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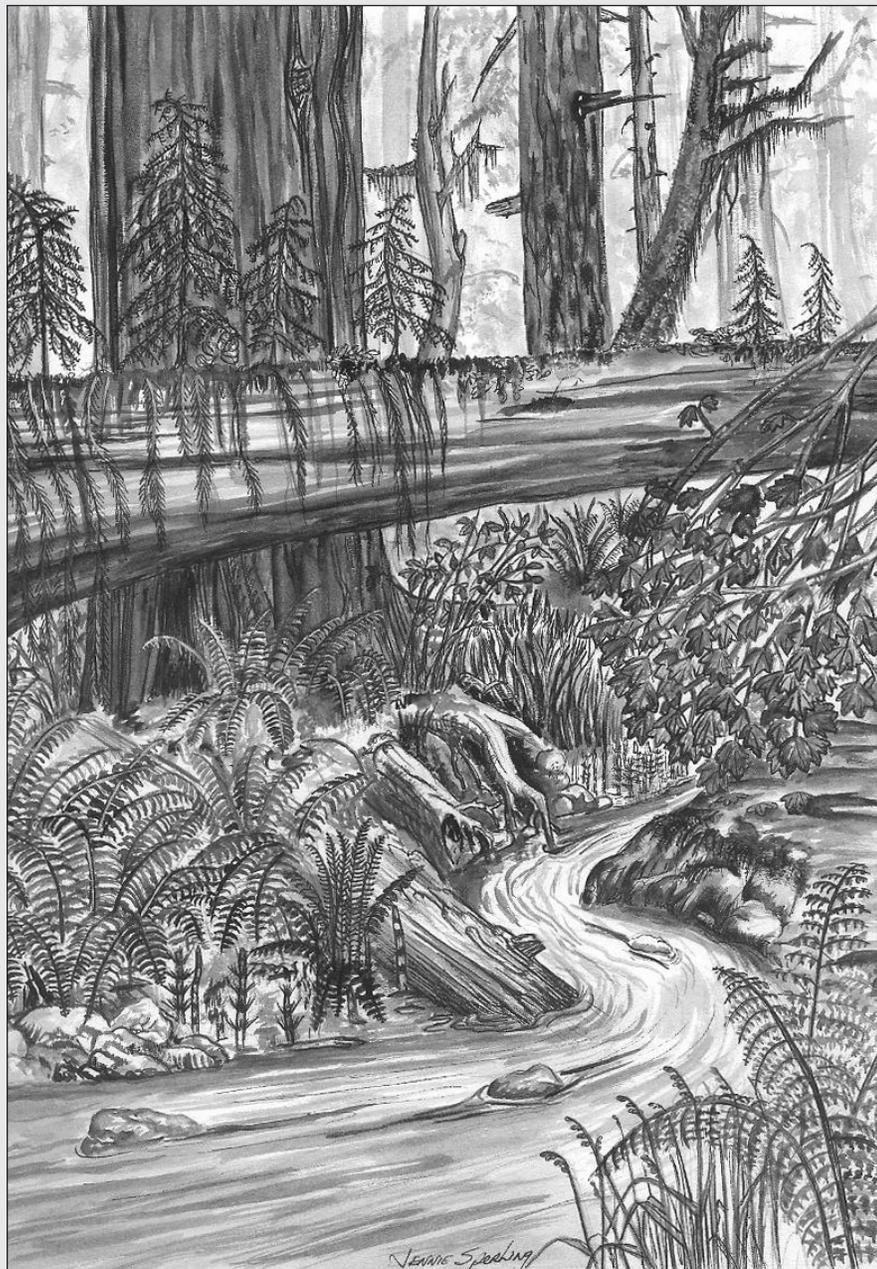
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# Cherry Creek Research Natural Area

## Guidebook Supplement 41

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Cover: Cherry Creek Research Natural Area. Original illustration by Jennie Sperling.

## Abstract

**Schuller, Reid; Sperling, Jennie; Rodenkirk, Tim. 2011.** Cherry Creek Research Natural Area: guidebook supplement 41. Gen. Tech. Rep. PNW-GTR-834. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 24 p.

This guidebook describes Cherry Creek Research Natural Area, a 239-ha (590-ac) area that supports old-growth Douglas-fir-western hemlock (*Pseudotsuga menziesii*-*Tsuga heterophylla*) forest occurring on sedimentary materials in the southern Oregon Coast Range. Major plant associations present within the area include the western hemlock/Oregon oxalis (*Oxalis oregana*) plant association, the western hemlock/evergreen huckleberry (*Vaccinium ovatum*) plant association, and the western hemlock/rhododendron-Oregon grape (*Rhododendron macrophyllum*-*Berberis nervosa*) plant association. A northern spotted owl population (*Strix occidentalis caurina*) also uses the area.

Keywords: Research natural area, area of critical environmental concern, riparian vegetation, old-growth Douglas-fir (*Pseudotsuga menziesii*), western hemlock/Oregon oxalis plant association, western hemlock/evergreen huckleberry plant association, western hemlock/rhododendron-Oregon grape plant association, *Tsuga heterophylla*/*Oxalis oregana*, *Tsuga heterophylla*/*Vaccinium ovatum*, *Tsuga heterophylla*/*Rhododendron macrophyllum*-*Berberis nervosa* plant association, northern spotted owl, *Strix occidentalis caurina*.

## Preface

The research natural area (RNA) described in this supplement<sup>1</sup> is administered by the Coos Bay District, Bureau of Land Management (BLM), U.S. Department of the Interior.

Cherry Creek RNA is part of a federal system<sup>2</sup> of natural areas established for research and educational purposes.<sup>3</sup> Of the 183 federal RNAs established in Oregon and Washington, 45 are described in *Federal Research Natural Areas in Oregon and Washington: A Guidebook for Scientists and Educators* (see footnote 1). This report is a supplement to the guidebook.

Each RNA is a site where ecological elements<sup>4</sup> are protected or managed for scientific purposes and natural processes are allowed to dominate. Their main purposes are to provide:

- Baseline areas against which effects of human activities can be measured or compared.
- Sites for study of natural processes in undisturbed ecosystems.
- Gene pool preserves for all types of organisms, especially for those that are rare and endangered.

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<sup>1</sup> Supplement No. 41 to Franklin, J.F.; Hall, F.C.; Dyrness, C.T.; Maser, C. 1972. Federal research natural areas in Oregon and Washington: a guidebook for scientists and educators. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 498 p.

<sup>2</sup> Six federal agencies cooperate in this program in the Pacific Northwest: U.S. Department of the Interior, Bureau of Land Management, Fish and Wildlife Service, and National Park Service; U.S. Department of Agriculture, Forest Service; U.S. Department of Energy; and U.S. Department of Defense. In addition, the federal agencies cooperate with state agencies and private organizations in Oregon and Washington in the Pacific Northwest Interagency Natural Area Committee. Taken from Wilson, T.M.; Schuller, R.; Holmes, R.; Pavola, C.; Fimbel, R.A.; McCain, C.A.; Gamon, J.G.; Speaks, P.; Seevers, J.I.; DeMeo, T.E.; Gibbons, S 2009. Interagency strategy for the Pacific Northwest Natural Areas Network. Gen. Tech. Rep. PNW-GTR-798. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 33 p.

<sup>3</sup> Federal Committee on Ecological Reserves. 1977. A directory of the research natural areas on federal lands of the United States of America. Washington, DC: U.S. Department of Agriculture, Forest Service.

<sup>4</sup> Elements are the basic units represented in a natural area system. An element may be an ecosystem, community, habitat, or organism. Adapted from Oregon Natural Heritage Program [ONHP]. 2003. Oregon natural heritage plan. Salem, OR: Department of State Lands. 167 p.; and Dyrness, C.T.; Franklin, J.F.; Maser, C.; Cook, S.A.; Hall, J.D.; Faxon, G. 1975. Research natural area needs in the Pacific Northwest: a contribution to land-use planning. Gen. Tech. Rep. PNW-38. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 231 p.

The guiding principle in managing RNAs is to maintain natural ecological processes or conditions for which the sites were designated. Timber harvesting and uncontrolled grazing are not allowed, nor is public use that might impair scientific or educational values. Management practices necessary to maintain or restore ecosystems may be allowed.

Federal RNAs provide a unique system of publicly owned and protected examples of undisturbed ecosystems where scientists can conduct research with minimal interference and reasonable assurance that investments in long-term studies will not be lost to logging, land development, or similar activities. Scientists and educators wishing to visit or use this RNA for scientific or educational purposes should contact the Coos Bay BLM District Manager in advance and provide information about research or educational objectives, sampling procedures, and other prospective activities. Research projects, educational visits, and collection of specimens from the RNA all require prior approval. There may be limitations on research or educational activities.

A scientist or educator wishing to use the RNA is obligated to:

- Obtain permission from the appropriate administering agency before using the area (see footnote 2).
- Abide by the administering agency's regulations governing use, including specific limitations on the type of research, sampling methods, and other procedures.
- Inform the administering agency on progress of the research, published results, and disposition of collected materials.

The purpose of this approval process is to:

- Ensure that the ecological integrity and scientific and educational values of the tract are not compromised.
- Allow the agency to document research or educational use of the tract.
- Help promote the dissemination and use of information collected at the site.
- Avoid conflict between ongoing studies and activities.

Appropriate uses of RNAs are determined by the administering agency (see footnote 2). Analysis involving destruction of vegetation is generally not allowed, nor are studies requiring extensive substrate modification such as extensive soil excavation. Collection of plant and animal specimens is generally restricted to voucher specimens or approved research activities. Under no circumstances may collecting significantly reduce species populations. Collecting must also be carried out in accordance with all other federal and state agency regulations.

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## Introduction

Cherry Creek Research Natural Area (RNA) is a 239-ha (590-ac) area located in Coos County, Oregon (fig. 1). The site was established in 1965 (Franklin et al. 1972) as an RNA, and the designation was reaffirmed by the Coos Bay District Resource Management Plan (USDI BLM 1995). A short guidebook was written for the area in 1972 (Franklin et al. 1972). Since that time, more comprehensive information has been compiled for the area, including a plant association guide for the northern Oregon Coast Range coniferous forests (McCain and Diaz 2002), and publication of the Oregon Natural Heritage Plan (ONHP 2003).

The original rationale for designating this site as an RNA was that it exemplified old-growth Douglas-fir-western hemlock (*Pseudotsuga menziesii*-*Tsuga heterophylla*) forest occurring on sedimentary materials in the southern Oregon Coast Range (Franklin et al. 1972). Recent inventory and classification (McCain and Diaz 2002) work has provide further basis for protecting the important elements<sup>1</sup> occurring within the RNA. These are listed in the 2003 Natural Heritage Plan (ONHP 2003) as:

- Western hemlock/Oregon oxalis (*Oxalis oregana*) plant association.
- Western hemlock/rhododendron-Oregon grape (*Berberis nervosa*-*Rhododendron macrophyllum*) plant association.
- Northern spotted owl (*Strix occidentalis caurina*).

## Access and Accommodations

From the intersection of Oregon State Highway 42 and N Central Boulevard in Coquille, Oregon, set odometer at 0 and proceed on N Central Boulevard for 1.3 km (0.8 mi) and turn right onto Fairview Road. Continue to 15.3 km (9.5 mi) on Fairview Road to the intersection at Four Corners. At Four Corners, turn right onto Lone Pine Road and continue to 26.1 km (16.2 mi) to the intersection with Cherry Creek Road (gravel) and turn left onto Cherry Creek Road. At 29 km (18.0 mi), take left fork at “Y.” At 30.6 km (19.0 mi), take left fork (do NOT cross bridge at this point). Continue to 32.8 km (20.4 mi) and cross the bridge over Cherry Creek. At 34.4 km (21.4 mi), pull off and park along the road shoulder (fig. 1). Upper elevations of the RNA may be accessed via Bureau of Land Management roads 27-11-27, 27-10-18, and 27-11-12. Maps and additional directions to the area are also available at the Coos Bay District office once permission to access the area has been granted. Lodging is available in Coquille, Coos Bay, and North Bend, Oregon.

<sup>1</sup> Elements are the basic units represented in a natural area system. An element may be an ecosystem, community, habitat, or organism (Dyrness et al. 2003).

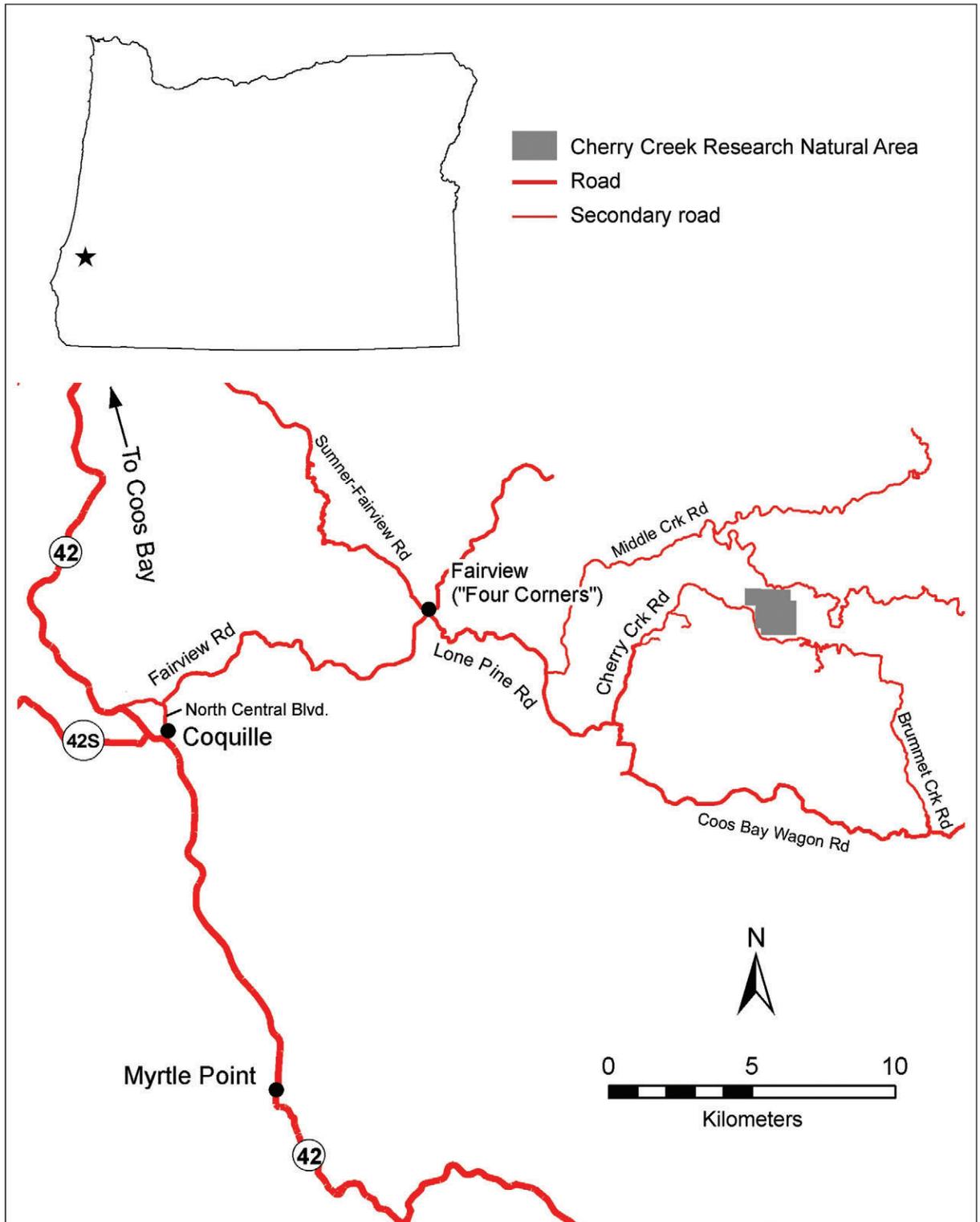


Figure 1—Cherry Creek Research Natural Area (RNA) location and access.

## Environment

The RNA includes first- to third-order stream reaches and adjoining upper slopes of the North Fork Cherry Creek drainage basin, and limited portions of the South Fork Cherry Creek basin. Elevations range from 190 m (623 ft) located along the northwestern boundary (fig. 2) adjacent to an abandoned recreational site along the main access road into the area to 450 m (1,476 ft) along the divide separating the North Fork and South Fork drainages in the south-central portion of the RNA. Slopes incline steeply toward the riparian basins, which drain toward the west.

Sedimentary rock underlies the entire natural area. Bedrock consists of massive, rhythmically bedded, micaceous lithic sandstone and siltstone of the Flournoy Formation of lower to middle Eocene age, roughly 50 million years before present. The Flournoy Formation is unconformable over the Lookingglass Formation and is overlain and unconformable with the Tyee Formation (Baldwin et al. 1973).

Soils are relatively deep, and are developed in colluvium and residuum derived from the underlying siltstone and sandstone bedrock. Depth to bedrock is 100 to 150 cm (40 to 60 in). The Bohannon soil series with Preacher, Milbury, and Umpcoos associations occupies the majority of the site (USDA NRCS 2010a). A typical profile of the Bohannon series follows (table 1) (USDA NRCS 2010b).

## Climate

The climate is characterized by cool, wet winters and warm, moist summers tempered by the influence of cyclonic westerlies that approach the Oregon Coast Range from the Pacific Ocean. Precipitation occurs primarily as rain and averages 1507 mm (59.3 in) per year. Winters are dominated by low-pressure systems, and conditions are wet and cool, with extended periods of cloudiness and heavy periods of precipitation. Average winter minimum temperatures of 1.8 °C (35.3 °F) occur in January. Temperature extremes are muted, and diurnal fluctuations are minor: 6 °C to 10 °C (11 °F to 18 °F) (Franklin and Dyrness 1988). Winter snow occurs at higher elevations from November through February, with the majority of snowfall occurring between January and February (table 2). Average annual snowfall is 51 mm (2.0 in) (WRCC 2010). During the drier, summer months, storm tracks move northward, resulting in dominant high-pressure systems with extended periods of warm, dry weather. Average summer maximum temperatures of 25.3 °C (77.5 °F) occur in July. Advection fog often occurs in the summer and may extend into lower elevation valleys of the Coast Range. Only 5 percent of the total average precipitation occurs during the June through August period (table 1) (WRCC 2010). The nearest weather station to the RNA is the Dora 2 West Oregon (352370) weather station located about 16 km (10 mi) to the south of Cherry Creek RNA at the same elevation as the lower portions of the RNA.

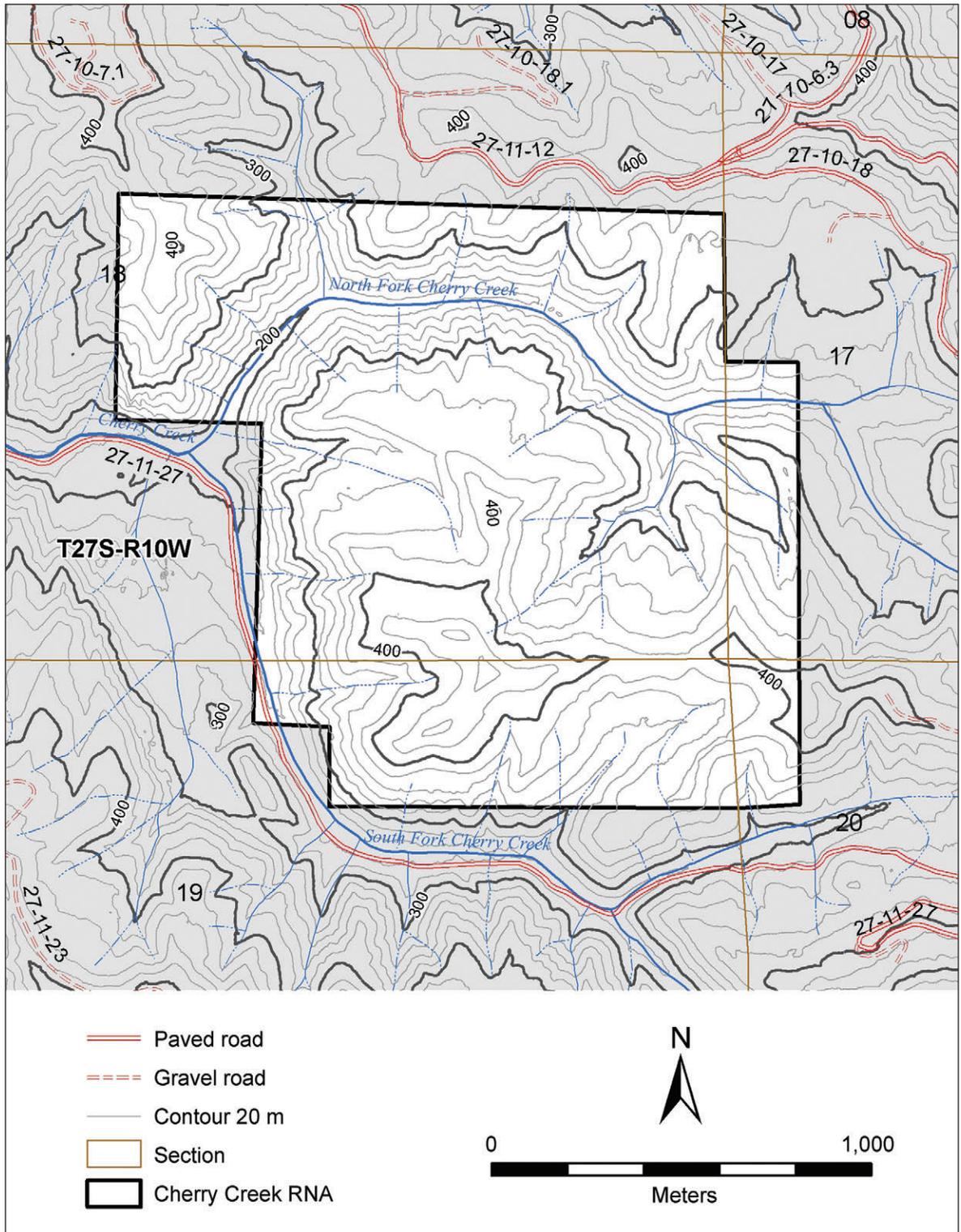


Figure 2—Cherry Creek Research Natural Area (RNA) topography and boundary.

**Table 1—Generalized soil profile of the Bohannon series, Oregon Coast Range**

Horizon	Depth	Characteristics
Oi	0 to 1 in	Intermittent horizon of freshly fallen needles and fern fronds.
A	1 to 5 in	Dark brown (10YR 3/3) gravelly medial loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; slightly hard, friable, nonsticky and nonplastic; weakly; smeary common roots; many fine and very fine irregular pores; 20 percent gravel; moderately acid (pH 5.9); abrupt smooth boundary.
AB	5 to 12 in	Dark brown (10YR 3/3) gravelly medial loam, brown (10YR 4/3) dry; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; weakly smeary; common roots; common fine and very fine irregular pores; 20 percent gravel, cobbles, and stones; moderately acid (pH 6.0); clear smooth boundary.
Bw	12 to 18 in	Dark brown (7.5YR 3/4) gravelly loam, brown (10YR 5/3) dry; weak very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common roots; many fine pores; few, fine, distinct darker colored coatings in pores; 20 percent gravel, cobbles, and stones; moderately acid (pH 6.0); clear smooth boundary.
Bc	18 to 25 in	Brown (7.5YR 4/4) gravelly loam, yellowish brown (10YR 5/4) dry; weak very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common roots; many fine pores; few, fine distinct darker colored coatings in pores; 30 percent gravel, cobbles, and stones; moderately acid (pH 6.0); clear smooth boundary.
Cr1	25 to 59 in	Fractured sandstone with dark yellowish brown (10YR 4/4) loam in fractures; soil material similar to above horizon and accounts for about 10 percent of the horizon; fractured at intervals of 18 to less than 40 inches; gradual irregular boundary.
Cr2	> 59 in	Moderately cemented, partially weathered arkosic; sandstone fractured at intervals of 18 to less than 40 inches.

Source: USDA NRCS 2010b.

**Table 2—Temperature and precipitation summary for the Dora 2 W, Oregon (352370) weather station near Cherry Creek Research Natural Area<sup>a</sup>**

Average minimum January temperature	1.8 °C (35.3 °F)
Average maximum January temperature	12 °C (53.6 °F)
Average minimum July temperature	10.6 °C (51.0 °F)
Average maximum July temperature	25.3 °C (77.5 °F)
Average annual precipitation	1507 mm (59.34 in)
Average June–August precipitation	75 mm (2.94 in)
Average annual snowfall	51 mm (2.0 in)

<sup>a</sup> Period of record: 5/21/1969 to 4/30/1999 – Dora 2 W, Oregon (352370).

## Vegetation

Two primary forest plant associations occur within the RNA: western hemlock/Oregon oxalis (fig. 3), and western hemlock/evergreen huckleberry (fig. 4; sensu McCain and Diaz 2002). Upper side slopes and narrow ridgetops also support a western hemlock-Douglas-fir/Pacific rhododendron-Oregongrape plant association. This latter community typically occupies south- and west-facing slopes and includes small hardwoods such as tanoak (*Lithocarpus densiflorus*) and giant chinquapin (*Chrysolepis chrysophylla*) (Franklin et al. 1972).

About 3.2 km (2 mi) of riparian vegetation occurs along the North Fork and the South Fork of Cherry Creek within the RNA. Typical vegetation includes ladyfern (*Athyrium filix-femina*), salmonberry (*Rubus spectabilis*), Siberian miner's lettuce (*Claytonia sibirica*), oneleaf foamflower (*Tiarella trifoliata* var. *unifoliata*), and slough sedge (*Carex obnupta*) (fig. 5).



Figure 3— Douglas-fir (*Pseudotsuga menziesii*) and western hemlock (*Tsuga heterophylla*) dominate the forest overstory and western swordfern (*Polystichum monitum*) and Oregon oxalis (*Oxalis oregana*) occupy major portions of the forest understory within the western hemlock/Oregon oxalis plant association.

Four 0.1-ha (2.47-ac) long-term monitoring plots were established in 2009 to quantify forest stand structure and composition. Plots were distributed across the full elevation gradient found within the RNA (table 3). Douglas-fir, western hemlock, and western redcedar (*Thuja plicata*) were the dominant overstory trees throughout the natural area. Other trees included California laurel (*Umbellularia californica*), and bigleaf maple (*Acer macrophyllum*). Douglas-firs averaged 125 to 175 cm (50 to 70 in) diameter at breast height (d.b.h.)<sup>2</sup> and western redcedars averaged 69 to 112 cm (27 to 44 in) d.b.h. Western hemlocks were the most common small and mid-sized trees in the understory and midstory based upon d.b.h. Tree regeneration was sparse in closed forest stands (table 4).

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<sup>2</sup> Diameter at breast height is a measurement taken at 1.47 m above the ground.



Figure 4—Douglas-fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*) dominate the forest canopy, and Pacific rhododendron (*Rhododendron macrophyllum*) and evergreen huckleberry (*Vaccinium ovatum*) are well represented in the shrub layer within the western hemlock/evergreen huckleberry plant association.



Figure 5—Riparian vegetation along the South Fork Cherry Creek with salmonberry (*Rubus spectabilis*), western swordfern (*Polystichum monitum*), and ladyfern (*Athyrium filix-femina*) comprising a major portion of the forest understory vegetation along with a variety of less conspicuous but typical herbaceous species.

**Table 3—Physiographic attributes of four permanent plots sampled in 2009, Cherry Creek Research Natural Area**

Plot number	990	991	992	993
Elevation (m)	259	342	400	346
Aspect (degrees)	272	244	170	120
Slope grade (degrees)	36	29	16	16
Slope position	Lower 1/3	Upper 1/3	Upper 1/3	Upper 1/3

**Table 4—Size class density and median diameters of live trees occurring within four permanent 0.1-ha monitoring plots, Cherry Creek Research Natural Area**

Species	Plot 990				Plot 991			
	Small saplings <sup>a</sup>	Large saplings	Live trees	Median d.b.h. (cm)	Small saplings	Large saplings	Live trees	Median d.b.h. (cm)
TSHE <sup>b</sup>	0	0	16	20.3	3	0	9	20.1
PSME	0	0	3	145.3	0	0	5	156.0
THPL	0	0	4	107.8	0	0	2	70.1
UMCA	1	1	0	0	1	1	5	14.1
ACMA	0	0	1	32.2	0	0	0	0

Species	Plot 992				Plot 993			
	Small saplings <sup>a</sup>	Large saplings	Live trees	Median d.b.h. (cm)	Small saplings	Large saplings	Live trees	Median d.b.h. (cm)
TSHE <sup>b</sup>	0	0	28	18.8	0	0	16	25.9
PSME	0	0	4	165.9	0	0	5	124.4
THPL	0	0	4	111.5	0	0	3	69.3
UMCA	0	0	5	31.9	1	0	7	35.6
ACMA	0	0	0	0	0	0	0	0

<sup>a</sup> Small saplings = 0.1 to 1.47 m tall, large saplings = < 5 cm diameter at breast height (d.b.h.) and > 1.47 m tall; live trees = ≥ 5 cm d.b.h.

<sup>b</sup> TSHE = *Tsuga heterophylla*, PSME = *Pseudotsuga menziesii*, THPL = *Thuja plicata*, UMCA = *Umbellularia californica*, ACMA = *Acer macrophyllum*.

Understory shrub cover was sparse to moderate (table 5). Major tall shrubs included Pacific rhododendron (*Rhododendron macrophyllum*), and vine maple (*Acer circinatum*). Low to mid-sized shrubs were locally dominant in small patches. These included evergreen huckleberry (*Vaccinium ovatum*), red huckleberry (*Vaccinium parvifolium*), and Oregon grape (*Berberis nervosa*). The herbaceous understory was low in species diversity and dominated by Oregon oxalis (*Oxalis oregana*) and western swordfern (*Polystichum munitum*).

A full list of scientific (FNA 1993+; Oregon Flora Project 2010) and common names (USDA NRCS 2010b) for vascular plants (app. 1) and bryophytes and lichens (Esslinger 2009, McCune and Geiser 2009, Missouri Botanical Garden 2010; app. 2) known or likely to occur within the area is provided at the end of the document.

**Table 5—Understory cover and frequency within four permanent vegetation plots, Cherry Creek Research Natural Area**

	TSHE/OXOR <sup>a,b</sup>				TSHE/VAOV2 <sup>a,b</sup>			
	Plot 990		Plot 991		Plot 992		Plot 993	
	Cover	Frequency	Cover	Frequency	Cover	Frequency	Cover	Frequency
	<i>Percent</i>							
Shrub cover: <sup>c</sup>								
<i>Acer circinatum</i>	+	—	4	—	2	—	—	—
<i>Berberis nervosae</i> <sup>d</sup>		—	—	—	1	—	1	—
<i>Vaccinium ovatum</i>	3	—	3	—	23	—	16	—
<i>Vaccinium parvifolium</i>	4	—	—	—	—	—	—	—
<i>Rhododendron macrophyllum</i>		—	—	—	7	—	—	—
Herb cover and frequency: <sup>c</sup>								
<i>Oxalis oregana</i>	15	75	13	89			3	36
<i>Polystichum munitum</i>	25	75	43	89	12	36	22	68
<i>Streptopus amplexifolius</i> var. <i>americanus</i>	+	4	+	4				
<i>Trillium ovatum</i>	+	4						
<i>Achlys triphylla</i>	+	4						
<i>Vancouveria hexandra</i>	+	4						

<sup>a</sup> TSHE = *Tsuga heterophylla*, OXOR = *Oxalis oregana*, VAOV2 = *Vaccinium ovatum*, + = trace (< 0.5 percent foliar cover), — = data not collected.

<sup>b</sup> Plant association assigned based on potential vegetation dominants in forest overstory and understory sensu McCain and Diaz (2002).

<sup>c</sup> Cover is expressed as percentage of foliar cover; frequency is expressed in percentage to reflect the proportion of 2 × 5 decimeter microplots in which a species occurs compared to the total number of microplots sampled. Zero values are not included.

<sup>d</sup> Some taxonomic authorities use *Mahonia nervosa* (USDA NRCS 2010c).

## Fauna

Amphibians, reptiles, birds, and mammals known or expected to occur within the RNA are listed in appendix 3. These lists have been derived from field observations by local BLM staff and published literature (Csuti et al. 1997).

## Disturbance History

Road construction and maintenance along the RNA boundary have influenced adjoining slopes adjacent to the northern boundary. There is no evidence that stand-replacing wildfires have affected the site for at least the past 220 years. Similarly, there is little evidence of windthrow along the RNA boundary or extensive damage to the forest interior from bark beetles such as Douglas-fir beetle (*Dendroctonus pseudotsugae*), or western redcedar bark beetles (*Phloeosinus* spp.) (Franklin et al. 1972).

Elk (*Cervus elaphus*) heavily use the area and influence the forest understory through their browsing and trampling activities (Franklin et al. 1972).

## Research History

In addition to the vascular plant, bryophyte and lichen field inventories (app. 1, 2, and 3) completed for the area, the following research and monitoring projects have been undertaken within the Cherry Creek RNA (Greene et al. 1986):

Unpublished vegetation monitoring data. (Schuller, R.; Greene, S.; Sperling, J.; Rodenkirk, T. 2009).

Large wood recruitment and redistribution in headwater streams of the Oregon Coast Range, U.S.A. (May, C.L.; Gresswell, R.E. 2003).

Patterns of coarse woody debris in a chronosequence of Douglas-fir stands in the western Cascades of Oregon and Washington. (Spies, T.A.; Franklin, J.F.; Thomas, T.B. [and others]. 1985).

Cherry Creek stream discharge data. (Oregon Water Resources Department 1983 to 1996).

Summer water temperature. (Bureau of Land Management, Coos Bay District. 1997, 1999, and 2000).

Studies on the incidence of coniferous needle endophytes in the Pacific Northwest. (Carroll, G.C.; Carroll, F.E. 1978).

The location, composition, and structure of old-growth forests of the Oregon Coast Range. (Juday, G.P. 1976).

## Maps

Maps applicable to Cherry Creek RNA: Topographic—Dora, Oregon 7.5 minute, 1:24,000 scale, 2006; Bureau of Land Management Coos Bay District transportation map, 15-minute, 1:63,360 scale, 2008.

## Acknowledgments

We thank the following people for their time and expertise on the project: John Guetterman, geographic information specialist, Bureau of Land Management (BLM) Coos Bay District, who created the maps that appear as figures 1 and 2; and Holly Witt, wildlife biologist, BLM Coos Bay District, for review and improvement of the list of animals in appendix 3. We also thank the three manuscript reviewers: Todd Wilson, wildlife biologist and research natural area coordinator, U.S. Forest Service (USFS), Pacific Northwest (PNW) Research Station; Susan Carter, botanist, BLM Roseville District; and Ron Halvorson (retired), botanist, BLM Prineville District. We also acknowledge the BLM Coos Bay District for funding this project and the USFS PNW Research Station for publishing this guidebook supplement.

## English Equivalentents

1 hectare (ha) = 2.47 acres (ac)

1 kilometer (km) = 0.62 mile (mi)

1 meter (m) = 3.28 feet (ft)

1 centimeter (cm) = 0.394 inch (in)

1 millimeter (mm) = 0.0394 inch

Degrees Celsius (°C) = 0.56 (degrees Fahrenheit – 32)

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## Appendix 1: Plants<sup>1 2</sup>

Scientific name	Common name
Coniferous trees:	
<i>Pseudotsuga menziesii</i> (Mirb.) Franco	Douglas-fir
<i>Taxus brevifolia</i> Nutt.	Western yew
<i>Thuja plicata</i> Donn ex D. Don	Western redcedar
<i>Tsuga heterophylla</i> (Raf.) Sarg.	Western hemlock
Deciduous trees >8 m (26.3 ft) tall:	
<i>Acer macrophyllum</i> Pursh	Bigleaf maple
<i>Alnus rubra</i> Bong.	Red alder
<i>Corylus cornuta</i> Marsh var. <i>californica</i> (DC.) Sharp	California hazelnut
<i>Chrysolepis chrysophylla</i> (Dougl. ex Hook.) Hjelmq.	Giant chinquapin
<i>Lithocarpus densiflorus</i> (Hook. & Arn.) Rehd.	Tanoak
<i>Umbellularia californica</i> (Hook. & Arn.) Nutt.	California laurel
Tall shrubs 2 to 8 m (6.6 to 26.3 ft) tall:	
<i>Acer circinatum</i> Pursh	Vine maple
<i>Holodiscus discolor</i> (Pursh) Maxim.	Oceanspray
<i>Philadelphus lewisii</i> Pursh	Mock orange
<i>Rhamnus purshiana</i> (DC.) Cooper	Cascara buckthorn
<i>Rhododendron macrophyllum</i> D. Don ex G. Don	Pacific rhododendron
<i>Salix scouleriana</i> Barratt ex Hook	Scouler's willow
<i>Salix sitchensis</i> Sans. ex Bong.	Sitka willow
<i>Sambucus racemosa</i> L.	Red elderberry
Medium shrubs 0.5 to 2 m (1.6 to 6.6 ft) tall:	
<i>Baccharis pilularis</i> DC.	Coyotebrush
<i>Gaultheria shallon</i> Pursh	Salal
<i>Lonicera hispidula</i> (Lindl.) Dougl. ex Torr. & A. Gray	Honeysuckle
<i>Ribes bracteosum</i> Dougl. ex Hook.	Stink currant
<i>Ribes sanguineum</i> Pursh	Red-flowering currant
<i>Rosa gymnocarpa</i> Nutt.	Baldhip rose
<i>Rubus leucodermis</i> Dougl. ex Torr. & A. Gray	Whitebark raspberry
<i>Rubus parviflorus</i> Nutt.	Thimbleberry
<i>Rubus spectabilis</i> Pursh	Salmonberry
<i>Sambucus racemosa</i> L. var. <i>arborescens</i> (Torr. & Gray) A. Gray	Red elderberry
<i>Toxicodendron diversilobum</i> (Torr. & A. Gray) Greene	Poison oak
<i>Vaccinium ovatum</i> Pursh	Evergreen huckleberry
<i>Vaccinium parvifolium</i> Sm.	Red huckleberry
Low shrubs <0.5 m (1.6 ft) tall:	
<i>Berberis nervosa</i> Pursh	Oregongrape
<i>Rubus ursinus</i> Cham. & Schldtl.	California dewberry
Herbs (including ferns and allies):	
<i>Actaea rubra</i> (Ait.) Willd.	Baneberry
<i>Achlys californica</i> I. Fukuda & H.G. Baker	California vanilla leaf
<i>Achlys triphylla</i> (Sm.) DC.	Vanilla leaf; deer foot
<i>Adenocaulon bicolor</i> Hook.	American trail plant
<i>Adiantum pedatum</i> L.	Maidenhair fern
<i>Anaphalis margaritacea</i> (L.) Benth. & Hook.	Pearly everlasting
<i>Anemone deltoidea</i> Hook.	Columbian windflower

Scientific name	Common name
<i>Aquilegia formosa</i> Fisch. ex DC.	Red columbine
<i>Asarum caudatum</i> Lindl.	Wild ginger
<i>Athyrium filix-femina</i> (L.) Roth	Ladyfern
<i>Blechnum spicant</i> (L.) Sm.	Deer fern
<i>Cardamine oligosperma</i> T. & G.	Little western bittercress
<i>Circaea alpina</i> L.	Small enchanter's nightshade
<i>Cirsium remotifolium</i> (Hook.) DC.	Fewleaf thistle
<i>Cirsium vulgare</i> (Savi) Ten.	Bull thistle
<i>Claytonia sibirica</i> (L.) Howell	Siberian miner's lettuce
<i>Corallorhiza maculata</i> (Raf.) Raf. var. <i>maculata</i>	Spotted coralroot
<i>Crepis capillaris</i> (L.) Wallr.	Smooth hawkbeard
<i>Dicentra formosa</i> (Andr.) Walpers	Pacific bleeding heart
<i>Digitalis purpurea</i> L.	Foxglove
<i>Dryopteris carthusiana</i> (Vill.) H.P. Fuchs	Spinulose woodfern
<i>Epilobium ciliatum</i> Raf.	Purple-leaved willowherb
<i>Equisetum telmateia</i> Ehrh.	Giant horsetail
<i>Galium aparine</i> L.	Stickywilly
<i>Galium triflorum</i> Michx.	Sweet scented bedstraw
<i>Gnaphalium</i> sp.	Cudweed
<i>Goodyera oblongifolia</i> Raf.	Western rattlesnake plantain
<i>Heuchera micrantha</i> Lindley	Small-flowered alumroot
<i>Hieracium albiflorum</i> Hook.	White-flowered hawkweed
<i>Hydrophyllum tenuipes</i> A. Heller	Slender-stem waterleaf
<i>Hypochaeris radicata</i> L.	Hairy cat's-ear
<i>Iris tenax</i> Dougl.	Oregon iris
<i>Lotus corniculatus</i> L.	Bird's foot-trefoil
<i>Maianthemum racemosum</i> (L.) Link	Feathery false lily-of-the-valley
<i>Maianthemum stellatum</i> (L.) Link	Starry false lily-of-the-valley
<i>Marah oreganus</i> (Torr. & Gray) Howell	Wild cucumber
<i>Mimulus guttatus</i> DC.	Common monkeyflower
<i>Mitella caulescens</i> Nutt.	Leafy miterwort
<i>Mitella ovalis</i> Greene	Coastal miterwort
<i>Monotropa uniflora</i> L.	Indianpipe
<i>Montia parvifolia</i> (Moc. ex DC.) Greene	Streambank springbeauty
<i>Oxalis oregana</i> Nutt.	Oregon oxalis
<i>Oxalis trilliifolia</i> Hook.	Three-leaf wood sorrel
<i>Polypodium glycyrrhiza</i> DC. Eat.	Licorice fern
<i>Polystichum munitum</i> (Kaulf.) C. Presl	Western swordfern
<i>Prosartes smithii</i> (Hook.) Utech, Shinwari & Kawano	Smith's fairybells
<i>Prunella vulgaris</i> L. var. <i>vulgaris</i>	Self heal
<i>Pteridium aquilinum</i> (L.) Kuhn.	Brackenfern
<i>Ranunculus repens</i> L.	Creeping buttercup
<i>Ranunculus uncinatus</i> D. Don ex G. Don	Woodland buttercup
<i>Rumex obtusifolius</i> L.	Bitter dock
<i>Selaginella wallacei</i> Hieron.	Wallace's spikemoss
<i>Senecio vulgaris</i> L.	Common groundsel
<i>Senecio</i> sp.	Groundsel
<i>Sidalcea cusickii</i> Piper	Cusick's checkerbloom
<i>Silene</i> sp.	Catchfly
<i>Sonchus asper</i> (L.) Hill	Spiny sowthistle

Scientific name	Common name
<i>Stachys</i> sp.	Hedgenettle
<i>Stellaria crispa</i> Cham. & Schldl.	Curled starwort
<i>Stellaria longipes</i> Goldie	Long-leaved starwort
<i>Streptopus amplexifolius</i> (L.) DC.	Clasping twisted stalk
<i>Synthyris reniformis</i> (Douglas ex Benth.) Benth.	Snowqueen
<i>Tellima grandiflora</i> (Pursh) Dougl. ex Lindl.	Fringecup
<i>Thalictrum occidentale</i> A. Gray	Western meadowrue
<i>Tiarella trifoliata</i> L. var. <i>trifoliata</i>	Three-leaf foamflower
<i>Tiarella trifoliata</i> L. var. <i>unifoliata</i> (Hook.) Kurtz	Oneleaf foamflower
<i>Tolmiea menziesii</i> (Pursh) Torr. & A. Gray	Piggy back plant
<i>Torilis arvensis</i> (Huds.) Link ssp. <i>arvensis</i>	Spreading hedgeparsley
<i>Trientalis borealis</i> Raf. ssp. <i>latifolia</i> (Hook.) Hultén	Broadleaf starflower
<i>Trifolium</i> sp.	Clover
<i>Trillium ovatum</i> Pursh	Western trillium
<i>Vancouveria hexandra</i> (Hook.) Morr. & Dec.	Inside-out flower
<i>Viola glabella</i> Nutt.	Pioneer violet
<i>Viola sempervirens</i> Greene	Redwoods violet
<i>Whipplea modesta</i> Torr.	Common whipplea
<i>Xerophyllum tenax</i> (Pursh) Nutt.	Common beargrass
Grasses, sedges and rushes:	
<i>Agrostis</i> sp.	Bentgrass
<i>Alopecurus</i> sp.	Foxtail
<i>Bromus vulgaris</i> (Hook.) Shear	Columbia brome
<i>Carex hendersonii</i> L.H. Bailey	Henderson's sedge
<i>Carex leptopoda</i> Mack.	Taperfruit shortscale sedge
<i>Carex obnupta</i> L.H. Bailey	Slough sedge
<i>Danthonia californica</i> Bol.	California oatgrass
<i>Deschampsia danthonioides</i> (Trin.) Munro	Annual hairgrass
<i>Elymus glaucus</i> Buckley	Blue wildrye
<i>Festuca occidentalis</i> Hook.	Western fescue
<i>Festuca subulata</i> Trin.	Bearded fescue
<i>Glyceria striata</i> (Lam.) Hitchc.	Fowl mannagrass
<i>Hierochloa occidentalis</i> Buckley	California sweetgrass
<i>Holcus lanatus</i> L.	Common velvet grass
<i>Lolium perenne</i> L.	Perennial ryegrass
<i>Luzula comosa</i> E. Mey.	Pacific woodrush
<i>Luzula parviflora</i> (Ehrh.) Desv.	Small flowered woodrush
<i>Poa</i> sp.	Bluegrass
<i>Scirpus microcarpus</i> J. Presl & C. Presl	Panicled bulrush

<sup>1</sup> Compiled from 2009 field surveys by J. Sperling, T. Rodenkirk, and R. Schuller.

<sup>2</sup> Nomenclature for vascular plants, ferns, and fern-allies follows the *Flora of North America* (1993+) and the Oregon Flora Project Web site (2010). Common names follow USDA NRCS *Plants Database* (2010c).

## Appendix 2: Bryophytes and Lichens<sup>1,2</sup>

Scientific name	Authority
Hornworts:	
<i>Anthoceros fusiformis</i>	Austin
Liverworts:	
<i>Calypogeia azurea</i>	Stotler & Crotz
<i>Calypogeia</i> sp.	Raddi
<i>Cephalozia bicuspidata</i>	(L.) Dumort.
<i>Cephalozia lunulifolia</i>	(Dumort.) Dumort
<i>Cephaloziella divaricata</i>	(Sm.) Warnst.
<i>Chiloscyphus pallescens</i>	(Ehrh. ex Hoffm.) Dumort
<i>Chiloscyphus polyanthos</i>	(L.) Corda
<i>Conocephalum conicum</i>	(L.) Underw.
<i>Diplophyllum plicatum</i>	Lindb.
<i>Frullania nisquallensis</i>	Sull.
<i>Gymnomitrium obtusum</i>	(Lindb.) Pears.
<i>Lepidozia reptans</i>	(L.) Dumort
<i>Lophocolea coadunata</i>	(Sw.) Mont.
<i>Lophocolea profunda</i>	Nees
<i>Metzgeria conjugata</i>	Lindb.
<i>Pellia neesiana</i>	(Gottsche) Limpr.
<i>Plagiochila porelloides</i>	(Torr. ex Nees) Lindenb.
<i>Porella cordaeana</i>	(Hueb.) Moore
<i>Porella navicularis</i>	(Lehm. & Lindenb.) Pfeiff.
<i>Porella roellii</i>	Stephani
<i>Radula bolanderi</i>	Gottsche
<i>Riccardia chamedryfolia</i>	(With.) Grolle
<i>Riccardia multifida</i>	(L.) Gray
<i>Riccardia palmata</i>	(Hedw.) Carruth.
<i>Riccardia</i> sp.	Gray
<i>Scapania americana</i>	K. Müll.
<i>Scapania bolanderi</i>	Austin
<i>Scapania undulata</i>	(L.) Dumort
Mosses:	
<i>Amphidium californicum</i>	(Hampe ex C. Müll.) Hal.
<i>Antitrichia curtispindula</i>	(Timm ex Hedw.) Brid.
<i>Aulacomnium androgynum</i>	(Hedw.) Schwa.
<i>Brachythecium</i> sp.	Schimp.
<i>Bryum miniatum</i>	Lesq.
<i>Buxbaumia</i> sp.	Hedw.
<i>Campylopus introflexus</i>	(Hedw.) Brid.
<i>Ceratodon purpureus</i>	(Hedw.) Brid.
<i>Claopodium bolanderi</i>	Best
<i>Claopodium crispifolium</i>	(Hook.) Renauld & Cardot
<i>Claopodium whippleanum</i>	(Sull.) Renauld & Cardot
<i>Codriophorus aciculare</i>	(Hedw.) Pali.
<i>Codriophorus varius</i>	(Mitt.) Jaeg.
<i>Codriophorus</i> sp.	Beauv.
<i>Dendroalsia abietina</i>	(Hook.) Britt.

Scientific name	Authority
<i>Dichodontium pellucidum</i>	(Hedw.) Schimp.
<i>Dicranoweisia cirrata</i>	(Hedw.) Lindb. ex Milde
<i>Dicranum fuscescens</i>	Turn.
<i>Dicranum howellii</i>	Renauld & Cardot
<i>Didymodon vinealis</i> var. <i>vinealis</i>	(Brid.) Zand.
<i>Eurhynchium oreganum</i>	(Sull.) Jaeg.
<i>Eurhynchium praelongum</i>	(Hedw.) Schimp.
<i>Fissidens bryoides</i>	Hedw.
<i>Fissidens crispus</i>	Mont.
<i>Fissidens ventricosus</i>	Lesq.
<i>Grimmia</i> sp.	Hedw.
<i>Heterocladium macounii</i>	Best
<i>Homalothecium fulgescens</i>	(Mitt. ex Müll.) Jaeg.
<i>Homalothecium nuttallii</i>	(Wils.) Jaeg.
<i>Hookeria lucens</i>	(Hedw.) Sm.
<i>Hygrohypnum luridum</i>	(Hedw.) Jenn.
<i>Hypnum circinale</i>	Hook.
<i>Hypnum dieckii</i>	Renauld & Cardot
<i>Isothecium stoloniferum</i>	Brid.
<i>Leucolepis acanthoneura</i>	(Schwaegr.) Lindb.
<i>Metaneckera menziesii</i>	(Hook. in Drumm.) Steere
<i>Neckera douglasii</i>	Hook.
<i>Orthotrichum consimile</i>	Mitt.
<i>Orthotrichum lyellii</i>	Hook. & Tayl.
<i>Philonotis fontana</i>	(Hedw.) Brid.
<i>Plagiomnium insigne</i>	(Mitt.) T. Kop.
<i>Plagiomnium venustum</i>	(Mitt.) T. Kop.
<i>Plagiothecium undulatum</i>	(Hedw.) Schimp.
<i>Pohlia cruda</i>	(Hedw.) Lindb.
<i>Porotrichum bigelovii</i>	(Sull.) Kindb.
<i>Pseudotaxiphyllum elegans</i>	(Brid.) Iwats.
<i>Rhizomnium glabrescens</i>	(Kindb.) T. Kop.
<i>Rhytidiadelphus loreus</i>	(Hedw.) Warnst.
<i>Rhytidiadelphus triquetrus</i>	(Hedw.) Warnst.
<i>Schistidium strictum</i>	(Turner) Loeske
<i>Scleropodium obtusifolium</i>	(Mitt.) Kindb.
<i>Tetraphis pellucida</i>	Hedw.
Lichens:	
<i>Alectoria subsarmentosa</i>	Stirton
<i>Alectoria vancouverensis</i>	(Gyelnik) Gyelnik ex Brodo & D. Hawksw.
<i>Bryoria fuscescens</i>	(Gyelnik) Brodo & D. Hawksw.
<i>Cetraria orbata</i>	(Nyl.) Fink
<i>Chaenotheca furfuracea</i>	(L.) Tibell
<i>Cladonia furcata</i>	(Huds.) Schr.
<i>Cladonia</i> sp.	P. Browne
<i>Hypogymnia enteromorpha</i>	(Ach.) Nyl.
<i>Hypogymnia imshaugii</i>	Krog
<i>Hypogymnia inactiva</i>	(Krog) Ohlsson
<i>Hypogymnia physodes</i>	(L.) Nyl.

Scientific name	Authority
<i>Hypogymnia tubulosa</i>	(Schaerer) Hav.
<i>Imadophila ericetorum</i>	(L.) Zahlbr.
<i>Leptogium palmatum</i>	(Huds.) Mont.
<i>Lobaria oregana</i>	(Tuck.) Müll. Arg.
<i>Nephroma helveticum</i>	Ach.
<i>Nephroma resupinatum</i>	(L.) Ach.
<i>Parmelia sulcata</i>	Taylor
<i>Peltigera collina</i>	(Ach.) Schrader
<i>Peltigera membranacea</i>	(Ach.) Nyl.
<i>Peltigera neopolydactyla</i>	(Gyelnik) Gyelnik
<i>Pertusaria subambigens</i>	Dibben
<i>Platismatia glauca</i>	(L.) Culb. & C. Culb.
<i>Platismatia herrei</i>	(Imshaug) Culb & C. Culb.
<i>Ramalina thrausta</i>	(Ach.) Nyl.
<i>Sphaerophorus tuckermanii</i>	Räsänen
<i>Sphaerophorus vernabilis</i>	Wedin, Högnabba & Goward
<i>Usnea filipendula</i>	Stirton
<i>Usnea longissima</i>	Ach.
<i>Usnea scabrata</i>	Nyl.
<i>Usnea</i> sp.	Dill. ex Adans.

<sup>1</sup> Compiled from 2009 field surveys by J. Sperling and T. Rodenkirk.

<sup>2</sup> Nomenclature follows Missouri Botanical Garden, <http://www.Tropicos.org> (2010) database for hornworts, liverworts, and mosses; and Esslinger (2009) for lichens.

### Appendix 3: Amphibians, Reptiles, Birds, and Mammals<sup>1</sup>

Family	Scientific name	Common name
Amphibians:		
Ambystomatidae	<i>Ambystoma gracile</i>	Northwestern salamander
	<i>Ambystoma macrodactylum</i>	Long-toed salamander
Dicamptodontidae	<i>Dicamptodon tenebrosus</i>	Pacific giant salamander
	<i>Rhyacotriton variegatus</i>	Southern torrent salamander
Plethodontidae	<i>Aneides ferreus</i>	Clouded salamander
	<i>Ensatina eschscholtzi</i>	Ensatina
	<i>Plethodon dunni</i>	Dunn's salamander
	<i>Plethodon vehiculum</i>	Western redback
Salamandridae	<i>Taricha granulosa</i>	Rough-skinned newt
Bufo	<i>Bufo boreas</i>	Western toad
Hylidae	<i>Pseudacris regilla</i>	Pacific chorus frog
Leiopelmatidae	<i>Ascaphus truei</i>	Tailed frog
Ranidae	<i>Rana aurora</i>	Red-legged frog
	<i>Rana boylei</i>	Foothill yellow-legged frog
	<i>Rana catesbeiana</i>	Bullfrog
Reptiles:		
Anguillidae	<i>Elgaria coerulea</i>	Northern alligator lizard
Scincidae	<i>Eumeces skiltonianus</i>	Western skink
Boidae	<i>Charina bottae</i>	Rubber boa
Colubridae	<i>Contia tenuis</i>	Sharptail snake
	<i>Diadophis punctatus</i>	Ringneck snake
	<i>Thamnophis elegans</i>	Western terrestrial garter snake
	<i>Thamnophis ordinoides</i>	Northwestern garter snake
	<i>Thamnophis sirtalis</i>	Common garter snake
Birds: <sup>2</sup>		
Ardeidae	<i>Ardea herodias</i>	Great blue heron
	<i>Butorides virescens</i>	Green heron
Anatidae	<i>Aix sponsa</i>	Wood duck
	<i>Mergus merganser</i>	Common merganser
	<i>Lophodytes cucullatus</i>	Hooded merganser
Cathartidae	<i>Cathartes aura</i>	Turkey vulture
Accipitridae	<i>Pandion haliaetus</i>	Osprey
	<i>Accipiter striatus</i>	Sharp-shinned hawk
	<i>Accipiter cooperii</i>	Cooper's hawk
	<i>Buteo jamaicensis</i>	Red-tailed hawk
Falconidae	<i>Falco sparverius</i>	American kestrel
	<i>Falco peregrinus</i>	Peregrine falcon

Family	Scientific name	Common name
Phasianidae	<i>Phasianus colchicus</i>	Ring-necked pheasant
	<i>Dendragapus obscurus</i>	Blue grouse
	<i>Bonasa umbellus</i>	Ruffed grouse
	<i>Callipepla californica</i>	California quail
	<i>Oreortyx pictus</i>	Mountain quail
Charadriidae	<i>Charadrius vociferous</i>	Killdeer
Scolopacidae	<i>Actitis macularia</i>	Spotted sandpiper
Alcidae	<i>Brachyramphus marmoratus</i>	Marbled murrelet
Columbidae	<i>Columba fasciata</i>	Band-tailed pigeon
	<i>Zenaida macroura</i>	Mourning dove
Strigidae	<i>Otus kennicottii</i>	Western screech-owl
	<i>Bubo virginianus</i>	Great-horned owl
	<i>Glaucidium gnoma</i>	Northern pygmy-owl
	<i>Strix occidentalis</i>	Spotted owl
	<i>Strix varia</i>	Barred owl
	<i>Aegolius acadicus</i>	Northern saw-whet owl
Caprimulgidae	<i>Chordeiles minor</i>	Common nighthawk
Apodidae	<i>Chaetura vauxi</i>	Vaux's swift
Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
	<i>Selasphorus rufus</i>	Rufous hummingbird
Alcedinidae	<i>Ceryle alcyon</i>	Belted kingfisher
Picidae	<i>Sphyrapicus ruber</i>	Red-breasted sapsucker
	<i>Picoides pubescens</i>	Downy woodpecker
	<i>Picoides villosus</i>	Hairy woodpecker
	<i>Colaptes auratus</i>	Northern flicker
	<i>Dryocopus pileatus</i>	Pileated woodpecker
Tyrannidae	<i>Contopus borealis</i>	Olive-sided flycatcher
	<i>Contopus sordidulus</i>	Western wood peewee
	<i>Empidonax hammondi</i>	Hammond's flycatcher
	<i>Empidonax traillii</i>	Willow flycatcher
	<i>Empidonax difficilis</i>	Pacific-slope flycatcher
	<i>Tyrannus verticalis</i>	Western kingbird
Hirundinidae	<i>Hirundo pyrrhonota</i>	Cliff swallow
	<i>Hirundo rustica</i>	Barn swallow
	<i>Progne subis</i>	Purple martin
	<i>Tachycineta bicolor</i>	Tree swallow
	<i>Tachycineta thalassina</i>	Violet-green swallow
Corvidae	<i>Perisoreus canadensis</i>	Gray jay
	<i>Cyanocitta stelleri</i>	Steller's jay
	<i>Corvus brachyrhynchos</i>	American crow
	<i>Corvus corax</i>	Common raven
Paridae	<i>Parus atricapillus</i>	Black-capped chickadee
	<i>Parus rufescens</i>	Chestnut-backed chickadee

Family	Scientific name	Common name
Aegithalidae	<i>Psaltriparus minimus</i>	Bushtit
Sittidae	<i>Sitta canadensis</i>	Red-breasted nuthatch
Certhiidae	<i>Certhia americana</i>	Brown creeper
Troglodytidae	<i>Thryomanes bewickii</i> <i>Troglodytes aedon</i> <i>Troglodytes troglodytes</i>	Bewick's wren House wren Winter wren
Cinclidae	<i>Cinclus mexicanus</i>	American dipper
Muscicapidae	<i>Chamaea fasciata</i> <i>Catharus guttatus</i> <i>Catharus ustulatus</i> <i>Ixoreus naevius</i> <i>Myadestes townsendi</i> <i>Regulus satrapa</i> <i>Sialia mexicana</i> <i>Turdus migratorius</i>	Wrentit Hermit thrush Swainson's thrush Varied thrush Townsend's solitaire Golden-crowned kinglet Western bluebird American robin
Bombycillidae	<i>Bombycilla cedrorum</i>	Cedar waxwing
Vireonidae	<i>Vireo cassinii</i> <i>Vireo gilvus</i> <i>Vireo huttonii</i>	Cassin's vireo Warbling vireo Hutton's vireo
Emberizidae	<i>Dendroica coronata</i> <i>Dendroica petechia</i> <i>Dendroica nigrescens</i> <i>Dendroica occidentalis</i> <i>Junco hyemalis</i> <i>Melospiza melodia</i> <i>Molothrus ater</i> <i>Oporornis tolmiei</i> <i>Passerella iliaca</i> <i>Pheucticus melanocephalus</i> <i>Pipilo maculatus</i> <i>Piranga rubra</i> <i>Spizella passerina</i> <i>Wilsonia pusilla</i> <i>Zonotrichia leucophrys</i>	Yellow-rumped warbler Yellow warbler Black-throated gray warbler Hermit warbler Dark-eyed junco Song sparrow Brown-headed cowbird MacGillivray's warbler Fox sparrow Black-headed grosbeak Spotted towhee Western tanager Chipping sparrow Wilson's warbler White-crowned sparrow
Fringillidae	<i>Carduelis pinus</i> <i>Carduelis tristis</i> <i>Coccothraustes vespertinus</i> <i>Loxia curvirostra</i>	Pine siskin American goldfinch Evening grosbeak Red crossbill
Mammals:		
Didelphidae	<i>Didelphis virginiana</i>	Virginia opossum
Soricidae	<i>Sorex sonomae</i> <i>Sorex pacificus</i> <i>Sorex bendirii</i> <i>Sorex trowbridgii</i> <i>Neurotrichus gibbsii</i>	Fog shrew Pacific shrew Pacific marsh shrew Trowbridge's shrew Shrew-mole

Family	Scientific name	Common name
Vespertilionidae	<i>Myotis volans</i>	Long-legged myotis
	<i>Myotis thysanodes</i>	Fringed myotis
	<i>Myotis evotis</i>	Long-eared myotis
	<i>Lasionycteris noctivagans</i>	Silver-haired bat
	<i>Eptesicus fuscus</i>	Big brown bat
Leporidae	<i>Sylvilagus bachmani</i>	Brush rabbit
Aplodontidae	<i>Aplodontia rufa</i>	Mountain beaver
Sciuridae	<i>Tamias townsendii</i>	Townsend's chipmunk
	<i>Sciurus griseus</i>	Western gray squirrel
	<i>Tamiasciurus douglasii</i>	Douglas' squirrel
	<i>Glaucomys sabrinus</i>	Northern flying squirrel
Castoridae	<i>Castor canadensis</i>	American beaver
Muridae	<i>Peromyscus maniculatus</i>	Deer mouse
	<i>Neotoma fuscipes</i>	Dusky-footed woodrat
	<i>Neotoma cinerea</i>	Bushy-tailed woodrat
	<i>Clethrionomys californicus</i>	Western red-backed vole
	<i>Phenacomys albipes</i>	White-footed vole
	<i>Phenacomys longicaudus</i>	Red tree vole
	<i>Microtus longicaudus</i>	Long-tailed vole
<i>Microtus oregoni</i>	Creeping vole	
Dipodidae	<i>Zapus trinotatus</i>	Pacific jumping mouse
Erethizontidae	<i>Erethizon dorsatum</i>	Common porcupine
Canidae	<i>Canis latrans</i>	Coyote
	<i>Urocyon cinereoargenteus</i>	Common gray fox
Ursidae	<i>Ursus americanus</i>	Black bear
Procyonidae	<i>Procyon lotor</i>	Common raccoon
Mustelidae	<i>Martes americana</i>	American marten
	<i>Mustela erminea</i>	Ermine
	<i>Mustela frenata</i>	Long-tailed weasel
	<i>Spilogale gracilis</i>	Western spotted skunk
	<i>Mephitis mephitis</i>	Striped skunk
Felidae	<i>Felis concolor</i>	Mountain lion
	<i>Lynx rufus</i>	Bobcat
Cervidae	<i>Cervus elaphus</i>	Elk
	<i>Odocoileus hemionus ssp. columbianus</i>	Black-tailed deer

<sup>1</sup> Nomenclature taken from Csuti et al. 1997.

<sup>2</sup> List partially compiled by 2009 field surveys by T. Rodenkirk and supplemented by habitat and distribution information in Csuti et al. 1997. Atlas of Oregon wildlife.

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