

# Lost Prairie

## Area of Critical Environmental Concern

### Guidebook

Salem District

BLM

T6S-R9W

T7S-R9W

Lost  
Prairie  
ACEC

6-9-34.1



Reid Schuller and Ronald L. Exeter



100



---

## Authors

**Reid Schuller** is a plant ecologist, Western Stewardship Science Institute, PO Box 1173, Bend, Oregon 97709.

**Ronald L. Exeter** is a botanist, Salem District, Marys Peak Resource Area, U.S. Department of Interior, Bureau of Land Management, 1717 Fabry Road SE, Salem, OR 97306.

## Design and Layout

**Tim Jacobsson** is a Visual Information Specialist, Salem District, U.S. Department of Interior, Bureau of Land Management, 1717 Fabry Road SE, Salem, OR 97306.

**As the Nation's principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.**

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data was compiled from multiple source data and may not meet U.S. National Map Accuracy Standards of the Office of Management and Budget. This product was developed through digital means and may be updated without notification. Marys Peak Resource Area, Salem District, BLM

Front Cover: Lost Prairie from the northeast looking southwest.  
All photos by Ron Exeter.

**BLM/OR/WA/PL -09/018+1792**



---

## Abstract

**Schuller, Reid; Exeter, Ronald L. 2009.** Lost Prairie Area of Critical Environmental Concern (ACEC) Guidebook.18 p.26

This guidebook describes the prominent biological and environmental features of Lost Prairie, a 24.28-ha (60-ac) tract located within the Oregon Coast Range, Lincoln County, Oregon. Special features include a 8.5-ha (21-ac) montane fen, and populations of six rare species including: three vascular plant species, two lichens, and one moss. The site has been designated as an Area of Critical Environmental Concern (ACEC) in the 1995 Salem District Resource Management Plan, Salem District, Bureau of Land Management. .

Keywords: Lost Prairie ACEC, Montane fen, Bureau of Land Management, rare plant species, sphagnum.

## Preface

Area of Critical and Environmental Concern (ACEC) designations highlight areas where special management attention is needed to protect, and prevent irreparable damage to, important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. The ACEC designation indicates to the public that the BLM recognizes that an area has significant values and has established special management measures to protect those values. In addition, designation also serves as a reminder that significant values or resources exist which must be accommodated near or within an ACEC. Designation may also support a funding priority (BLM manual 1613.02).

The Federal Land Policy and Management Act (FLPMA) provides for ACEC designation and established national policy for the protection of public land areas of critical environmental concern. Section 202(c) (3) of the FLPMA mandates the agency to give priority to the designation and protection of ACEC's in the development and revision of land use plans. The BLM's planning regulations (43 CFR 1610.7-2) establish the process and procedural requirements for the designation of ACEC's in resource management plans and in plan amendments (BLM manual 1613.02).

To be considered as a potential ACEC and analyzed in resource management alternatives, an area must meet the criteria of both relevance and importance, as established and defined in 43 CFR 1610.7-2.

### A. Relevance.

An area meets the "relevance" criterion if it contains one or more of the following:

1. A significant historic, cultural, or scenic value (including but not limited to rare or sensitive archeological resources and religious or cultural resource important to Native Americans).
2. A fish and wildlife resource (including but not limited to habitat for endangered, sensitive or threatened species, or habitat essential for maintaining species diversity).
3. A natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relic plants or plant communities which are terrestrial, aquatic, or riparian; or rare geological features).



---

4. Natural hazards (including but not limited to areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human action may meet the relevance criteria if it is determined through the resource management planning process that it has become part of a natural process.

## **B. Importance.**

The value, resource, system, process, or hazard described above must have substantial significance and values in order to satisfy the importance criteria. This generally means that the value, resource, system, process, or hazard is characterized by one or more of the following:

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource.
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLMPA.
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare.
5. Poses a significant threat to human life and safety or to property.

## Criteria Evaluation.

An interdisciplinary team screens the ACEC nominations to see if the area meets the relevance and importance criteria. The Field Manager, with the District Manager concurrence approves the relevance and importance criteria. Areas which meet the criteria are called Potential ACEC's. Areas which do not meet the criteria are dropped from the process, but are acknowledged in the planning process.

## Special Management Attention.

To be designated as an ACEC, an area must require special management attention to protect the important and relevant values. "Special management attention" refers to management prescriptions developed during preparation of a Resource Management Plan (RMP) or amendment expressly to protect the important and relevant values of an area from the potential effects of actions permitted by the RMP. A management prescription is considered to be special if it is unique to the area involved and includes terms and conditions specifically to protect the important and relevant values occurring on that area. Special management often provides for consultation and coordination with identified groups and/or experts having interest or expertise in the affected values (BLM manual 1613.12).

## Develop Management Prescriptions for Potential ACEC's.

Management prescriptions must be developed for all potential ACEC's. At least one prescription for each potential ACEC must be developed which provides special management attention (BLM manual 1613.22).



---

## Identifying Factors Which Influence Management Prescriptions.

The factors will vary based on the planning issues and resources in the planning area. They are primarily identified and evaluated during the analysis of the management situation (BLM manual 1616.4). These factors are important in the development of management prescriptions for potential ACEC's. Factors to consider include, but are not limited to, the following:

1. Conditions or trends of the potential ACEC. What is the current condition of the resource(s) or hazard involved? What is the trend in its condition? Can degradation be stopped? Is it reversible? What is the capability of the resource or hazard in terms of the level and type of use it can sustain without risk or threat?
2. Relationship to other resources or activities. What measures can be taken to reduce the adverse effects of other resource uses on the potential ACEC? Are resource uses contributing to the degradation of or threatening the existence of the important and relevant values? What land and resource uses would be compatible and under what conditions should they be conducted or permitted in order to protect the important and relevant values? What uses or actions would not be compatible with protection of the identified values even when conditioned? Considering the objectives of the RMP alternative, do the values of other resources outweigh the need for protection of the important and relevant values?
3. Opportunities for protection and/or restoration of potential ACEC values. What measures can be taken to protect the potential ACEC values without restricting other resource uses? Is it feasible to protect the resource value(s) or reduce or minimize the threats from hazards?

## Monitoring and Management of ACEC's.

General guidance on monitoring is set forth in BLM manual 1616.9.

The Lost Prairie ACEC described in this document is administered by the Bureau of Land Management (BLM), U.S. Department of the Interior. The BLM Salem District office has ACEC program administrative responsibility, and the Marys Peak Resource Area has on-the-ground management responsibility for the ACEC. Individuals or organizations wishing to visit or use the site should contact the resource area field manager in advance and provide information about the purpose of their visit, specific areas within the ACEC that will be visited, group size, timing of the visit, and planned activities. Research projects, educational visits, and collection of specimens from the site require prior approval. There may be limitations on public use.



---

## Table of Contents

<b>Introduction .....</b>	<b>1</b>
<b>Access and Accommodations .....</b>	<b>1</b>
<b>Environment.....</b>	<b>3</b>
<b>Climate .....</b>	<b>4</b>
<b>Vegetation .....</b>	<b>4</b>
<b>Fauna.....</b>	<b>7</b>
<b>Disturbance History.....</b>	<b>7</b>
<b>Maps and Aerial Photography.....</b>	<b>7</b>
<b>Acknowledgments .....</b>	<b>7</b>
<b>English Equivalents.....</b>	<b>7</b>
<b>Appendix 1: Plants.....</b>	<b>8</b>
<b>Appendix 2: Bryophytes - Liverworts .....</b>	<b>12</b>
<b>Appendix 3: Bryophytes - Mosses.....</b>	<b>13</b>
<b>Appendix 4: Amphibians, Reptiles, Birds, and Mammals .....</b>	<b>14</b>
<b>References .....</b>	<b>17</b>



## Introduction

Lost Prairie Area of Critical Environmental Concern (ACEC) is a 32.38-ha (60-ac) tract of land occupying a portion of the upper reaches of the Salmon River drainage, including a mid-elevation basin within the Oregon Coast Range. Lost Prairie was designated as an ACEC in 1984 (Federal Register 49) to protect a rare example of mid- to high-elevation sedge fen, Sphagnum (see app. 1 for a list of species names and authorities) bog and beaver marsh in the Oregon Coast Range ecological province (Dyrness et al. 1975, O.N.H.P. 2003). Populations of rare plants including: *Erythronium elegans* (Coast Range fawn-lily), *Anemone oregana* var. *felix* (Felix anemone), and *Fritillaria camschatcensis* (Indian rice) also occur at Lost Prairie. The presence of two rare lichens (*Hypogymnia duplicata*, *Platismatia lacunosa*), and a rare moss (*Tetraplodon mnioides*) (O.N.H.I.C. 2007) provide further justification for designation of the site. In addition, Lost Prairie supports a diverse array of vascular plants and bryophyte species that would be considered as uncommon in the coastal coniferous forests of northwestern Oregon.

Lost Prairie was originally designated as an ACEC in 1984 (Federal Register 1984) in the Salem District Management Framework Plan (MFP) (USDI BLM 1984). The site was subsequently re-designated in May, 1995 in the Salem District Resource Management Plan (RMP) (USDI BLM 1995). The ACEC is administered by the Salem District Bureau of Land Management (BLM) and managed as part of the Marys Peak Resource Area.

## Access and Accommodations

Vehicle access is through gated, private lumber company roads. Permission is required to cross these lands. Contact the Salem BLM, Marys Peak Resource Area for current access information.

From the town site of Grande Ronde, Oregon, travel west on Highway 18 to the Murphy Grade road located west of milepost 17, and turn south (locked gate). Murphy Grade road

(also known as the “100 road”) is located just west of the green Murphy summit road sign and where two westbound lanes merge into one. Proceed on the 100 road (portions are also known as “road 6”) past the junction of the 300 road at 7.5 mi (12 km). At 7.9 mi (12.7 km), turn right on the 200 road, then right onto road 210 (fig. 1) and travel approximately 1.3 km (0.8 mi) and park.

There are no developed trails within Lost Prairie ACEC although foot access into the central portions of the site may be gained off of adjacent logging roads (fig. 1). Lodging accommodation is available in Grande Ronde, Lincoln City, and Salem, Oregon.

## Environment

Lost Prairie occupies a mid- to upper-elevation bench along the upper reaches of the Salmon River in Lincoln County, Oregon. Elevations range from 701 to 884 m (2300 to 2900 ft) within the ACEC (fig. 2). Parent material underlying the montane fen is partially decomposed organic material over alluvium and colluvium derived from igneous and sedimentary rock.

Slightly more than half of the ACEC (12.55-ha (31-ac)) supports soils that have been mapped as Histic Cryaquepts, 0 to 3 percent slopes. These organic soils occur along drainageways and on benches in the upper reaches of the Salmon River. They are very poorly drained and experience frequent ponding. Depth to water table varies with yearly and seasonal variation in precipitation between 0 and 30 cm (0 and 12 in) USDA-NRCS 2007). A typical profile includes:

0 to 20 cm (0 to 8 in) peat  
20 to 30 cm (8 to 12 in) muck  
30 to 41 cm (12 to 16 in) silty clay loam  
41 to 91 cm (16 to 36 in) gravelly sandy loam  
91 to 152 cm (36 to 60 in) cobbly loam

Depth to a restrictive feature exceeds 203 cm (80 in) in this soil mapping unit (USDA-NRCS 2007).

The remainder of the ACEC (as mapped by soil maps) is terrestrial upland that has been mapped as the Valsetz-Yellowstone complex

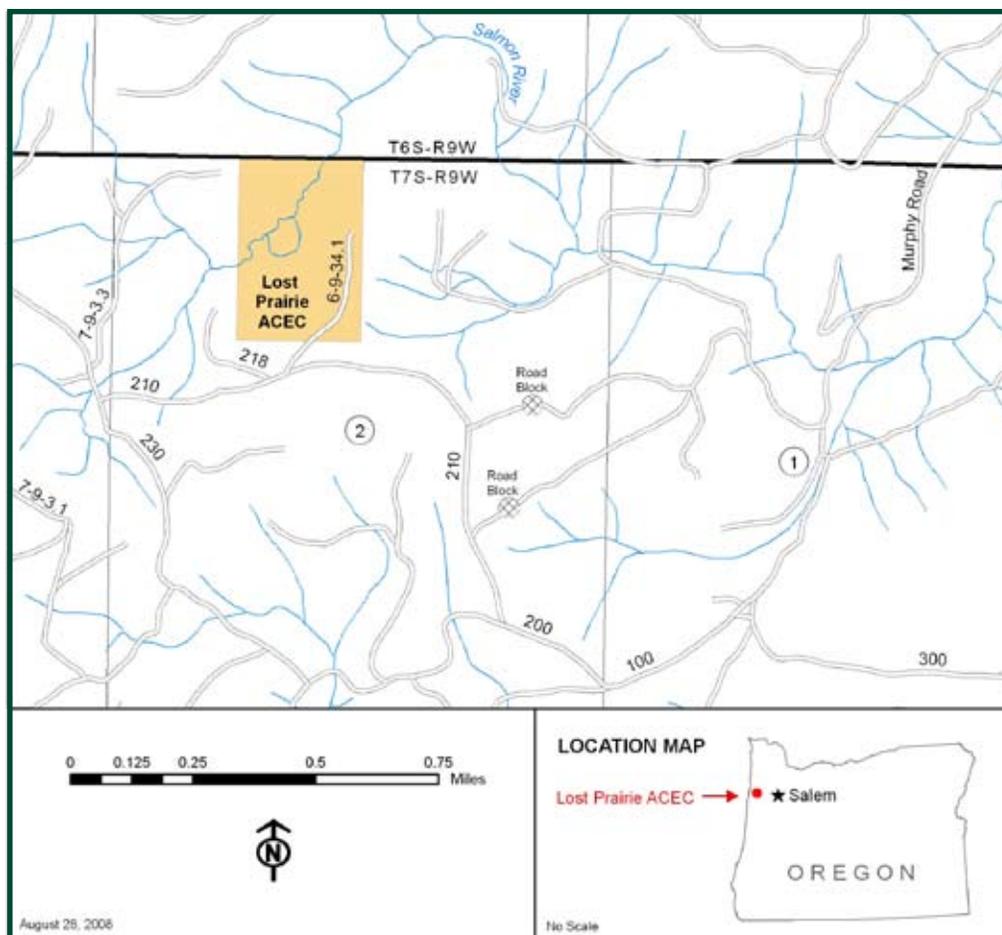


Figure 1 - Location Map: Lost Prairie ACEC location and access.

with slopes steepness ranging between 3 to 30 percent. Valsetz soil is moderately deep and well drained and formed in colluvium derived from volcanic material. The surface layer is brown cobbly loam about 13 cm thick. The upper part of the subsurface is reddish-brown very cobbly loam about 23 cm thick, and the lower part is brown and strongly brown extremely cobbly loam about 56 cm thick. Fractured basic igneous rock is at a depth of about 91 cm. The Valsetz component of this complex is classified as medial-skeletal, frigid Typic Haplocryands (Shipman 1997, USDA-NRCS 2007).

Yellowstone soil is shallow and somewhat excessively well drained. The surface layer is dark reddish-brown stony cobbly loam about 25 cm thick. The subsurface is dark reddish-brown extremely cobbly loam about 20 cm thick. Fractured basic igneous rock occurs at a depth of about 45 cm. The Yellowstone

component of this complex is classified as medial-skeletal, frigid Lithic Haplocryands (Shipman 1997, USDA-NRCS 2007).

## Climate

The climate of Lost Prairie is strongly maritime, owing to its proximity to the Pacific Ocean. By mid-June, a high pressure system develops off the Oregon coast, and north to northwesterly winds deflect storms to the north resulting in periods of clear skies. Summers are usually moderately dry and warm with the June-August period receiving about 5 percent of the total annual precipitation (Christy 2004, Western Regional Climate Center 2007).

Between October and April, low-pressure weather systems generated in the Gulf of Alaska bring extended and occasionally strong

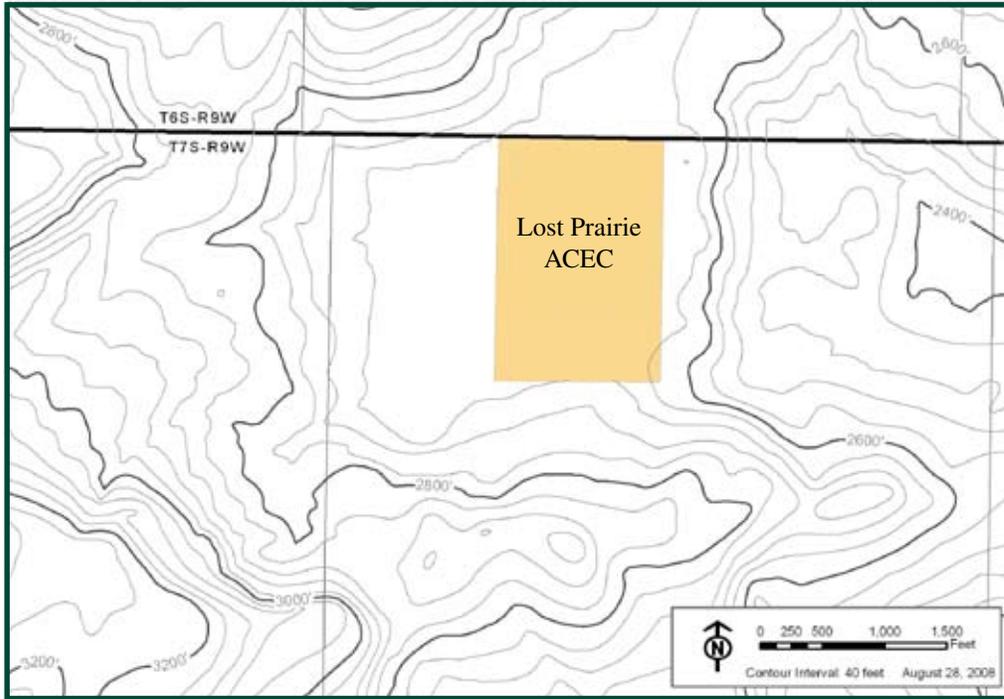


Figure 2 - Lost Prairie ACEC boundary and topography.

cyclonic storms to the Oregon Coast Range. These winter storms are accompanied by south to southwesterly winds, and by heavy precipitation in the form of both rain and snow. Eighty-five percent of the annual total precipitation occurs between October and April. Fall, winter, and spring are typically cool and wet Western Regional Climate Center 2007.

Meteorological data are taken from Laurel Mountain (station 354776) and summarized in Table 1, the nearest climate station of comparable elevation in the Oregon Coast Range, (Western Regional Climate Center 2007). The Laurel Mountain station is on the mountain summit at 1094 m (3,589 ft) elevation. Lost Prairie occurs at 853 m (2,800 ft) elevation, and is probably somewhat drier,

warmer, and has less snow accumulation than the Laurel Mountain climate station would indicate. Lost Prairie ACEC is located approximately 32 km (20 mi) northwest of the Laurel Mountain climate station.

Snowfall may occur from October through May. The highest monthly snowfall averages are between December and March. During the 1978-2007 time period, the highest average monthly snowfall of 61 cm (23.9 in) occurred in February, with February also averaging the highest monthly maximum snow depths of 25.4 cm (10 in) (Western Regional Climate Center 2007).

Table 1. Summary of Meteorological data

Period of Record: 3/1/1978 to 6/30/2007 – LAUREL MOUNTAIN, OREGON (354776)	
Average minimum January temperature	-0.8 °C (30.5 °F)
Average maximum January temperature	4.4 °C (40.0 °F)
Average minimum July temperature	9.3 °C (48.7 °F)
Average maximum July temperature	18.7 °C (65.6 °F)
Average annual precipitation	3106 mm (122.30 in)
Average June-August precipitation	156 mm (6.14 in)
Average annual snowfall	3048 mm (120 in)

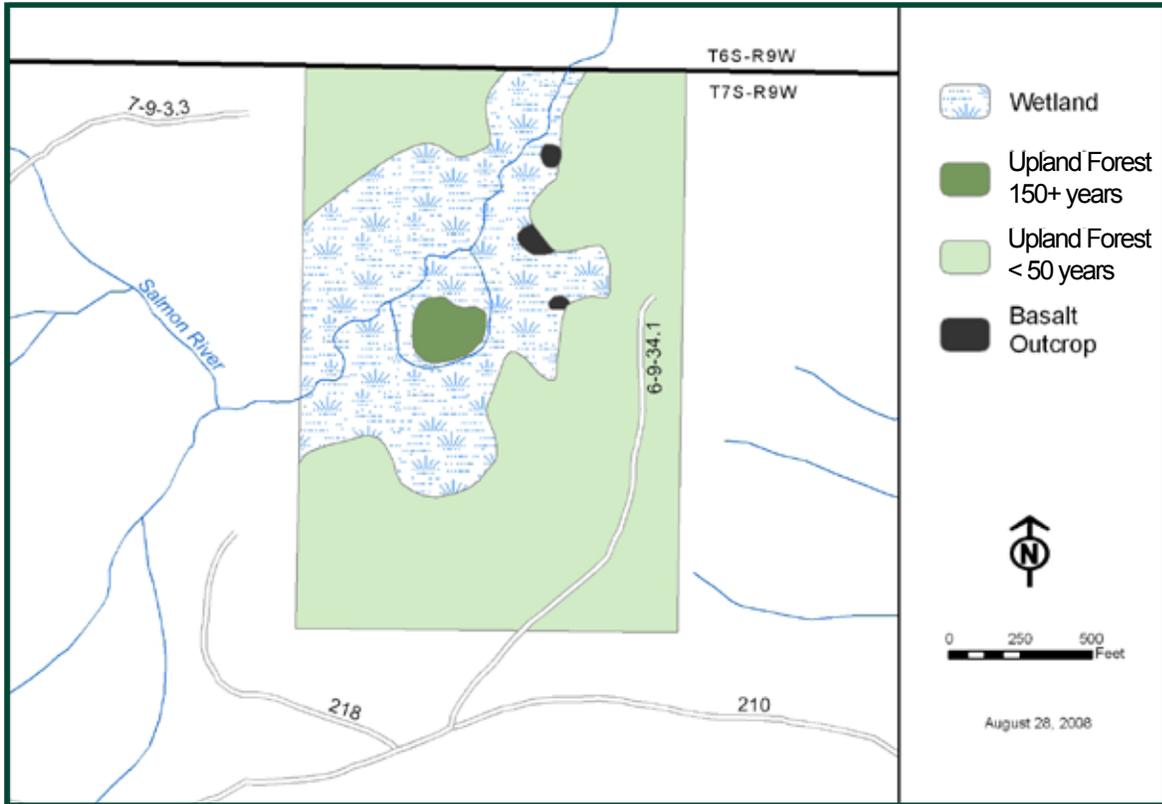


Figure 3 - Stand Age-class distribution in Lost Prairie ACEC.



Center basalt outcrop



Riparian channel located on west boundary



View of Lost Prairie, 'meadow' from NE corner to SW

## Vegetation

The primary reason for designation of Lost Prairie as an ACEC is the occurrence of the montane fen<sup>1</sup> (ONHP 2003). The majority of the fen is non-forested. Within this area, the fen consists of low hummocks of *Vaccinium caespitosum* (Dwarf huckleberry) interspersed around seasonally-flooded openings with a variable cover of *Carex obnupta* (Slough sedge), *C. aquatilis* var. *dives* (Water sedge), *C. exsiccata* (Western inflated sedge), *C. urticulata* (Northwest Territorial sedge) and other graminoids. *Vaccinium caespitosum* is widespread and common throughout the fen, except is locally sparse in some areas. *Salix scouleriana* (Scouler willow) and *Spiraea douglasii* (Rose spirea) both have patchy distributions and occasionally dominate as tall- or medium-sized shrubs. *Sanguisorba officinalis* (Official burnet) is a major herbaceous species in many areas of the fen. Stunted growth forms of *Spiraea douglasii*, *Carex obnupta* and *Camassia quamash* (Camas) suggest that the soil has low nutrient status. *Sphagnum mendocinum* and *Aulacomnium palustre* are the dominant mosses to occur among the *Vaccinium* hummocks (Christy 1984). Grasses such as *Deschampsia cespitosa* (Tufted hairgrass), *Calamagrostis stricta* var. *inexpansa* (Northern reedgrass), and *Agrostis exarata* (Spike bentgrass) occasionally occupy the herb layer. Felix anemone and Indian Rice are rare plants that occur within the fen (ONHP 2003, ONHIC 2007). See table 2 for a summary of rare vascular plants, lichens and mosses of Lost Prairie.

In the center of the fen a habitat "island" of less than 0.4-ha (1-ac) supports a conifer stand of approximately 150 years (see figure 3 and 4). This area is dominated by *Pseudotsuga menziesii* (Douglas-fir), *Tsuga heterophylla* (Western hemlock), *Thuja plicata* (Western red cedar), *Pinus monticola* (Western white pine), *Rhododendron macrophyllum*, and *Gaultheria shallon* (Salal). Similar habitats occur as a thin band around the margins of the fen and are not represented on figure 3, but are identifiable on figure 4. Similar shrub habitats occur on logs and elevated areas within and surrounding the fen.

Three small basalt outcrops occur along the fen margin (see figure 3 & 4). These sparsely vegetated areas support *Saxifraga* (Saxifrage) sp., *Allium crenulatum* (Olympic onion), mosses such as *Andreaea* sp. and *Codriophorus* sp., and lichens (*Cladina rangiferina*).

The forested portion of the ACEC consists of a 15.8-ha (39-ac) ~ 35 year-old Douglas-fir and western hemlock stand. The surrounding forested portion of Lost Prairie ACEC was harvested for timber in the mid-1970s. The resulting, second growth stands form a mosaic of dense conifers with sparse to absent shrub and herb cover (see figure 4). This alternates and intergrades with dense, impenetrable thickets of *Rhododendron macrophyllum* (Pacific rhododendron), *Vaccinium* spp. (huckleberry) and *Gaultheria shallon* (Salal) or a mixture of both. In addition, numerous rare plant species occur at Lost Prairie. An updated list of vascular plants which are known to occur at Lost Prairie is included in appendix 1. \* See Figure 3 and Figure 4 for Age Class Distribution.

<sup>1</sup> A fen is a type of freshwater wetland fed by surface and/or groundwater. The flora of fens is characterized by their water chemistry. Fens are often confused with bogs, which are fed primarily by rainwater and often inhabited by certain sphagnum moss, making them acidic.



Figure 4 - 2005 aerial photograph of Lost Prairie ACEC.



Deep pond located south of Basalt outcrop facing the “center island” of conifers.



Young upland forest with small meadow amongst stumps. This habitat is common around the margins of the fen.



**Table 2.** Rare vascular plants, lichens and mosses of Lost Prairie - their global, federal, and state status' (ONHP 2003, ONHIC 2007).

Species Name	ONHP rank	Federal status	ODA list	ORNHIC list	BLM list
<i>Anemone oregana</i> var. <i>felix</i>	G4 T2 S1	listed as species of concern	-	list 2	X
<i>Erythronium elegans</i>	G1 S1	listed as species of concern	LT listed as threatened	list 1	X
<i>Fritillaria camschatcensis</i>	G5 S1	-	-	list 2	X
<i>Hypogymnia duplicata</i> (lichen)	G4 S2	-	-	list 3	X
<i>Platismatia lacunosa</i> (lichen)	G3G4 S3	-	-	list 4	Tracking
<i>Tetraplodon mnioides</i> (moss)	G4 S2	-	-	list 2	X = sensitive

## Fauna

Elk frequent Lost Prairie and roam over 30 mi<sup>2</sup> of the Slick Rock – Warnick Creek watershed. The herd uses the ACEC for foraging and escape cover. In 1986 the herd of 150 was determined to be increasing in size (Elliott et al. 1986).

Reptiles, amphibians, birds, and mammals known or expected to occur within the ACEC are listed in appendix 4. These lists have been compiled from a combination of field observations and published literature and together represent a provisional list of species expected to occur within or use the ACEC for portions of their life cycles (Csuti et al. 1997, USDI BLM 2007).

Juday (1976) examined Douglas-fir growth rings on stumps in a clearcut adjacent to the old-growth stand within Saddle Bag Mountain Research Natural Area (RNA) and concluded that there had been no major disturbance (in the immediate vicinity) since approximately 1300. Hines (1971) surmised that the absence of Douglas-fir fire scars and charcoal in soil profiles on Saddle Bag Mountain may be attributed to the high rainfall on Saddle Bag Mountain. However, other locations on Saddle Bag Mountain have experienced wildfire in recent history (USDI BLM 2006).

## Disturbance History

The Oregon Coast Range is characterized by a pattern of large-scale (some greater than 20,000 ac), infrequent (150- to 300-year mean fire-return interval) stand-replacement fires typical of cool moist climates where lightning is uncommon (Agee 1990). Large fires such as the 1933 Tillamook Fire are part of recent Oregon Coast Range fire history. Almost all coniferous forests within the *Tsuga heterophylla* Zone are first- or multi-generation stands originating from fire. Proximity to historic wildfire areas suggests that at least periodically, wetlands such as Lost Prairie may burn. However, no detailed fire history data has been collected within the ACEC. About 3.2 km (2 mi) northwest of Lost Prairie



---

## Maps and Aerial Photography

Maps applicable to Lost Prairie ACEC: Topographic—Stott Mountain 7.5 minute 1:24,000 scale, 1984; BLM Salem District Westside Recreation Map 1:10,560, 1996.  
Aerial Photography: 2003 color 1:12,000.

## Acknowledgments

We thank Michelle Davis for creating and providing maps for this publication, Gary Licata and Scott Hopkins for reviewing the wildlife portion, Tim Jacobsson for formatting and final layout and the Salem District, Bureau of Land Management for providing funding for this project.

## English Equivalents

1 hectare (ha) = 2.47 acres (ac)  
1 kilometer (km) = 0.62 miles (mi)  
1 meter (m) = 3.28 feet (ft)  
1 centimeter (cm) = 0.394 inch (in)  
1 millimeter (mm) = 0.0394 inch



View of Lost Prairie in late spring.



View of Lost Prairie in mid-summer.



---

## APPENDIX 1 – Vascular Plants, Ferns and Fern Allies<sup>a, b</sup>

<u>Scientific name</u>	<u>Common name</u>
<b>Coniferous trees</b>	
<i>Abies amabilis</i> (Douglas ex Louden) Douglas ex Forbes	Pacific silver fir
<i>Abies procera</i> Rehder	Noble fir
<i>Picea sitchensis</i> (Bong.) Carr.	Sitka spruce
<i>Pinus monticola</i> Dougl. ex D. Don	Western white pine
<i>Pseudotsuga menziesii</i> (Mirbel) Franco.	Douglas-fir
<i>Thuja plicata</i> Donn ex D. Don	Western red cedar
<i>Tsuga heterophylla</i> (Raf.) Sarg.	Western hemlock
<b>Deciduous trees &gt;8m (26.3 ft) tall</b>	
<i>Alnus rubra</i> Bong.	Red alder
<i>Pyrus fusca</i> (Raf.) Schneid.	Oregon crabapple
<b>Tall shrubs 2m-8m (6.6-26.3 ft) tall</b>	
<i>Acer circinatum</i> Pursh	Vine maple
<i>Amelanchier alnifolia</i> (Nutt.) Nutt. ex M. Roem. var. <i>semiintegrifolia</i> (Hook.) C.L. Hitchc.	Saskatoon serviceberry
<i>Cytisus scoparius</i> (L.) Link.	Scotch broom
<i>Physocarpus capitatus</i> (Pursh) Kuntze	Pacific ninebark
<i>Rhododendron macrophyllum</i> D. Don ex G. Don	Pacific rhododendron
<i>Salix scouleriana</i> Barratt ex Hook.	Scouler's willow
<i>Sorbus sitchensis</i> M. Roemer	Western mountain ash
<i>Viburnum edule</i> (Michx.)	Raf. Squashberry
<b>Medium shrubs 0.5m-2m (1.6-6.6 ft) tall</b>	
<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	Kinnikinnick
<i>Gaultheria shallon</i> Pursh	Salal
<i>Ledum</i> × <i>columbianum</i> Piper (pro sp.) [ <i>glandulosum</i> × <i>groenlandicum</i> ]	Labrador tea
<i>Lonicera involucrata</i> (Richardson) Banks ex Spreng.	Twinberry honeysuckle
<i>Menziesia ferruginea</i> Sm.	Fool's huckleberry
<i>Ribes lacustre</i> (Pers.) Poir.	Prickly currant
<i>Rosa gymnocarpa</i> Nutt.	Baldhip rose
<i>Rubus spectabilis</i> Pursh	Salmonberry
<i>Spiraea douglasii</i> Hook.	Rose spirea
<i>Symphoricarpos mollis</i> Nutt.	Creeping snowberry
<i>Vaccinium caespitosum</i> Michx.	Dwarf huckleberry
<i>Vaccinium deliciosum</i> Piper	Cascade huckleberry
<i>Vaccinium ovalifolium</i> Sm.	Oval-leaf blueberry
<i>Vaccinium parvifolium</i> Sm.	Red huckleberry

---

<sup>a</sup> Compiled from numerous sources

<sup>b</sup> Nomenclature from vascular plants, ferns, and fern-allies follows the Flora of North America Web site (2006) and the Oregon Flora Project Web site (2006).



---

## Scientific name

## Common name

### Low shrubs <0.5m (1.6 ft) tall

*Cornus canadensis* L.  
*Chimaphila menziesii* (R. Br.) Spreng.  
*Linnaea borealis* L. var. *longiflora* Torr.  
*Rubus lasiococcus* Gray  
*Rubus pedatus* J.E. Smith  
*Rubus ursinus* Cham. & Schlecht.

Bunchberry dogwood  
Little Prince's-pine  
Western twinflower  
Roughfruit berry  
Strawberry dwarf bramble  
California blackberry

### Ferns and allies

*Athyrium filix-femina* (L.) Roth.  
*Blechnum spicant* (L.) Sm.  
*Botrychium multifidum* (Gmel.) Trev  
*Cystopteris fragilis* (L.) Bernh.  
*Equisetum palustre* L.  
*Lycopodium clavatum* L.  
*Polypodium glycyrrhiza* D.C. Eat.  
*Polystichum munitum* (Kaulf.) Presl  
*Pteridium aquilinum* (L.) Kuhn.

Lady fern  
Deer fern  
Leathery grapefern  
Brittle bladderfern  
Marsh horsetail  
Running clubmoss  
Licorice fern  
Western swordfern  
Bracken fern

### Herbs

*Allium crenulatum* Wieg.  
*Anaphalis margaritacea* (L.) B. & H.  
*Anemone oregana* Gray var.  
*felix* (M.E. Peck) C.L. Hitchc.  
*Angelica arguta* Nutt.  
*Bistorta bistortoides* Pursh  
*Boykinia elata* Torr. & Gray  
*Caltha leptosepala* DC.  
*Camassia quamash* (Pursh) Greene  
*Castilleja miniata* Dougl. ex Hook.  
*Cerastium nutans* Raf.  
*Chamerion angustifolium* (L.) Holub  
*Cicuta douglasii* (DC.) Coult. & Rose  
*Claytonia parvifolia* (Moc. ex DC.) Greene  
*ssp. parvifolia*  
*Digitalis purpurea* L.  
*Drosera rotundifolia* L.  
*Epilobium* sp.  
*Equisetum* sp.  
*Erythronium elegans* Hammonds & Chambers  
*Fritillaria camschatcensis* (L.) Ker-Gawl.  
*Galium trifidum* L. var. *pacificum* Wieg.  
*Gentiana sceptrum* Griseb.  
*Hieracium albiflorum* Hook.  
*Hypericum anagalloides* Cham. & Schlecht.  
*Hypericum formosum* Kunth var. *nortoniae*  
(M.E. Jones) C.L. Hitchc.  
*Hypericum perforatum* L.  
*Hypochaeris radicata* L.  
*Leucanthemum vulgare* Lam.

Olympic onion  
Pearly-everlasting  
Felix anemone  
  
Lyell's angelica  
American bistort  
Coastal brookfoam  
White marsh marigold  
Camas  
Giant red Indian paintbrush  
Nodding chickweed  
Fireweed  
Western water hemlock  
Littleleaf minerslettuce  
  
Purple foxglove  
Roundleaf sundew  
Willowherb  
Horsetail  
Coast Range fawn-lily  
Black lily, Indian rice  
Treepetal bedstraw  
King's gentian  
White-flowered hawkweed  
Bog St. John's-wort  
Western St. John's-wort  
  
Common St. John's-wort  
Hairy cat's-ear  
Oxeye daisy



<u>Scientific name</u>	<u>Common name</u>
<i>Lilium columbianum</i> Leichtl. in Duchartre	Columbia lily
<i>Lomatium martindalei</i> Coult. & Rose (Coult. & Rose)	Cascade desert parsley
<i>Lotus crassifolius</i> (Benth.) Greene	Big deervetch
<i>Lupinus latifolius</i> Lindl. ex J.G. Agardh	Broadleaf lupine
<i>Lysichitum americanus</i> Hultén & St. John	American Skunk cabbage
<i>Lycopodium clavatum</i> L.	Running clubmoss
<i>Maianthemum dilatatum</i> (Wood) A. Nels. & J.F. Macbr.	False lily of the valley
<i>Maianthemum stellatum</i> (L.) Link.	Starry false lily of the valley
<i>Osmorhiza berteroi</i> DC.	Sweetcicely
<i>Petasites frigidus</i> L.) Fries var. <i>palmatus</i> (Ait.) Cronq.	Colt's foot
<i>Platanthera dilatata</i> (Pursh) Lindl. ex Beck var. <i>dilatata</i>	White bogorchid
<i>Platanthera stricta</i> Lindl.	Slender bog orchid
<i>Potamogeton</i> sp.	Pondweed
<i>Pyrola asarifolia</i> Michx. var. <i>asarifolia</i>	Liverleaf wintergreen
<i>Ranunculus flammula</i> L.	Greater creeping spearwort
<i>Ranunculus populago</i> Greene	Popular buttercup
<i>Rumex acetosella</i> L.	Sheep sorrel, Sour weed
<i>Sanguisorba menziesii</i> Rydb.	Menzies' burnet
<i>Saxifraga ferruginea</i> Graham	Russethair saxifrage
<i>Scolopus hallii</i> S. Wats.	Oregon fetid adderstongue
<i>Senecio jacobaea</i> L.	Tansy ragwort
<i>Senecio triangularis</i> Hook. var. <i>angustifolius</i> G. N. Jones	Bog grounsel
<i>Sisyrinchium</i> sp.	Blue eyed grass
<i>Solidago canadensis</i> L.	Canada goldenrod
<i>Spiranthes romanzoffiana</i> Cham.	Hooded lady's tresses
<i>Trientalis arctica</i> Fisch. ex Hook.	Northern starflower
<i>Trifolium repens</i> L.	White clover
<i>Trifolium</i> sp.	Clover
<i>Veratrum viride</i> Ait.	Green false hellebore
<i>Veronica officinalis</i> L.	Common gypsyweed
<i>Viburnum ellipticum</i> Hook.	Common viburnum
<i>Viola palustris</i> L.	Marsh violet
<i>Viola sempervirens</i> Greene	Redwoods violet
<i>Xerophyllum tenax</i> (Pursh) Nutt.	Common beargrass
<b>Grasses, sedges and rushes</b>	
<i>Agrostis exarata</i> Trin.	Spike bentgrass
<i>Aira caryophyllea</i> L.	Silver hairgrass
<i>Aira praecox</i> L.	Little hairgrass
<i>Calamagrostis canadensis</i> (Michx.) P. Beauv.	Bluejoint
<i>Calamagrostis stricta</i> (Timm) Koel. ssp. <i>inexpansa</i> (Gray) C.W. Greene	Northern reedgrass
<i>Carex aquatilis</i> Wahlenb. var. <i>dives</i> Kuken.	Water sedge
<i>Carex californica</i> L. H. Bailey	California sedge
<i>Carex echinata</i> Murr. var. <i>echinata</i>	Star sedge
<i>Carex exsiccata</i> L. H. Bailey	Western inflated sedge
<i>Carex leptopoda</i> Mack.	Taperfruit shortscale sedge



<u>Scientific name</u>	<u>Common name</u>
<i>Carex luzulina</i> Olney	Woodrush sedge
<i>Carex mertensii</i> J. D. Prescott ex Bong.	Mertens' sedge
<i>Carex obnupta</i> Bailey	Slough sedge
<i>Carex pachystachya</i> Cham.	Chamisso sedge
<i>Carex rossii</i> Boott	Ross' sedge
<i>Carex utriculata</i> Boott	Northwest Territory sedge
<i>Dactylis glomerata</i> L.	Orchardgrass
<i>Danthonia californica</i> Bol.	California oatgrass
<i>Deschampsia cespitosa</i> (L.) Beauv.	Tufted hairgrass
<i>Elymus glaucus</i> Buckl.	Blue wildrye
<i>Festuca rubra</i> L.	Red fescue
<i>Holcus lanatus</i> L.	Common velvetgrass
<i>Juncus effusus</i> L.	Common rush
<i>Juncus</i> sp.	Rush
<i>Luzula multiflora</i> (Ehrh.) Lej. ssp. <i>multiflora</i>	Field woodrush
<i>Luzula parviflora</i> (Ehrh.) Desv.	Small-flowered woodrush
<i>Poa</i> sp,	Bluegrass
<i>Schoenoplectus americanus</i> (Pers.) Volk.	Chairmaker's bulrush
<i>Scirpus macrocarpus</i> J. Presl & C. Presl	Panicled bulrush
<i>Sparganium emersum</i> Rehm.	European bur-reed

## APPENDIX 2 – Liverworts<sup>c, d</sup>

<u>Scientific name</u>	<u>Authority</u>
<i>Blepharostoma trichophyllum</i>	(L.) Dum.
<i>Calypoegeja</i> sp.	
<i>Cephalozia</i> sp.	
<i>Cephaloziella divaricata</i> (Sm.)	Schiffn.
<i>Chiloscyphus pallescens</i>	(Ehrh. ex Hoffm.) Dum.
<i>Chiloscyphus polyanthus</i> (L.)	Corde
<i>Diplophyllum obtusifolium</i>	(Hook.) Dum.
<i>Douinia ovata</i>	(Dicks.) Brid.
<i>Frullania nisquallensis</i>	Sull.
<i>Gymnocolea inflata</i>	(Huds.) Dum.
<i>Marsupella sphacelata</i>	(Gieseke) Dum.
<i>Porella navicularis</i>	(Lehm. & Lindenb.) Pfeiff.
<i>Ptilidium californicum</i>	(Aust.) Underw.
<i>Scapania bolanderi</i>	Aust.
<i>Scapania paludosa</i>	(K. Muell.) K. Muell.
<i>Scapania undulata</i>	(L.) Dum.

## APPENDIX 3 – Mosses<sup>e, f</sup>

<i>Amblystegium serpens</i> (Hedw.)	Schimp. in B.S.G.
<i>Andreaea rothii</i> var. <i>rothii</i>	Web. & Mohr
<i>Andreaea rupestris</i>	Hedw.
<i>Antitrichia curtipendula</i>	(Hedw.) Brid.
<i>Aulacomnium androgynum</i>	(Hedw.) Schwaegr.
<i>Aulacomnium palustre</i>	(Hedw.) Schwaegr.

<sup>c</sup> Compiled from numerous sources

<sup>d</sup> Nomenclature follows Missouri Botanic Garden website W3MOST (2007)

<sup>e</sup> Compiled from numerous sources

<sup>f</sup> Nomenclature follows Missouri Botanic Garden website W3MOST (2007)



---

<u>Scientific name</u>	<u>Authority</u>
<i>Brachythecium frigidum</i>	(C. Muell.) Besch.
<i>Bryum capillare</i>	Hedw.
<i>Calliergon stramineum</i>	(Brid.) Kindb.
<i>Calliergonella cuspidata</i>	(Hedw.) Loeske
<i>Ceratodum purpureus</i>	(Hedw.) Brid.
<i>Dicranella heteromalla</i>	(Hedw.) Schimp.
<i>Dicranum fuscescens</i>	Turn.
<i>Dicranum scoparium</i>	Hedw.
<i>Ditrichum heteromallum</i>	(Hedw.) Britt.
<i>Eurhynchium oreganum</i>	(Sull.) Jaeg.
<i>Eurhynchium praelongum</i>	(Hedw.) Schimp. in B.S.G.
<i>Fontinalis howellii</i>	Ren. & Card.
<i>Fontinalis neomexicana</i>	Sull. & Lesq.
<i>Hylocomium splendens</i>	(Hedw.) Schimp. in B.S.G.
<i>Hypnum circinale</i>	Hook.
<i>Hypnum dieckii</i>	Ren. & Card. in Roell
<i>Isothecium myosuroides</i>	Brid.
<i>Mnium thomsonii</i>	Schimp.
<i>Philonotis fontana</i> var. <i>fontana</i>	(Hedw.) Brid.
<i>Plagiothecium laetum</i>	Schimp. in B.S.G.
<i>Pleuridium subulatum</i>	(Hedw.) Rabenh.
<i>Pleurozium schreberi</i>	(Brid.) Mitt.
<i>Pogonatum contortum</i>	(Brid.) Lesq.
<i>Pohlia annotina</i>	(Hedw.) Lindb.
<i>Pohlia nutans</i>	(Hedw.) Lindb.
<i>Polytrichastrum alpinum</i>	(Hedw.) G.L. Sm.
<i>Polytrichum commune</i>	Hedw.
<i>Polytrichum juniperinum</i>	Hedw.
<i>Racomitrium elongatu</i>	Ehrh. ex Frisv.
<i>Racomitrium heterostichum</i>	(Hedw.) Brid.
<i>Racomitrium lanuginosum</i>	(Hedw.) Brid.
<i>Rhizomnium glabrescens</i>	(Kindb.) T. Kop.
<i>Rhizomnium magnifolium</i>	(Horik.) T. Kop.
<i>Rhytidiadelphus loreus</i>	(Hedw.) Warnst.
<i>Rhytidiadelphus squarrosus</i>	(Hedw.) Warnst.
<i>Rhytidiadelphus triquetrus</i>	(Hedw.) Warnst.
<i>Sphagnum fuscum</i>	(Schimp.) Klinggr.
<i>Sphagnum henryense</i>	Warnst.
<i>Sphagnum mendocinum</i>	Sull. & Lesq. in Sull.
<i>Sphagnum palustre</i>	L.
<i>Sphagnum squarrosum</i>	Crome
<i>Sphagnum subnitens</i>	Russ. & Warnst. in Warnst.
<i>Sphagnum subsecundum</i>	Nees in Sturm
<i>Tetraplodon mnioides</i>	(Hedw.) Bruch & Schimp. in B.S.G.
<i>Trachybryum megaptilum</i>	(Sull.) Schof.
<i>Ulota megalospora</i>	Vent. in Roell
<i>Warnstorfia exannulata</i>	(Schimp. in B.S.G.) Loeske



## Appendix 4 – Amphibians, reptiles, birds, and mammals<sup>g</sup>

### Amphibians

<u>Order</u>	<u>Scientific name</u>	<u>Common name</u>
Caudata	<i>Ambystoma gracile</i>	Northwestern salamander
	<i>Ambystoma macrodactylum</i>	Long-toed salamander
	<i>Aneides ferreus</i>	Clouded salamander
	<i>Dicamptodon tenebrosus</i>	Pacific giant salamander
	<i>Ensatina eschscholtzi</i>	Ensatina
	<i>Plethodon dunni</i>	Dunn's salamander
	<i>Plethodon vehiculum</i>	Western redback salamander
	<i>Rhyacotriton variegatus</i>	Southern torrent salamander
	<i>Taricha granulosa</i>	Rough-skinned newt
Anura	<i>Bufo boreas</i>	Western toad
	<i>Pseudacris regilla</i>	Pacific chorus frog
	<i>Rana aurora</i>	Red-legged frog

### Reptiles

Squamata	<i>Elgaria coerulea</i>	Northern alligator lizard
	<i>Charina bottae</i>	Rubber boa
	<i>Coluber constrictor</i>	Racer
	<i>Contia tenuis</i>	Sharptail snake
	<i>Eumeces skiltonianus</i>	Western skink
	<i>Sceloporus occidentalis</i>	Western fence lizard
	<i>Thamnophis elegans</i>	Western terrestrial garter snake
	<i>Thamnophis ordinoides</i>	Northwestern garter snake
	<i>Thamnophis sirtalis</i>	Common garter snake

### Birds

Anseriformes	<i>Aix sponsa</i>	Wood Duck
	<i>Anas platyrhynchos</i>	Mallard
	<i>Anas cyanoptera</i>	Cinnamon Teal
	<i>Lophodytes cucullatus</i>	Hooded Merganser
Podicipediformes	<i>Podilymbus podiceps</i>	Pied-billed Grebe
Ciconiiformes	<i>Ardea herodias</i>	Great Blue Heron
	<i>Butorides virescens</i>	Green Heron
Falconiformes	<i>Accipiter cooperii</i>	Cooper's hawk
	<i>Accipiter striatus</i>	Sharp-shinned hawk
	<i>Buteo jamaicensis</i>	Red-tailed hawk
	<i>Cathartes aura</i>	Turkey vulture

<sup>g</sup> Nomenclature, distribution and habitat characteristics taken from Csuti et al. 1997.



---

<u>Order</u>	<u>Scientific name</u>	<u>Common name</u>
	<i>Circus cyaneus</i>	Northern harrier
	<i>Falco sparverius</i>	American kestrel
	<i>Haliaeetus leucocephalus</i>	Bald eagle
Galliformes	<i>Bonasa umbellus</i>	Ruffed grouse
	<i>Dendragapus fuliginosus</i>	Sooty Grouse
	<i>Oreortyx pictus</i>	Mountain quail
Charadriiformes	<i>Actitis macularia</i>	Spotted sandpiper
	<i>Gallinago delicata</i>	Wilson's Snipe
	<i>Brachyramphus marmoratus</i>	Marbled murrelet
Columbiformes	<i>Columba fasciata</i>	Band-tailed pigeon
	<i>Zenaida macroura</i>	Mourning dove
Strigiformes	<i>Aegolius acadicus</i>	Northern saw-whet owl
	<i>Bubo virginianus</i>	Great-horned owl
	<i>Glaucidium gnoma</i>	Northern pygmy owl
	<i>Otus kennicottii</i>	Western screech-owl
	<i>Strix occidentalis</i>	Spotted owl
	<i>Strix varia</i>	Barred owl
Caprimulgiformes	<i>Chordeiles minor</i>	Common nighthawk
Apodiformes	<i>Chaetura vauxi</i>	Vaux's swift
	<i>Selasphorus rufus</i>	Rufous hummingbird
Coraciiformes	<i>Ceryle alcyon</i>	Belted kingfisher
Piciformes	<i>Colaptes auratus</i>	Northern flicker
	<i>Dryocopus pileatus</i>	Pileated woodpecker
	<i>Picoides pubescens</i>	Downy woodpecker
	<i>Picoides villosus</i>	Hairy woodpecker
	<i>Sphyrapicus ruber</i>	Red-breasted sapsucker
Passeriformes	<i>Agelaius phoeniceus</i>	Red-winged blackbird
	<i>Bombycilla cedrorum</i>	Cedar waxwing
	<i>Carduelis pinus</i>	Pine siskin
	<i>Carduelis tristis</i>	American goldfinch
	<i>Carpodacus purpureus</i>	Purple finch
	<i>Catharus ustulatus</i>	Swainson's thrush
	<i>Certhia americana</i>	Brown creeper
	<i>Chamaea fasciata</i>	Wrentit
	<i>Cinclus mexicanus</i>	American dipper
	<i>Coccothraustes vespertinus</i>	Evening grosbeak



<u>Order</u>	<u>Scientific name</u>	<u>Common name</u>
	<i>Contopus borealis</i>	Olive-sided flycatcher
	<i>Contopus sordidulus</i>	Western wood peewee
	<i>Corvus brachyrhynchos</i>	American crow
	<i>Corvus corax</i>	Common raven
	<i>Cyanocitta stelleri</i>	Steller's jay
	<i>Dendroica coronata</i>	Yellow-rumped warbler
	<i>Dendroica nigrescens</i>	Black-throated gray warbler
Passeriformes		
	<i>Dendroica occidentalis</i>	Hermit warbler
	<i>Dendroica petechia</i>	Yellow warbler
	<i>Empidonax difficilis</i>	Pacific-slope flycatcher
	<i>Empidonax hammondi</i>	Hammond's flycatcher
	<i>Empidonax traillii</i>	Willow flycatcher
	<i>Geothlypis trichas</i>	Common yellowthroat
	<i>Ixoreus naevius</i>	Varied thrush
	<i>Junco hyemalis</i>	Dark-eyed junco
	<i>Loxia curvirostra</i>	Red crossbill
	<i>Melospiza melodia</i>	Song sparrow
	<i>Molothrus ater</i>	Brown-headed cowbird
	<i>Myadestes townsendi</i>	Townsend's solitaire
	<i>Oporornis tolmiei</i>	MacGillivray's warbler
	<i>Parus atricapillus</i>	Black-capped chickadee
	<i>Parus rufescens</i>	Chestnut-backed chickadee
	<i>Perisoreus canadensis</i>	Gray jay
	<i>Pheucticus melanocephalus</i>	Black-headed grosbeak
	<i>Pipilo maculatus</i>	Spotted towhee
	<i>Piranga rubra</i>	Western tanager
	<i>Progne subis</i>	Purple martin
	<i>Psaltriparus minimus</i>	Bushtit
	<i>Regulus satrapa</i>	Golden-crowned kinglet
	<i>Sialia mexicana</i>	Western bluebird
	<i>Sitta canadensis</i>	Red-breasted nuthatch
	<i>Spizella passerina</i>	Chipping sparrow
	<i>Stelgidopteryx serripennis</i>	Northern rough-winged swallow
	<i>Tachycineta bicolor</i>	Tree swallow
	<i>Tachycineta thalassina</i>	Violet-green swallow
	<i>Troglodytes aedon</i>	House wren
	<i>Troglodytes troglodytes</i>	Winter wren
	<i>Turdus migratorius</i>	American robin
	<i>Vermivora celata</i>	Orange-crowned warbler
	<i>Vermivora ruficapilla</i>	Nashville warbler
	<i>Vireo gilvus</i>	Warbling vireo
	<i>Vireo cassinii</i>	Cassin's Vireo
	<i>Vireo huttoni</i>	Hutton's vireo
	<i>Wilsonia pusilla</i>	Wilson's warbler
	<i>Zonotrichia leucophrys</i>	White-crowned sparrow



---

## Mammals

<u>Order</u>	<u>Scientific name</u>	<u>Common name</u>
Didelphimorphia	<i>Didelphis virginiana</i>	Virginia opossum
Insectivora	<i>Neurotrichus gibbsii</i>	Shrew-mole
	<i>Scapanus townsendii</i>	Townsend's mole
	<i>Scapanus orarius</i>	Coast mole
	<i>Sorex bairdi</i>	Baird's shrew
	<i>Sorex bendirii</i>	Pacific marsh shrew
	<i>Sorex pacificus</i>	Pacific shrew
Insectivora	<i>Sorex sonomae</i>	Fog shrew
	<i>Sorex trowbridgii</i>	Trowbridge's shrew
	<i>Sorex vagrans</i>	Vagrant shrew
Chiroptera	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat
	<i>Eptesicus fuscus</i>	Big brown bat
	<i>Lasionycteris noctivagans</i>	Silver-haired bat
	<i>Lasiurus cinereus</i>	Hoary bat
	<i>Myotis californicus</i>	California myotis
	<i>Myotis evotis</i>	Long-eared myotis
	<i>Myotis lucifugus</i>	Little brown myotis
	<i>Myotis thysanodes</i>	Fringed myotis
	<i>Myotis volans</i>	Long-legged myotis
	<i>Myotis yumanensis</i>	Yuma myotis
Lagomorpha	<i>Lepus americanus</i>	Snowshoe hare
	<i>Sylvilagus bachmani</i>	Brush rabbit
Rodentia	<i>Aplodontia rufa</i>	Mountain beaver
	<i>Castor canadensis</i>	American beaver
	<i>Clethrionomys californicus</i>	Western red-backed vole
	<i>Erethizon dorsatum</i>	Common porcupine
	<i>Glaucomys sabrinus</i>	Northern flying squirrel
	<i>Microtus longicaudus</i>	Long-tailed vole
	<i>Microtus oregoni</i>	Creeping vole
	<i>Microtus townsendii</i>	Townsend' vole
	<i>Neotoma cinerea</i>	Bushy-tailed woodrat
	<i>Peromyscus maniculatus</i>	Deer mouse
	<i>Phenacomys albipes</i>	White-footed vole
	<i>Phenacomys longicaudus</i>	Red tree vole
	<i>Spermophilus beecheyi</i>	California ground squirrel



<u>Order</u>	<u>Scientific name</u>	<u>Common name</u>
Rodentia	<i>Tamias townsendii</i>	Townsend's chipmunk
	<i>Tamiasciurus douglasii</i>	Douglas' squirrel
	<i>Thomomys mazama</i>	Western pocket gopher
	<i>Zapus trinotatus</i>	Pacific jumping mouse
Carnivora	<i>Canis latrans</i>	Coyote
	<i>Felis concolor</i>	Mountain lion
	<i>Lutra canadensis</i>	Northern river otter
	<i>Lynx rufus</i>	Bobcat
	<i>Mephitis mephitis</i>	Striped skunk
	<i>Mustela erminea</i>	Ermine
	<i>Mustela frenata</i>	Long-tailed weasel
	<i>Mustela vison</i>	Mink
	<i>ssp. columbianus</i>	
Carnivora	<i>Procyon lotor</i>	Common raccoon
	<i>Spilogale gracilis</i>	Western spotted skunk
	<i>Urocyon cinereoargenteus</i>	Common gray fox
	<i>Ursus americanus</i>	Black bear
	<i>Vulpes vulpes</i>	Red fox
Artiodactyla	<i>Cervus elaphus</i>	Elk
	<i>Odocoileus hemionus</i>	Black-tailed deer



View of the forested island from the northwest.



Beaver dam in riparian channel on west portion of Lost Prairie.



---

## REFERENCES

- Agee, J.K. 1990.** The historical role of fire in Pacific Northwest forests. In: Walstad, J., Radosevich, S.; and Sandberg, D., eds. *Natural and prescribed fire in Pacific Northwest forests*. Corvallis, OR: Oregon State University Press: 25-38.
- Bauer, P.; Brown, W.E.; Hukari, J.; Kuust, J.; Lira, E. 1986.** Monitoring and management proposals for Saddleback Mountain. Unpublished report on file with: Oregon State University, School of Forestry, Corvallis, OR 97331. [No pagination].
- Christy, J. A. 2004.** Native freshwater wetland plant associations of northwestern Oregon. Oregon Natural Heritage Information Center, Oregon State University. Portland, Oregon. 246 p.
- Csuti, B.; Kimerling, A.J.; O'Neil, T.A.; Shaughnessy, M.M.; Gaines, E.P.; Huso, M.M.P. 1997.** Atlas of Oregon wildlife. Corvallis, OR: Oregon State University Press. 427 p. + map.
- 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.
- Elliott, L.; Keller, P.; Patton, C.; Rech, S.; Yeary, M. 1986.** A plan to manage and monitor two areas of critical environmental concern. Unpublished report on file with: Bureau of Land Management, Salem District Office, 1717 Fabry Road SE, Salem, OR 97306.
- Esslinger, T. L. 2006.** A cumulative checklist for the lichen-forming, lichenicolous and allied fungi of the continental United States and Canada. North Dakota State University: <http://www.ndsu.nodak.edu/instruct/esslinge/chcklst/chcklst7.htm> (First Posted 1 December 1997, Most Recent Update 10 April 2006), Fargo, North Dakota. (November 15, 2007).
- Federal Register. 1984.** January 3, 1984, notices. Federal Register. 49(1): 165.
- Flora of North America Editorial Committee. 1993+.** Flora of North America North of Mexico 13+ volumes. Oxford University Press, New York and Oxford.
- Franklin, Jerry F.; C.T. Dyrness. 1988.** 2<sup>nd</sup> edition. *Natural vegetation of Oregon and Washington*. Oregon State University Press, Corvallis. 452 p.
- Hines, William W. 1971.** Plant communities in the old-growth forests of north coastal Oregon. Unpublished M. S. thesis. Oregon State University, Corvallis. 135 p.
- Juday, Glenn P. 1976.** The location, composition, and structure of old-growth forests of the Oregon Coast Range. Corvallis, OR: Oregon State University, Ph.D. dissertation. 206 p.
- Missouri Botanical Garden W<sup>3</sup>MOST database. 2007.** Current moss nomenclature and authorities, MOSs TROPICOS, (December 3, 2007). <http://mobot.mobot.org/W3T/Search/most.html>
- Oregon Flora Project. 2006.** The Oregon plant atlas. <http://www.oregonflora.org/oregonplantatlas.html>. (November 26, 2007).
- Oregon Natural Heritage Information Center. 2007.** Rare, Threatened, and Endangered Species of Oregon. Oregon Natural Heritage Information Center, Oregon State University, Portland, Oregon. 100pp. Also available at <http://oregonstate.edu/ornhic/>



- 
- Oregon Natural Heritage Program. 2003.** Oregon natural heritage plan. Salem, OR: Department of State Lands, 167 p.
- Shipman, J.A. 1997.** Soil survey of Lincoln County area. Newport, OR: USDA NRCS and USFS in cooperation with the Oregon Agricultural Experiment Station. 158 p.
- U.S. Department of Agriculture, Natural Resources Conservation Service [USDA NRCS]. 2007a.** Plants database: <http://plants.usda.gov/> (December 4, 2007)
- U.S. Department of Agriculture, Natural Resources Conservation Service [USDA NRCS]. 2007b.** Soil maps from Lincoln County, Oregon. <http://websoilsurvey.nrcs.usda.gov/app/>. (December 28, 2006).
- U.S. Department of the Interior, Bureau of Land Management [USDI BLM]. 1984.** Salem District Management Framework Plan. On file with: Salem District Office, 1717 Fabry Road SE, Salem, Oregon 97306.
- U.S. Department of the Interior, Bureau of Land Management [USDI BLM]. 1995.** Salem District Record of Decision and Resource Management Plan. On file with: Salem District Office, 1717 Fabry Road SE, Salem, Oregon 97306. 76p + appendices.
- U.S. Department of the Interior, Bureau of Land Management [USDI BLM]. 2006a.** . Manual Section 1613. "Areas of Critical Environmental Concern."
- U.S. Department of the Interior, Bureau of Land Management [USDI BLM]. 2006b.** Forest inventory database. Unpublished report. On file with: Salem District Office, 1717 Fabry Road SE, Salem, Oregon 97306.
- Western Region Climate Center. 2007.** Oregon climate data. <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?or4776> (December 4, 2007).

Back Cover: Red alder snag covered in lichens and bryophytes near edge of pond  
at Lost Prairie.



Salmon River



Lost  
Prairie  
ACEC

218

---

**U.S. Department of Interior  
Bureau of Land Management  
Salem District  
1717 Fabry Rd. SE  
Salem, OR 97306**

---

Tim Jacobsson VIS

200

100