support its prey species.

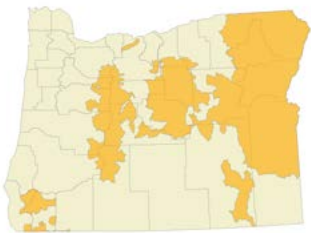
PRIMARY PREDATORS/THREATS: Wolves in packs have no natural predators. Were originally exterminated from Oregon, but have recently begun dispersing back to Oregon from Idaho.

REPRODUCTION: Breeding season is latitude-dependent and is generally between January and April. Breeding pairs annually produce a litter of about six pups.

PREFERRED FOREST HABITAT: Occurs in a variety of habitats, especially forested. Currently known packs utilize forested and open areas, but it is unknown at this time where wolves will persist in Oregon.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): May be present throughout the state, but have only been documented in several packs. For detailed areas of known wolf activity, please see www.dfw.state.or.us/wolves.

Wolverine (*Gulo gulo*)



ECOREGIONS: Blue Mountains, Northern Basin and Range, Columbia Plateau, Klamath Mountains, and East Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): Proposed T/T/G4/Yes

PHYSICAL DESCRIPTION: Averages 32 to 44 inches in length and weighs between 24 and 40 pounds, with males weighing about 30 percent more than females.

DIET AND HABITAT REQUIREMENTS: Preys on small to medium-size rodents, marmots, hares, carrion, birds, bird eggs, insects, fish, roots and berries. Move over very large areas in search of prey or mates. Females will construct dens in the snow or ground to raise young. Prefers lodgepole pine for scent-marking.

PRIMARY PREDATORS/THREATS: Preyed upon by wolves, bears, cougars and eagles. The greatest threat is habitat loss and degradation caused by various human development and activities.

REPRODUCTION: Breeds in early summer with delayed implantation, and produces a litter of two young in early spring.

PREFERRED FOREST HABITAT: Mature open forests at high elevations.

SPECIES RANGE IN OREGON (GENERAL DESCRIPTION): Found in the northeast portion of the state and may be present in portions of the Cascades and Siskiyou mountains and Steens Mountain. In 2011 there was photographic confirmation of two wolverines in Wallowa County.

Plants

Priority plants in Oregon typically have very specific habitat requirements. Protecting known locations of priority plants is a great way to help these species. Protecting habitat types where these species are found is another great way to manage for priority plants in Oregon.

NOTE: All special status species are included in the table beginning on page 90. Only species with a federal or state status are described. Plants with only a G1, G2 or G3 status are included in the table and are not described.

ECOREGION: All ecoregions where the species occurs will be listed here.

STATUS (FEDERAL/STATE/NATURESERVE/OCS/FPA):

The status of the species will be listed here. Species may be classified at the Federal level as Threatened (T), Endangered (E), Candidate (C) or Species of Concern (SOC). At the state level they may be listed a Threatened (T), Endangered (E), Candidate (C), Sensitive (S) or Sensitive - Critical (SC). NatureServe rankings (G1-5 and GH) are included. Species inclusions to the Oregon Conservation Strategy (OCS) are denoted. Several bird species also receive protections under the Forest Practices Act (FPA); if applicable, this protection is denoted here. Example: (None/None/G5/Yes/FPA)

PHYSICAL DESCRIPTION: A brief description of the species.

PREFERRED FOREST HABITAT: A brief description of which forested environments they're most likely to be found in.

SPECIES COMMON NAME (<i>SCIENTIFIC NAME</i>)	FEDERAL STATUS	STATE STATUS	NATURE- SERVE STATUS	OCS	PAGE NUMBER
Anemone, bog (<i>Anemone oregana</i> <i>var. felix</i>)	SOC	None	G4	No	
Aster, wayside (<i>Eucephalus vialis</i>)	SOC	T	G3	Yes	Pg 93
Bartoneberry (<i>Rubus bartonianus</i>)	SOC	None	G2	No	
Bleedingheart, few-flowered (<i>Dicentra pauciflora</i>)	SOC	None	G3	No	
Bog violet, western (<i>Viola primulifolia</i> <i>spp. Occidentalis</i>)	SOC	None	G5	No	
Buckwheat, Cusick's (<i>Eriogonum cusickii</i>)	SOC	C	G2	No	
Buckwheat, green (<i>Eriogonum umbellatum</i> <i>var. glaberrimum</i>)	SOC	None	G5	No	
Buttercup, Dalles Mountain (<i>Ranunculus tritermatus</i>)	SOC	None	G2	No	
Buttercup, southern Oregon (<i>Ranunculus austrooreganus</i>)	None	C	G2	No	
Cabbage, slender wild (<i>Caulanthus major var. nevadensis</i>)	SOC	C	G4	No	
Camas, Howell's (<i>Camassia howellii</i>)	SOC	C	G2	No	
Checkermallow, coast (<i>Sidalcea malviflora spp. patula</i>)	SOC	C	G5	No	
Checkermallow, Nelson's (<i>Sidalcea nelsoniana</i>)	T	T	G2G3	Yes	Pg 93
Clover, Douglas' (<i>Trifolium douglasii</i>)	SOC	None	G2	No	
Corydalis, cold-water (<i>Corydalis aquae-gelidae</i>)	SOC	None	G3	No	
Cypress, Baker's (<i>Cupressa bakeri</i>)	SOC	None		No	
Daisy, Siskiyou (<i>Erigeron cervinus</i>)	SOC	None	G3	No	
Fawn lily, Coast Range (<i>Erythronium elegans</i>)	SOC	T	G2	Yes	Pg 94
Fritillary, Gentner's (<i>Fritillary gentneri</i>)	E	E	G1	Yes	Pg 94
Gentian, bristly (<i>Gentiana plurisetosa</i>)	SOC	None	G2G3	No	
Goldflower, Cooper's (<i>Hymenoxys lemmonii</i>)	SOC	None	G4G5	No	
Grape-fern, crenulate (<i>Botrychium crenulatum</i>)	SOC	C	G3	No	
Grape-fern, mountain (<i>Botrychium montanum</i>)	SOC	None	G3	No	
Grape-fern, pumice (<i>Botrychium pumicola</i>)	T	T	G3	Yes	Pg 95
Grass, Hitchcock's blue-eyed (<i>Sisyrinchium hitchcockii</i>)	SOC	None	G2	No	

SPECIES COMMON NAME (<i>SCIENTIFIC NAME</i>)	FEDERAL STATUS	STATE STATUS	NATURE- SERVE STATUS	OCS	PAGE NUMBER
Howellia (<i>Howellia aquatilis</i>)	T	T	G3	Yes	Pg 95
Kalmiopsis, fragrant (<i>Kalmiopsis fragrans</i>)	SOC	None	G2	No	
Kentrophyta, bastard (<i>Astragalus tegetarioides</i>)	SOC	None	G3	No	
Lady's-slipper, clustered (<i>Cypripedium fasciculatum</i>)	SOC	C	G4	No	
Larkspur, peacock (<i>Delphinium pavonaceum</i>)	SOC	E	G1	Yes	Pg 96
Larkspur, white rock (<i>Delphinium leucophaeum</i>)	SOC	E	G2	Yes	Pg 96
Lily, Kellogg's (<i>Lilium kelloggii</i>)	SOC	None	G3	No	
Lupine, Kincaid's (<i>Lupinus oreganus</i>)	T	T	G2	Yes	Pg 97
Manzanita, Gasquet (<i>Arctostaphylos hispidula</i>)	SOC	None	G3	No	
Mariposa-lily, Cox's (<i>Calochortus coxii</i>)	SOC	E	G1	Yes	Pg 97
Mariposa-lily, Greene's (<i>Calochortus greenei</i>)	SOC	C	G3	No	
Mariposa-lily, Peck's (<i>Calochortus longebarbatus</i> <i>var. peckii</i>)	SOC	C	G4	No	
Mariposa-lily, Umpqua (<i>Calochortus umpquaensis</i>)	SOC	E	G3	Yes	Pg 98
Meadowfoam, dwarf (<i>Limnanthes floccosa ssp. pumila</i>)	SOC	T	G4	Yes	Pg 98
Meconella, white (<i>Meconella oregana</i>)	SOC	C	G2G3	No	
Microseris, Detling's (<i>Microseris laciniata spp. detlingii</i>)	SOC	None	G4	No	
Microseris, Howell's (<i>Microseris howellii</i>)	None	T	G3	Yes	Pg 99
Milkvetch, Peck's (<i>Astragalus peckii</i>)	None	T	G3	Yes	Pg 99
Milkvetch, South Fork John Day (<i>Astragalus diaphanus var. diurnus</i>)	None	T	G5	Yes	Pg 100
Monardella, Siskiyou (<i>Monardella purpurea</i>)	SOC	None	G3	No	
Moonwort, stalked (<i>Botrychium pedunculosum</i>)	SOC	C	G3	No	
Moonwort, upward-lobed (<i>Botrychium ascendens</i>)	SOC	C	G3	No	
Necklace, western (<i>Sophora leachiana</i>)	SOC	C	G2	No	
Paintbrush, Chambers' (<i>Castilleja chambersii</i>)	SOC	None	G1	No	

SPECIES COMMON NAME (<i>SCIENTIFIC NAME</i>)	FEDERAL STATUS	STATE STATUS	NATURE- SERVE STATUS	OCS	PAGE NUMBER
Parsley, Suksdorf's desert (<i>Lomatium suksdorfii</i>)	SOC	C	G3	No	
Peavine, thin-leaved (<i>Lathyrus holochlorus</i>)	SOC	None	G2	No	
Penstemon, blue-leaved (<i>Penstemon glaucinus</i>)	SOC	None	G3	No	
Pine, whitebark (<i>Pinus albicaulis</i>)	C	None	G3G4	No	Pg 100
Prickly-phlox, Hazel's (<i>Leptodactylon pungens</i> <i>spp. hazeliae</i>)	SOC	None	G5	No	
Queen-of-the-forest (<i>Filipendula occidentalis</i>)	SOC	C	G2G3	No	
Rockcress, McDonald's (<i>Arabis macdonaldiana</i>)	E	E	G2	Yes	Pg 101
Senecio, western (<i>Senecio hesperius</i>)	SOC	None	G3	No	
Shootingstar, frigid (<i>Dodecatheon austrofrigidum</i>)	SOC	None	G2	No	
Sidalcea, bristly-stemmed (<i>Sidalcea hirtipes</i>)	SOC	C	G2	No	
Thelypody, arrow-leaf (<i>Thelypodium eucosmum</i>)	SOC	T	G2	Yes	Pg 101
Willow-herb, Siskiyou (<i>Epilobium siskiyouense</i>)	SOC	C	G3	No	

Aster, wayside (*Eucephalus vialis*)

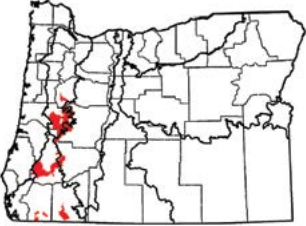


ECOREGIONS: Klamath Mountains, West Cascades and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/T/G3/Yes

PHYSICAL DESCRIPTION: The wayside aster is an erect perennial, typically 20 to 50 inches tall. The lowermost leaves are reduced and scale-like; those above are elliptic or broadly lanceolate, sessile, entirely or with a few irregular teeth. The leaves are glabrous to glandular above, and glandular-pubescent beneath. The several to many turbinate flowering heads are arranged in an inflorescence.

PREFERRED FOREST HABITAT: Found in a wide variety of habitat types, including relatively open areas in the understory of mixed coniferous/hardwood forests, along roadsides, and on open slopes and prairie balds.



Checkermallow, Nelson's (*Sidalcea nelsoniana*)

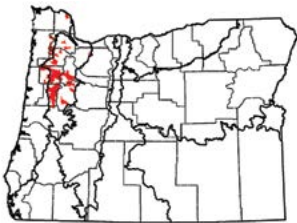


ECOREGIONS: Coast Range and Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G2-G3/Yes

PHYSICAL DESCRIPTION: An erect herb is 16 to 40 inches tall. Its flowers are rose-colored, with petals clustered at the end of a tall spike. The calyx (the green structure at the base of the flower petals that encloses the floral bud) is purple-tinged, nearly smooth and sometimes with stellate hairs (star-like, with radiating branches). The stems are several in number, with short, straight hairs at the base (they may be absent). There are leaves at the base, roundish with lobed margins. Leaves on the stem have deeply divided segments

PREFERRED FOREST HABITAT: Grassy areas from valley bottomlands to mid-elevation, open meadows within Douglas-fir, and hemlock-type forested communities.



Fawn lily, Coast Range (*Erythronium elegans*)



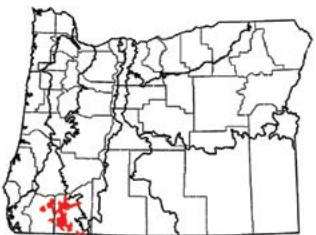
ECOREGION: Coast Range

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/T/
G2/Yes

PHYSICAL DESCRIPTION: A perennial, slender, erect herb, about 6 to 12 inches tall. Its flowers are pinkish-white and nodding, one to two and sometimes four in number; the petals are reflexed (bent backward) in bright sunshine, but only spreading in shadier lighting. The petals have a bright, narrow yellow stripe around the base, and are often reddish on the back. Flowering plants have two leaves, lying prone on the ground, 3 to 5 and sometimes 6 inches long, $\frac{3}{4}$ to 2 and sometimes 3 inches wide, usually uniformly deep green or mottled with a few pale lines.

PREFERRED FOREST HABITAT: Meadows, rocky cliffs, brushlands and open coniferous forests.

Fritillary, Gentner's (*Fritillary gentneri*)



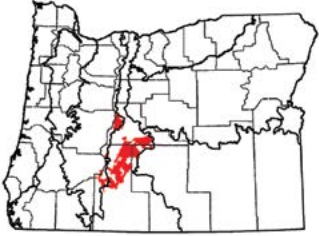
ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): E/E/G1/Yes

PHYSICAL DESCRIPTION: A perennial, erect herb, 20 to 38 inches tall. Its flowers are mostly purple-red with some light yellow mottling, one to five in number. Individual flower petals spread at the tip but are not generally curled backward. It has a single stem, green to purple, red below ground. The leaves are whorled (attached from the same site on the stem), with three to five per whorl.

PREFERRED FOREST HABITAT: Openings in oak woodlands, mixed conifer-deciduous or conifer forests.

Grape-fern, pumice (*Botrychium pumicola*)



ECOREGIONS: East Cascades and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G3/Yes

PHYSICAL DESCRIPTION: A perennial, erect herb, about 3 to 4 inches tall, comprised of two distinct parts, a leafy non-reproductive blade and a spore-bearing segment with small, ball-like spore cases (sporangia). The leafy blade is leathery with a whitish-grayish appearance, without a stalk or nearly so, usually one but sometimes two, $\frac{3}{4}$ to 2 inches long, $\frac{3}{8}$ to 1- $\frac{1}{4}$ inches wide. The blade is deeply divided into threes, the central one being the largest, making the plant appear to have more than one leaf blade. The spore-bearing segment is much branched with spore cases, about the size of mustard seeds, arranged on two sides and appearing clustered. The entire segment is the same length or barely topping the leafy blade.

PREFERRED FOREST HABITAT: Pumice-derived soils in lodgepole pine-bitterbrush communities. Also on open ridgetops in raw pumice.

Howellia (*Howellia aquatilis*)



ECOREGION: Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G3/Yes

PHYSICAL DESCRIPTION: A delicate, glabrous aquatic annual with a flaccid, somewhat fistulose stem. Plants are rooted, naked below and branched above, the branches spreading or floating. Its leaves are narrowly linear, mostly entire or with a few slender teeth, and flaccid. Early flowers are submerged, cleistogamous (remaining closed), and located in the axils of ordinary leaves. Later flowers are emergent, borne on specialized branches with shorter and more or less verticillate leaves, and are chasmogamous (opening at maturity), bearing lavender or whitish, deeply dorsally cleft and five-lobed tubular corollas, 2 to 3 mm long.

PREFERRED FOREST HABITAT: Typically found at the edges of low-elevation vernal pools, generally in shaded areas.

Larkspur, peacock (*Delphinium pavonaceum*)



ECOREGION: Willamette Valley

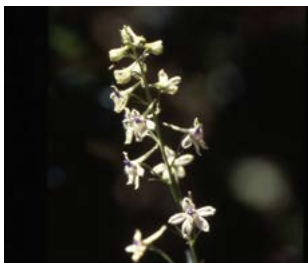
STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/E/
G1/Yes

PHYSICAL DESCRIPTION: A leafy perennial 11 to 35 inches tall that grows from a cluster of globose tubers. The deeply cleft leaves are mostly cauline, becoming bract-like above. Its flowers are arranged in a pyramidal raceme, with lower pedicels much longer than the upper ones. The sepals are white to cream, sometimes slightly greenish-blue on the back and greenish at the tip, and more or less reflexed to spreading. The lower petals are white or faintly bluish-tinged toward the base, and glandular-pubescent with a hairy tuft at the base of the blade. The upper petals are bluish to lavender-tipped.

PREFERRED FOREST HABITAT: Found in slightly higher and drier microhabitats within wet prairies and shady edges of Oregon ash and Oregon oak woodlands.



Larkspur, white rock (*Delphinium leucophaeum*)



ECOREGION: Willamette Valley

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/E/
G2/Yes

PHYSICAL DESCRIPTION: A perennial, slender, erect herb 8 to 24 inches, and sometimes up to 40 inches, tall. The flowers are mainly white to cream with a blue upper petal, with many flowers per plant. A prominent spur extends from the upper back. The lower petals are hairy throughout. Its stems are single, usually with fine, crisp hairs. The upper leaves are numerous, distributed evenly on the stem. The lower leaves are palm-shaped (from a central point), with deeply divided, linear segments.

PREFERRED FOREST HABITAT: Openings in or the edges of oak woodlands; also on cliffs and in rocky areas.



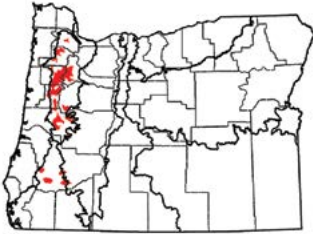
Lupine, Kincaid's (*Lupinus oreganus*)



ECOREGIONS: Willamette Valley and Klamath Mountains
STATUS (FEDERAL/STATE/NATURESERVE/OCS): T/T/G2/Yes

PHYSICAL DESCRIPTION: A perennial, erect herb, 12 to 40 inches tall. Its flowers are mainly purple or blue, often yellowish-cream on some parts, arranged on a spike, 4 to 7 inches long, extending above the leaves. The upper petal (banner) is ruffled. There are one or more stems, not branched. The leaves are palmate (radiating from the same point), with seven to 12 leaflets, and their upper surface is smooth, with long hairs on the underside. The stalks of the basal leaves are three to five times longer than the blade, and much longer than those of the upper leaves. Basal leaves are present at flowering.

PREFERRED FOREST HABITAT: Open grassy prairies and meadow edges, often near oak. In Douglas County, this lupine also grows in Douglas-fir and madrone woodlands.



Mariposa-lily, Cox's (*Calochortus coxii*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/E/G1/Yes

PHYSICAL DESCRIPTION: A perennial, erect herb, 6 to 9 inches tall. Its flowers are deeply cup-shaped and white to cream in color, typically with a tinge of pink at the inner base, one to four per plant, 1-½ to 3 inches in diameter. A band of white hairs immediately above the pink tinge is followed by another band of pink, with yellow hairs that grade to white at the petal's edges. The leaves are dark green and smooth on one side, with fine hairs in a row on the other, about 1 inch long and ¼ inch wide, arising from the base.

PREFERRED FOREST HABITAT: Restricted to serpentine soils, grasslands and openings in or the edges of mixed woodlands, often comprised of Jeffrey pine, Douglas-fir, incense cedar or madrone.



Mariposa-lily, Umpqua (*Calochortus umpquaensis*)



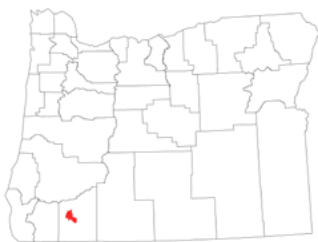
ECOREGIONS: Klamath Mountains and West Cascades

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/E/
G3/Yes

PHYSICAL DESCRIPTION: A perennial, erect herb 8 to 12 inches tall. Its flowers are shallow and cup-shaped, white to cream in color, with a noticeable dark purple-black spot at the inner bases of the petals, one to several per plant, about 1-½ inches long. The inner petal surface is hairy, dense and purple-colored near the base, sparser and white on the upper portion. The leaves are solitary and thin, smooth on one side with fine hairs in a row on the other, arising from the base.

PREFERRED FOREST HABITAT: Restricted to serpentine soils, grasslands, under open canopy and at the edges of mixed woodlands, often comprised of Jeffrey pine, Douglas-fir, incense cedar or madrone.

Meadowfoam, dwarf (*Limnanthes floccosa* ssp. *pumila*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/T/
G4/Yes

PHYSICAL DESCRIPTION: An annual herb with herbage glabrous throughout. Its stems are simple or sparingly branched near the base. The leaves are pinnately divided, with linear to oblanceolate leaflets. The peduncles are stout and glabrous. Its sepals are broadly lanceolate and are glabrous to sparse woolly-hairy within and glabrous without. The petals are white, oblong, rounded and less than or equal to the sepals in length. Each flower produces three to five ovoid nutlets that are wrinkled below. Depending on the rains and temperature, this species can be found flowering from the beginning of March to mid-April.

PREFERRED FOREST HABITAT: Typically grows along the edges of deep vernal pools. This species is associated with ancient basalt lava flows on Upper and Lower Table Rocks in Jackson County, above 1,950 feet.

Microseris, Howell's (*Microseris howellii*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/T/
G3/Yes

PHYSICAL DESCRIPTION: A taprooted perennial 4 to 20 inches tall, usually with a single, slender, erect stem branched proximally and often distally. Its leaves are chiefly basal, linear to narrowly lanceolate or oblanceolate. The flower heads are nodding before anthesis and bear eight to 30 yellow ray flowers.

PREFERRED FOREST HABITAT: Occurs on slopes or flat ground with varying exposures. This species is found in rocky serpentine soils at approximately 980-3,280 feet.



Milkvetch, Peck's (*Astragalus peckii*)



ECOREGIONS: East Cascades and Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/T/
G3/Yes

PHYSICAL DESCRIPTION: A prostrate perennial with a deep taproot. The reddish stems are about an inch long, and leaves are pinnately compound, with eight to 14 leaflets per leaf. Leaf petioles persist from year to year, giving the plants a skeletal look during winter dormancy. Mature plants produce small cream or pale yellow flowers in numerous axillary racemes of five to nine flowers. Flowers are shaped like butterflies, and fruits resemble very small pea pods. Plants begin to produce new leaves in March, and flowers begin to open in late May or early June and can continue blooming through July.

PREFERRED FOREST HABITAT: Grows in natural openings of sagebrush-juniper woodlands, lodgepole pine forests and ponderosa pine forests. Soils in preferred sites are sandy, with little organic matter and varying amounts of pumice deposition.



Milkvetch, South Fork John Day (*Astragalus diaphanus* var. *diurnus*)



ECOREGION: Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): None/T/G5/Yes

PHYSICAL DESCRIPTION: A taprooted annual, or possibly short-lived perennial, with stems 4 to 15 inches long. Its leaves are slender petioles. The leaflets number nine to 15 and are oblong to obovate, glabrous above and strigose beneath. Its racemes are short, with few flowered, and are borne on peduncles mostly shorter than the leaves.

PREFERRED FOREST HABITAT: This species occurs on barren ash in stream-bottom habitat of the South Fork of the John Day River.



Pine, whitebark (*Pinus albicaulis*)

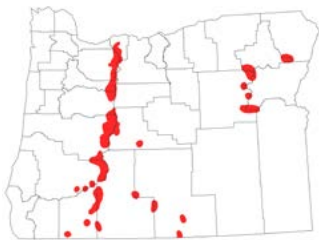


ECOREGIONS: Blue Mountains, West Cascades, East Cascades and Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): C/None/G3G4/No

PHYSICAL DESCRIPTION: A five-needled conifer species, typically 16 to 66 feet tall with a rounded or irregularly spreading crown shape. One of five species of stone pines worldwide, whitebark pine is the only stone pine that occurs in North America. The whitebark pine's characteristic dark-brown to purple seed cones are 2 to 3 inches long and grow at the outer ends of its upper branches. The seeds are dispersed almost exclusively by Clark's nutcrackers (*Nucifraga columbiana*), a jay-like bird of high-altitude forest habitats.

PREFERRED FOREST HABITAT: Typically found growing at alpine timberline or with other high-mountain conifers just below the timberline and upper montane zone. Isolated stands of whitebark pine are known from the Blue and Wallowa mountains in northeastern Oregon, and the subalpine and montane zones of the Cascade and Klamath mountains in south-central Oregon, including Crater Lake National Park.



Rockcress, McDonald's (*Arabis macdonaldiana*)



ECOREGION: Klamath Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): E/E/G2/Yes

PHYSICAL DESCRIPTION: A mat-forming perennial species, usually with several simple stems growing from a branched caudex. Basal leaves are arranged in rosettes. Fragrant flowers are arranged in a simple raceme and borne on pedicels about 1/3 of an inch long. Its sepals are greenish or dark purple. The petals are crimson to purple in color.

PREFERRED FOREST HABITAT: Occurs in serpentine, fairly barren habitat, usually on steep, unstable slopes or dry, open woods. These sites are often recently disturbed and below 5,900 feet in elevation.



Thelypody, arrow-leaf (*Thelypodium eucosmum*)



ECOREGION: Blue Mountains

STATUS (FEDERAL/STATE/NATURESERVE/OCS): SOC/T/G2/Yes

PHYSICAL DESCRIPTION: A biennial or short-lived perennial arising from a spreading rootstock. Plants are often purplish. Its flower buds are purple and oblong-linear. The sepals are lilac-purple, erect and linear-oblong. The petals are dark purple, spatulate to oblanceolate, and attenuate at the base.

PREFERRED FOREST HABITAT: Occurs with western junipers along streambanks, seasonally moist areas, seeps and under isolated juniper trees away from obvious moisture.



Photography credits

Animals:

Aimee McIntyre – Cope's giant salamander.

Ashok Khosla – willow flycatcher.

Audubon Society (Manuel Marin) – black swift.

Background Pictures (www.backgroundpictures.org) – great gray owl.

Bat Conservation International – hoary bat, long-eared myotis, pallid bat, silver-haired bat, spotted bat and Townsend's western big-eared bat (Merlin D. Tuttle), Yuma myotis (Michael Durham).

Bert Gildart – red tree vole.

Bureau of Land Management – yellow-breasted chat.

California State Parks – western gray squirrel.

California Academy of Sciences – Pacific shrew (Manzanita Image Project), Vernal pool fairy shrimp (Vic Smith).

California Dept. of Fish and Wildlife (William Grenfell) – California mountain kingsnake.

Defenders of Wildlife – gray wolf.

Eugene Wier – Siskiyou short-horned grasshopper.

Gary Botello – juniper titmouse.

Gary Nafis – clouded salamander, coastal tailed frog, Columbia spotted frog, Columbia torrent salamander, common kingsnake, Del Norte salamander, foothill yellow-legged frog, Larch Mountain salamander, northern leopard frog, northern alligator lizard, Rocky Mountain tailed frog, Siskiyou Mountain salamander, southern torrent salamander and western toad.

Glen Jones – bald eagle.

H. Ulmschneider and R. Dixon – pygmy rabbit.

Jacob Spendelow – white-headed woodpecker and yellow-billed cuckoo.

Josh Johnson – Oregon slender salamander.

Keith Williams – Canada lynx.

Ken Bevis – Cascades frog.

Larry Basden (courtesy Cornell Lab of Ornithology) – chipping sparrow.

Larry Pecenka – great blue heron.

Laura Todd – Oregon spotted frog.

Mark Penninger – American pika.

Melissa Carr – peacock larkspur.

Montana Natural Heritage Program (Alexis McEwan) – western small-footed myotis.

Northwest Habitat Institute – northern pocket gopher.

Oregon Department of Fish and Wildlife – western pond turtle and osprey.

Oregon Department of Forestry – little brown bat.

Pacific Analytics, LLC 2005 – Roth's blind ground beetle.

Pbonenfant – American three-toed woodpecker.

Peter Knapp – mountain quail.

Reed Ojala-Barbour – Cascade torrent salamander.

Rich and Buskirk – Oregon silverspot butterfly.

Rich Hatfield (The Xerces Society) – western bumble bee.

Richard Forbes – black-tailed jackrabbit, fisher, shrew, white-tailed deer and wolverine.

Roy Lowe – American peregrine falcon, band-tailed pigeon, harlequin duck and marbled murrelet.

Scott Attenbach – Fringed myotis and long-legged myotis.

Smithsonian Institute – Camas pocket gopher.

United States Army Corps of Engineers – Fender's blue butterfly.

United States Fish and Wildlife Service – acorn woodpecker, American marten, common nighthawk, flammulated owl, streaked horned lark, Lewis' woodpecker, monarch butterfly, northern red-legged frog, northern spotted owl, Oregon silverspot butterfly, purple martin, spruce grouse, western rattlesnake, western painted turtle and white-tailed jackrabbit (Tom Koerner, flicker.com).

Wikimedia – black salamander (Marshal Hedin), pileated woodpecker (D. Gordon and E. Robertson), Sierra Nevada red fox (U.S. Fish and Wildlife Service Pacific Southwest Region), western bluebird (Kevin Cole) and white-footed vole (Evan James).

Wikipedia – black-backed woodpecker (Cephas), northern goshawk (Norbert Kenntner), olive-sided flycatcher (Dominic Sherony), pocket gopher (Leonardo Weiss), ringtail (Robert Body), Northern sagebrush lizard, striped skunk and white-breasted nuthatch (naturepics.com).

William Leonard – minor Pacific sideband snail.

Plants:

Belinda Vos – Gentner's fritillary.

David Wagner – wayside aster.

Jean Siddall – Bristly-stemmed sidalcea.

Mary Douglass Stovall – Umpqua mariposa-lily.

Oregon Biodiversity Information Center – white rock larkspur, Nelson's checkermallow.

Oregon.gov (<https://data.oregon.gov/Natural-Resources/Oregon-listed-and-candidate-plants-complete-list/8s3k-ygh2/data>) – arrow-leaf thelypody, dwarf meadowfoam, howellia, Howell's microderis, McDonald's rockcress, Peck's milkvetch and South Fork John Day milkvetch.

Phil Phillips – Greene's mariposa-lily.

Stephen Anderson – Coast Range fawn-lily.

Sue Vrilakas – Dalles Mountain buttercup, pumice grape-fern.

The Oregon Flora Project:

Tom Kaye – Kincaid's lupine.

Mildred Thiele – Cox's mariposa-lily.

Wikipedia – whitebark pine.

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