

INVENTORY OF POTENTIAL  
NATURAL AREAS  
ON STATE LANDS:  
PART 1



A report to the  
NATURAL AREA PRESERVES  
ADVISORY COMMITTEE to the  
STATE LAND BOARD

by

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Corvallis, Oregon

March, 1975

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VEGETATION INVENTORY OF CERTAIN STATE-OWNED LANDS  
IN SELECTED OREGON COUNTIES

A Report to the  
NATURAL AREA PRESERVES ADVISORY COMMITTEE  
OREGON STATE LAND BOARD

by  
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Environmental Remote Sensing Applications Laboratory  
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Corvallis, Oregon  
March, 1975

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Vegetation Inventory of Certain State-Owned Lands  
in Selected Oregon Counties

Introduction

On 15 July 1974, the Environmental Remote Sensing Laboratory (ERSAL) at Oregon State University entered into an agreement with the Natural Area Preserves Advisory Committee to the Oregon State Land Board (NAPAC) for the purpose of cooperatively conducting a vegetation resource inventory of all state-owned land in selected counties using remote sensing techniques and accepted vegetation resource inventory procedures. Information gathered during the project is to meet the need of NAPAC to locate and identify potential natural area preserves. This report presents the results of that project under the current agreement.

Within the scope of this inventory, ERSAL recognized the following objectives: 1) to provide through remote sensing techniques a description of vegetation in potential natural areas on state-owned lands in Benton, Clatsop, Crook, Curry, Jefferson, Linn, and Malheur Counties; 2) to identify from National Aeronautics and Space Administration (NASA) high altitude photography state land which may not be appropriate for natural area preservation at an early stage of the project; 3) to interpret and to describe primarily from aerial photography the plant communities on potentially suitable sites at the "cell" level as set forth in the review copy of Research Natural Area Needs in the Pacific Northwest: A Contribution to Land Use Planning, C. T. Dyrness, et al., 1974; 4) to field check interpretations from high altitude photography to insure correct identification of plant communities; and 5) to present to NAPAC, in a mutually agreeable format, the results of the inventory on the specified state-owned lands by spring, 1975.

Working toward these objectives, ERSAL personnel located parcels of state land, including state parks and waysides, in the project counties on 15' and 7½' USGS topographic maps and, where necessary, on Oregon State Highway Division road maps (1"/lmile). Each parcel, or contiguous land unit, was systematically located on available color infrared (CIR) high altitude photography with the aid of these maps. Interpretations of the composition and character of the vegetation were made and inappropriate units or areas within units were omitted from further analysis. Brief



notes on nearly all culled units were made on inventory sheets provided by the State Land Board and Department of Forestry. These working maps and inventory sheets have been preserved in an organized manner and are to be eventually stored by ERSAL.

Land units considered as having from marginal to strong potential for natural area preserves are described in catalog form by county in the main body of the report. The decision to include a unit in the catalog was based on 1) the lack of excessive vegetation disturbance; 2) the unusual as well as the typical attributes of the vegetation, e.g., regionally uncommon plant species present or a quality community of regionally common species present; 3) the natural character of the immediate environmental setting; and 4) the presence of other values such as unique scenery, unusual landform, natural water source, important wildlife habitat, or special soil type. Systematic photo interpretation provided the bulk of information for carrying out the evaluation on the 521,000 acres of state land involved in the study. Where "ground truth" data or the positive identification of an extraordinary vegetation photo signature was needed an attempt was made to field check the areas and sites in question.

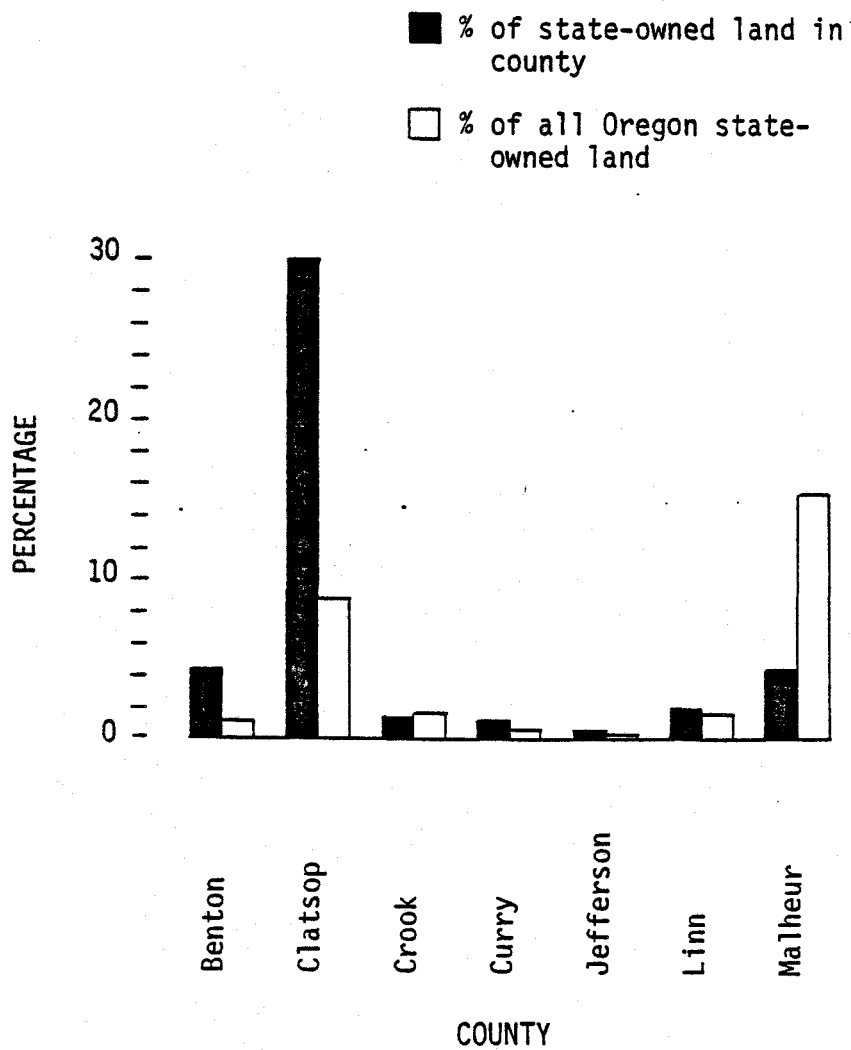
Supplementary sources of data for this project were the field sheets for the survey of state-owned rangeland resources in southeastern Oregon (Poulton and Isley, 1970), the vegetation-land use maps of Crook County compiled by ERSAL (Pyott and Cornwell, 1974), and the State Department of Forestry forest cover-type computer maps for Clatsop County. Also, acknowledgement is given to the contribution and interest of Dr. Kenton L. Chambers and Mr. Dennis Jaques of the Department of Botany, OSU, and to the cooperative assistance of NAPAC members and state agency personnel.

The format of the following catalog is alphabetical by county. For each county, there is a small scale reference map indicating the location of all state land in that county. Each unit selected for cataloging has its legal description (except state parks), its approximate landmark location, the title of the map on which it may be found, and the flight and frame number of the NASA photography on which it may be found listed under "A". Under "B" is given the physiographic province, vegetation zone (after Franklin and Dyrness, 1973), and "cell" or community description. A brief statement concerning the vegetation composition and other pertinent

features in the unit is in part "C". A comment on the potential or suitability of the unit for preserve status is after "D". It would be helpful, but not absolutely necessary, to refer to the folder of working maps submitted to NAPAC as part of this report when using the catalog. Eventually the folder is to be on file at ERSAL.

USED FOR AN EXPLANATION OF LOCATION description  
USED - E.g. How is  $NW\frac{1}{4}, E\frac{1}{2}$  to be read?  
 $NW\frac{1}{4}$  of the  $E\frac{1}{2}$ , or  $E\frac{1}{2}$  of the  $NW\frac{1}{4}$ ?

# STATE LAND IN THE SEVEN COUNTIES



Source: State of Oregon, District Facts, 1970.

## BENTON COUNTY

### Oregon Coast Range - Willamette Valley

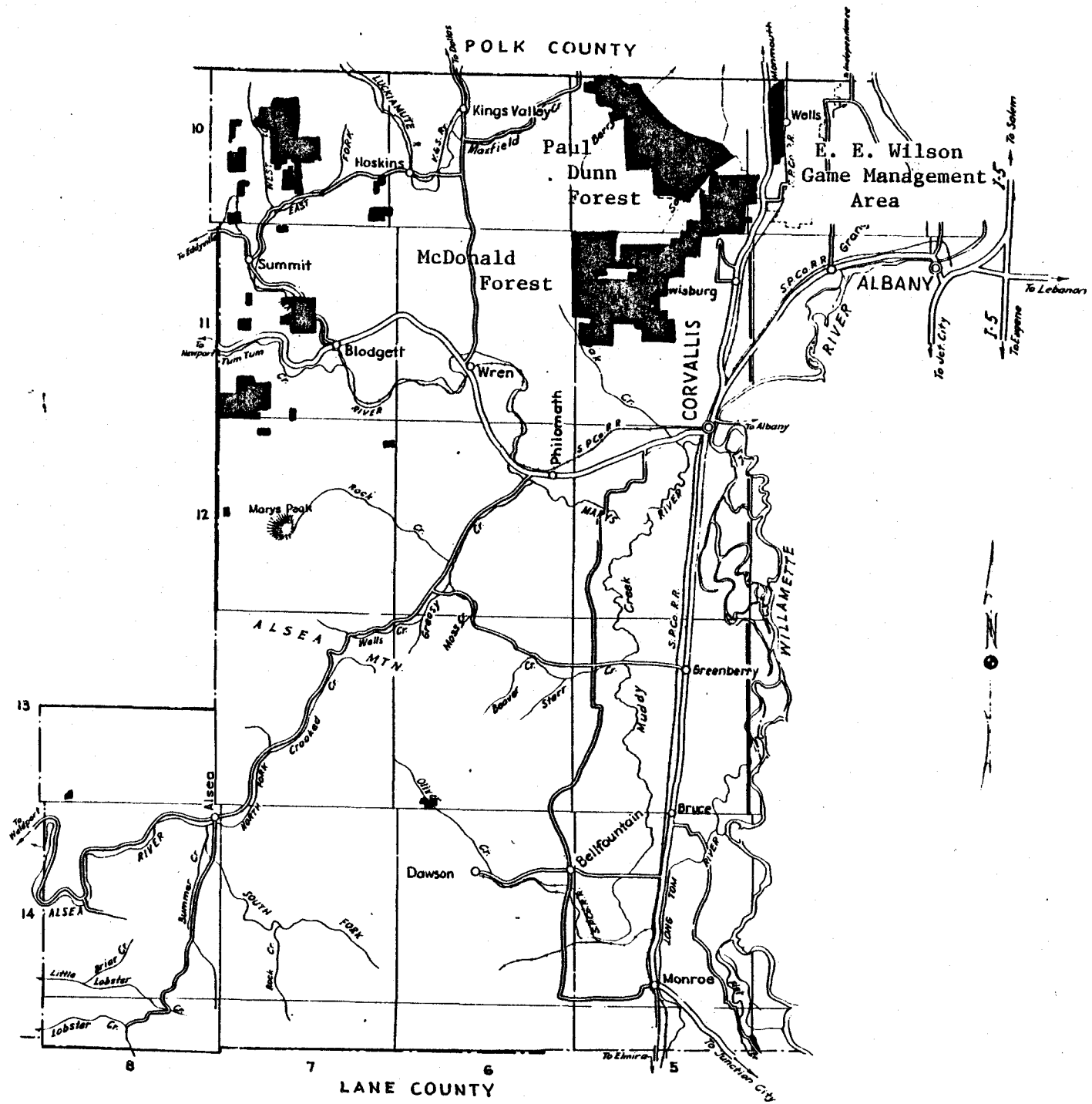
Over fifty percent of the state land in Benton County is comprised of McDonald and Paul Dunn forests, located north of Corvallis and administered by the State System of Higher Education. About 8,200 acres of State Department of Forestry and State Land Board land are located in the north-west part of the county in blocks and a few isolated parcels. Other state lands are Willamette River Park corridor, E. E. Wilson Game Management area, and Washburne State Wayside.

#### Summary of Vegetation on State Lands, Benton County.

State parcels in Benton County are nearly all located in the Oregon Coast Range province, Western Hemlock Zone (Franklin and Dyrness, 1973). The vegetation is characterized by regenerating conifer forests, hardwood (red alder), and brush cover. McDonald and Paul Dunn forests have large areas of older coniferous forest communities and smaller areas of riparian hardwood and meadow communities. State-owned forest land in the remainder of the county has been used for its timber resource. Much of the vegetation is a regenerating forest of Douglas fir, western hemlock, red alder, and bigleaf maple. Few, if any, "natural" vegetation sites exist. However, some possible candidate areas may be found in McDonald and Paul Dunn forests, Willamette River Park corridor, and one or two other locations. Descriptions follow.

#### Catalog of Selected Parcels, Benton County.

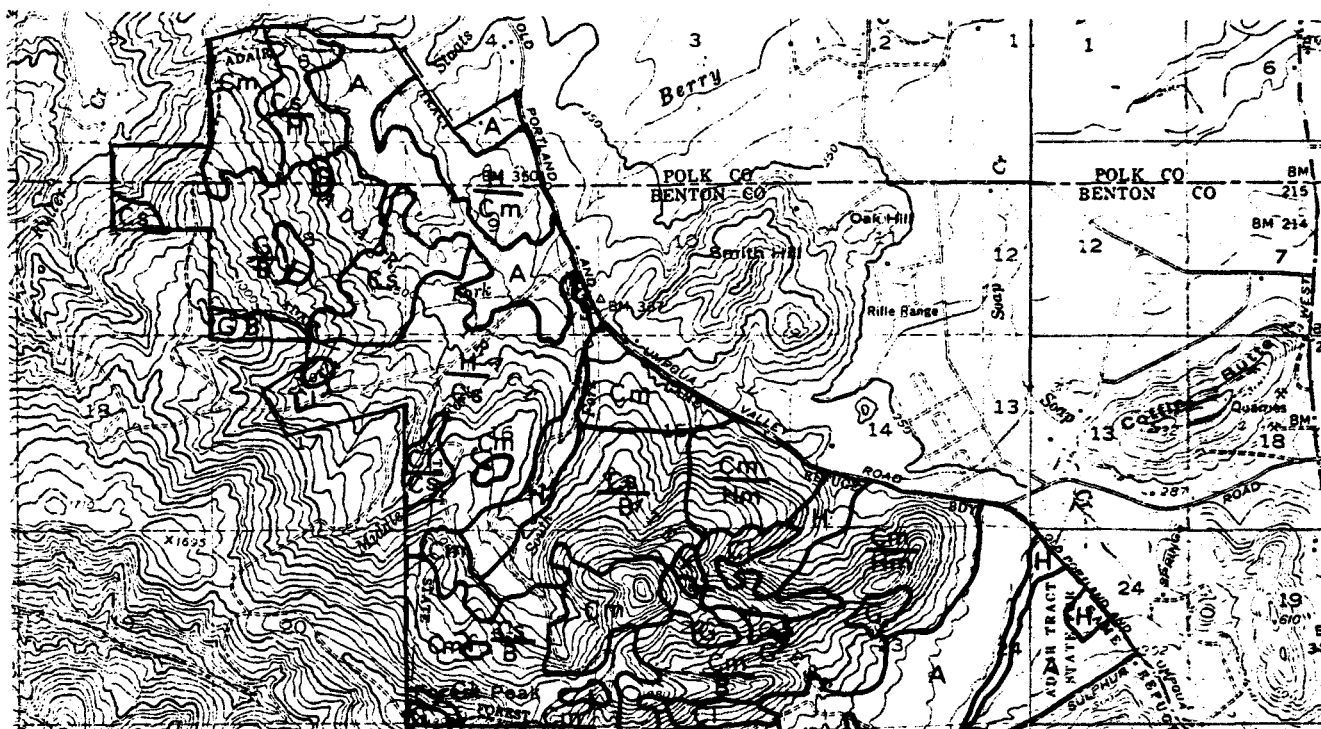
- 1A. T10S, R7W  
Section 19, E $\frac{1}{2}$   
Section 19, W $\frac{1}{2}$ , E $\frac{1}{2}$   
Section 19, lots 1, 2  
Approximately 2 miles N of Nashville on the Yaquina River  
Marys Peak, Oreg., 15', USGS, 1957  
73-127, 113 (1:32,500)
- B. Oregon Coast Range; Western Hemlock Zone; Douglas fir forest and riparian hardwood communities.
- C. This is an area on the upper segment of the Yaquina River. Moderately dense, mid-size Douglas fir cover the slopes E and W of the stream. Red alder and bigleaf maple hardwood communities border the stream itself. There is some evidence of past logging, but the forest cover is relatively mature compared to surrounding areas. Elevation is approximately 300 feet. There is road access into this section.



- D. Some potential for natural area.
- 2A. T10S, R7W  
 Section 31, SE $\frac{1}{4}$   
 Section 31, lot 4  
 About 1 mile E of Nashville  
Marys Peak, Oreg., 15', USGS, 1957  
 73-127, 114 (1:32,500)
- B. Oregon Coast Range; Western Hemlock Zone; young hardwoods communities.
- C. This parcel includes a railroad right-of-way. The vegetation is typical of the region and has been logged in years past. The hardwood cover present is young, dense alder. A small portion of the unit is covered with young conifers and there is a scattering of older conifers. The point of interest is the ponds which occur on Spilde Creek running though SE $\frac{1}{4}$ , W $\frac{1}{2}$ . Plant and animal communities that occur around the ponds may be of sufficient interest for natural area consideration.
- D. Marginal potential for natural area.
- 3A. T11S, R5W  
 Section 17, NW $\frac{1}{4}$ , SW $\frac{1}{4}$   
 Section 17, SW $\frac{1}{4}$ , W $\frac{1}{2}$ , W $\frac{1}{2}$   
 Section 18, SE $\frac{1}{4}$ , E $\frac{1}{2}$ , E $\frac{1}{2}$   
 About one-half mile into McDonald Forest from the Oak Creek entrance. See map, page 8a.  
Corvallis, Oreg., 15', USGS, 1956  
 73-110, 189 (1:32,500)
- B. Oregon Cascades; Western Hemlock Zone; riparian hardwood and meadow communities.
- C. The described area is within McDonald Forest N of the Oak Creek entrance. Although there appear to be experimental plots in the area, some of the open meadows are undisturbed and important collection areas for uncommon species of insects.
- D. Some potential for natural area.
- 4A. T11S, R5W  
 Section 8, SE $\frac{1}{4}$ , NE $\frac{1}{4}$   
 About 2 miles N of the Oak Creek entrance of McDonald Forest  
Corvallis, Oreg., 15', USGS, 1956  
 73-110, 189 (1:32,500)
- B. Oregon Coast Range; Western Hemlock Zone; Douglas fir forest community/shrub understory.



- C. This unit is on a N facing slope at about 1200 feet elevation. The vegetation cover is characterized by large, moderately dense Douglas fir and a few hardwood species intermixed. The forest is little disturbed and has a uniform character. The understory is apparently mature shrubs.
  - D. Good potential for natural area.
- 5A. T11S, R5W  
 Section 5, SE $\frac{1}{4}$ , E $\frac{1}{2}$ , E $\frac{1}{2}$   
 Near confluence of Baker Creek and Soap Creek  
Corvallis, Oreg., 15', USGS, 1956  
 73-110, 189
- B. Oregon Coast Range; Western Hemlock Zone; riparian hardwood/conifer forest communities.
  - C. This segment of Baker Creek has a series of ponds. Hardwood cover is dense along the stream and beaver are reported in the area. The surrounding slopes are of mid-age conifer/hardwood forest. See map, page 8a.
  - D. Suggest further investigation. Potential may be based on the natural character of the ponds.
- 6A. T10S, R5S  
 Section 16, SW $\frac{1}{4}$ , NW $\frac{1}{4}$ , NW $\frac{1}{4}$   
 Section 16, NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SW $\frac{1}{4}$   
 In Paul Dunn Forest on the middle fork of Berry Creek  
Corvallis, Oreg., 15', USGS, 1956  
 73-110, 188 (1:32,500)
- B. Oregon Coast Range; Western Hemlock Zone; conifer/hardwood forest communities.
  - C. This is a small stand of older Douglas fir and hardwoods in the upper portion of a stream drainage. Elevation is about 700 feet.
  - D. Marginal potential for natural area.
- 7A. T10S, R5W  
 Section 17, NW $\frac{1}{4}$ , NE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 In Paul Dunn Forest on the north fork of Berry Creek  
Corvallis, Oreg., 15', USGS, 1956  
 73-110, 187 (1:32,500)
- B. Oregon Coast Range; Western Hemlock Zone; Douglas fir forest/grassland communities.



## McDonald and Paul Dunn Forests

C--Conifer forest (Douglas fir).

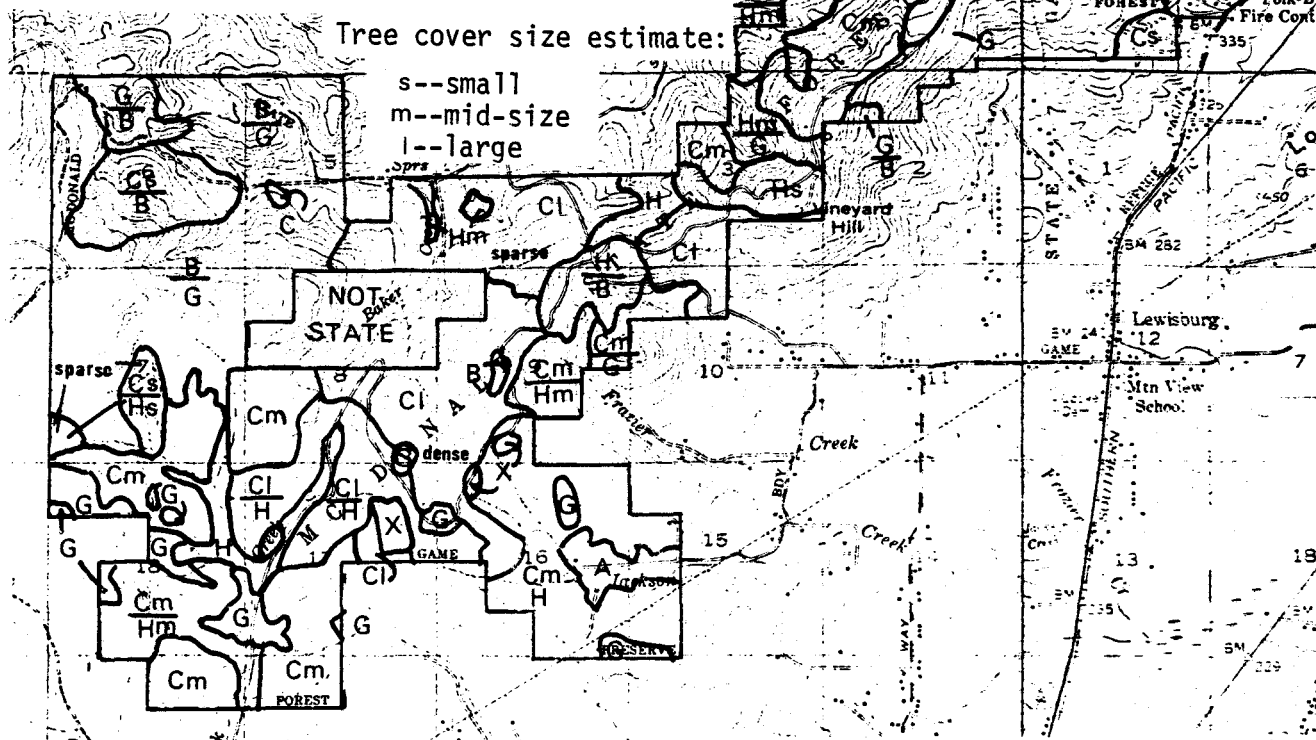
H--Hardwood forest (red alder, bigleaf maple).

G--Grassland, meadows.

B--Brush cover (berries, young hardwoods, vine maple, other).

A--Agricultural land (field crops, grazing).

X--Clearcut area.



C. This parcel has a small group of Douglas fir in it surrounded by shrubs and adjacent to a small patch of apparently natural grassland. The immediate area is severely disturbed. Many vehicle tracks are evident in the brush cover and the area has been logged in the past. The elevation is about 750 feet.

D. Marginal potential for natural area.

State Parks, Waysides, and Game Management Areas, Benton County.

Washburne State Wayside - Only a narrow strip of the wayside is within Benton County. The wayside is a stand of "old growth" Douglas fir with a few hardwoods intermixed. The surrounding land is agricultural. The character of the vegetation is affected by heavy visitor use and therefore the site may not be suitable for natural area consideration.

E. E. Wilson Game Management area - There is no potential for a natural area preserve in the area. The vegetation has been severely disturbed by past use as a military base and is mostly covered by brush.

Willamette River Park Corridor - described separately.

CLATSOP COUNTY  
Oregon Coast Range

Of the seven counties included in this report, Clatsop County has the largest proportion of state-owned land. Approximately thirty percent of the county area, or about 157,000 acres, is state land. Most of the land is owned and managed by the Department of Forestry. Smaller portions of the total state acreage are state parks, Oregon Wildlife Commission management areas, and Land Board parcels managed by the Department of Forestry.

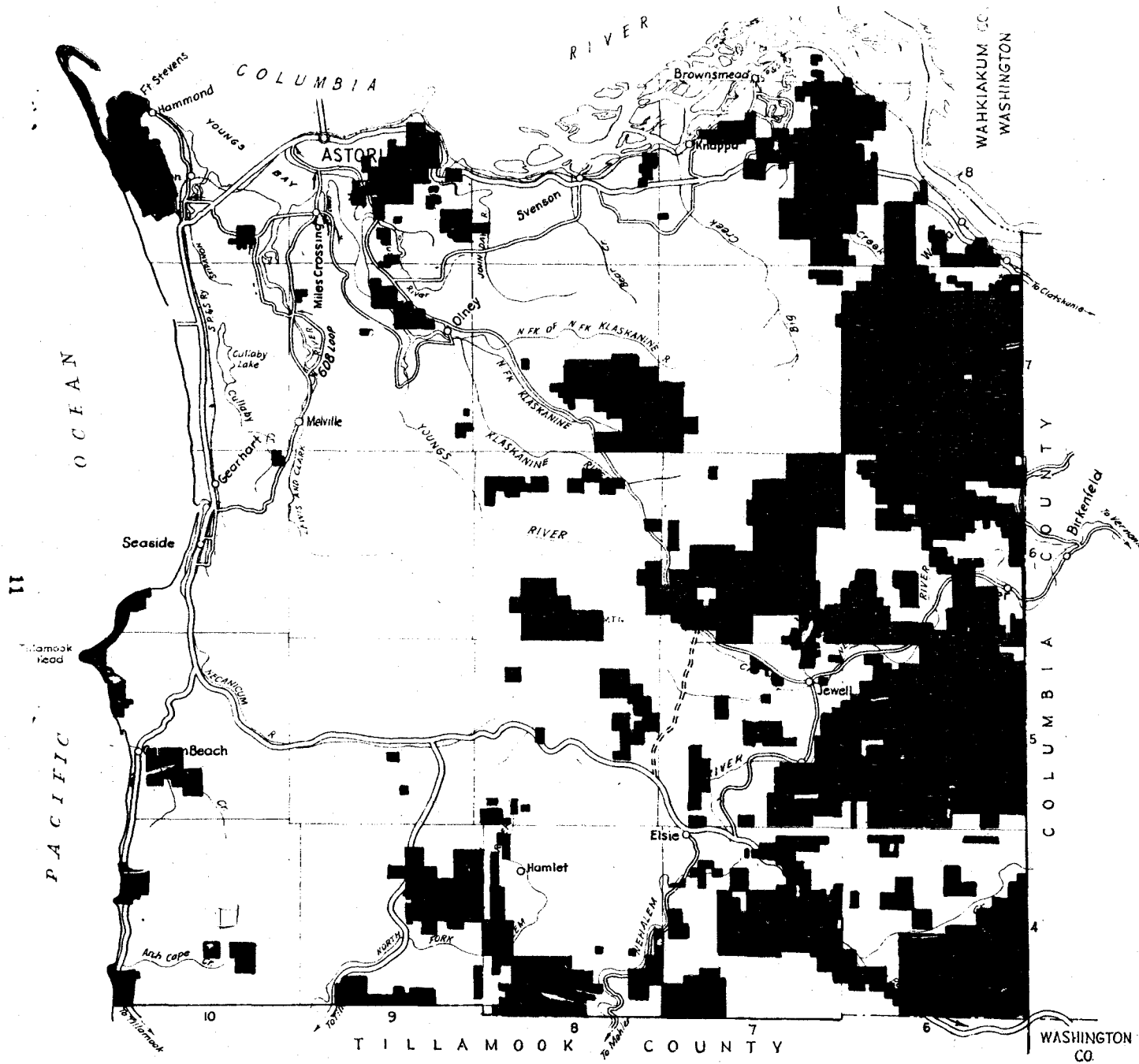
Summary of Vegetation on State-Owned Lands.

The county is divided into two major natural vegetation zones: 1) the Sitka Spruce Zone occurring in a narrow strip along the coast extending inland ten to fifteen miles into open coastal river valleys and up the Columbia River to near Aldrich Point; and 2) the Western Hemlock Zone, the most extensive vegetation zone in the Oregon coast range, which extends over the remainder of the county (Franklin and Dyrness, 1973). A large proportion of the state land is managed as timber resource land.

However, there are coastal state parks which exhibit not only dense coniferous forests, but scenic shrub and grass headlands and stabilized sand dune plant communities as well. On Saddle Mountain, Saddle Mountain State Park, the subalpine environment harbors habitats for unusual and endemic plant species. Other high peaks in the county that are included in state ownership, such as Nicolai Mountain and Onion Peak, also have plant species of special interest. Estuarine marshes, upland ponds, and riparian plant communities, in addition to tracts of forest land, occur in relatively undisturbed condition on state land in Clatsop County.

Catalog of Selected Parcels, Clatsop County.

For Clatsop County, a brief overall description of the vegetation cover in townships with greater than fifty percent state ownership is given. This is followed by specific descriptions of vegetation in selected state parcels considered suitable for further analysis as potential natural area preserves.



CLATSOP COUNTY

T4N, R6W. This township is covered by a complex vegetation mosaic of variable-age coniferous and deciduous trees with a few large areas of grass/forb/fern cover. Approximately fifty-five percent is covered by young, sparsely distributed Douglas fir/western hemlock/western redcedar mixed with mid-age alder and other deciduous tree species. Large patches of open shrub are also evident. Approximately thirty percent is a dense, older cover of Douglas fir/western hemlock with some areas of hardwoods intermixed. The remainder of the area includes grass/forb/fern cover and a small percentage of identifiable, recently logged areas.

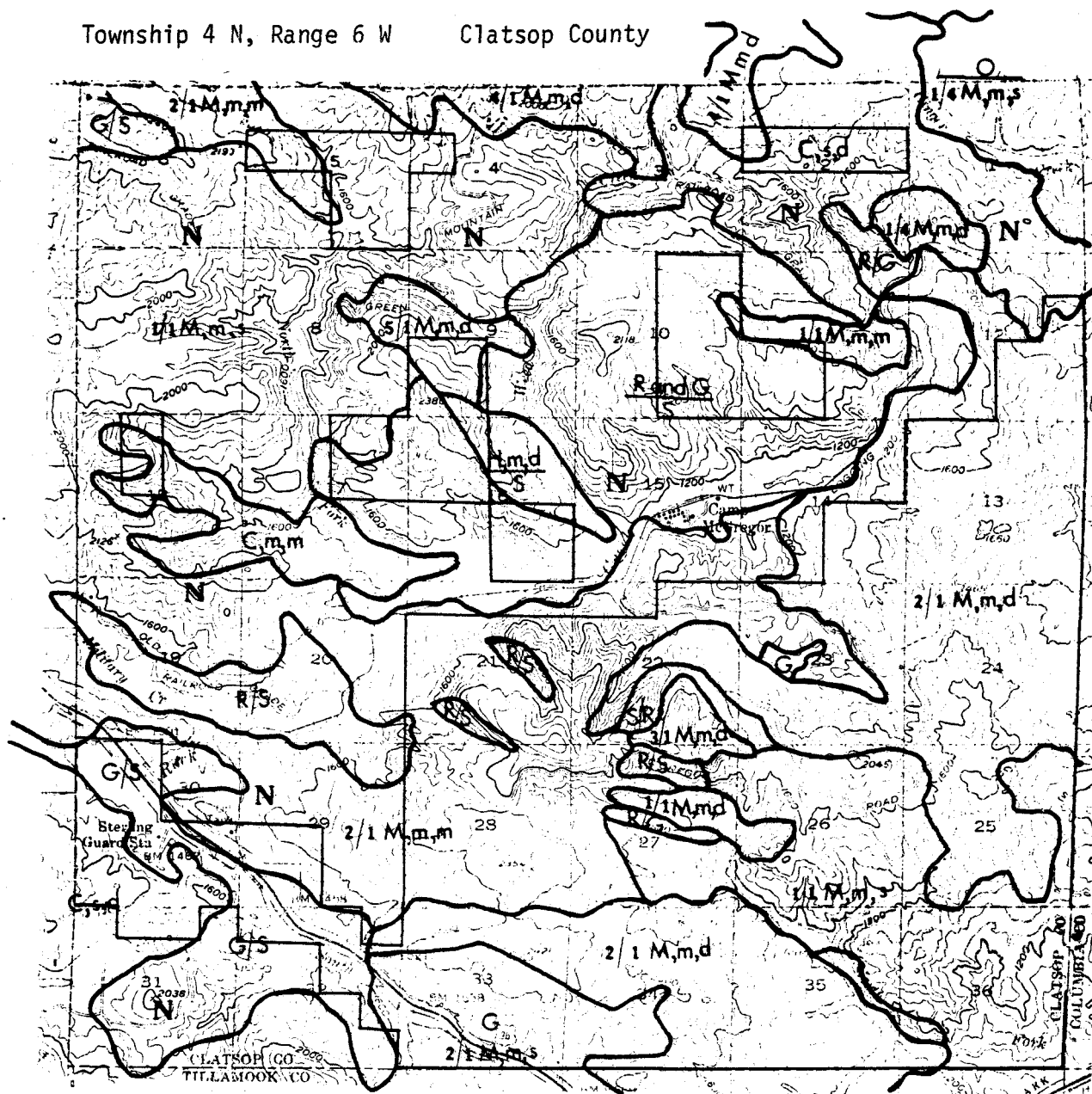
Many slopes in the southern and central portions are nearly absent of vegetation, especially along Rock Creek. In general, this area exhibits extensive vegetation disturbance by historic burns, logging, and possibly soil erosion (see map, page 13).

- 1A. Section 2, N $\frac{1}{2}$ , S $\frac{1}{2}$   
Section 2, Lots 2, 3, 4  
SE slope of Green Mountain (SE Clatsop County)  
Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2120 (1:130,000)
- B. Oregon Coast Range (OCR); Western Hemlock Zone (WHZ);  
Douglas fir/western hemlock with possible fern understory  
(cells 6, 13).
- C. This unit is on the lower SE slope of Green Mountain  
at approximately 1600 feet. The USGS quad, 1955, in-  
dicates a trail or old railroad grade providing access  
to the area. Coniferous vegetation appears dense and  
relatively older than that in the surrounding area.  
Douglas fir and young western hemlock are mixed with  
dense alder stands.
- D. Some potential for natural area.
- 2A. Section 23, NW $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 23, SW $\frac{1}{4}$ , N $\frac{1}{2}$   
Approximately one mile SE of Camp McGregor  
Birkenfeld, Oreg., 15, USGS, 1955  
74-165, 2120 (1:130,000)
- B. OCR; WHZ; herbaceous/freshwater aquatic/upland hardwood  
communities (cells 16, 22).
- C. Elevation 1300 feet. Several small lakes or ponds are pre-  
sent along a stream course. Hardwoods and shrubs are on  
the S-facing slopes, mixed with mid-size conifers on N-  
facing slopes. A large, open meadow area is surrounding  
and to the E of the chain of small lakes (see Figure 1,  
page 14).
- D. Good potential for natural area status.



Township 4 N, Range 6 W

Clatsop County



Blakenfeld 15' USGS 1955

Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, western hemlock, true firs, Sitka spruce)  
H --- hardwoods (red alder, vine maple, bigleaf maple)  
M --- conifer/hardwood mix  
G --- grass/forbs/ferns  
S --- shrub (berries, salal, scrub vine maple and alder)  
O --- old burn or cutover area (>5 yrs.)  
R --- rocky areas or naturally exposed surface  
A --- agriculture  
X --- recently cutover (< 5 yrs.)

Tree Cover-relative size and cover estimates:

size (second character):

- s --- small  
m --- medium  
l --- large

cover (third character):

- s --- sparse  
m --- moderate  
d --- dense

N --- not state land

1 mile

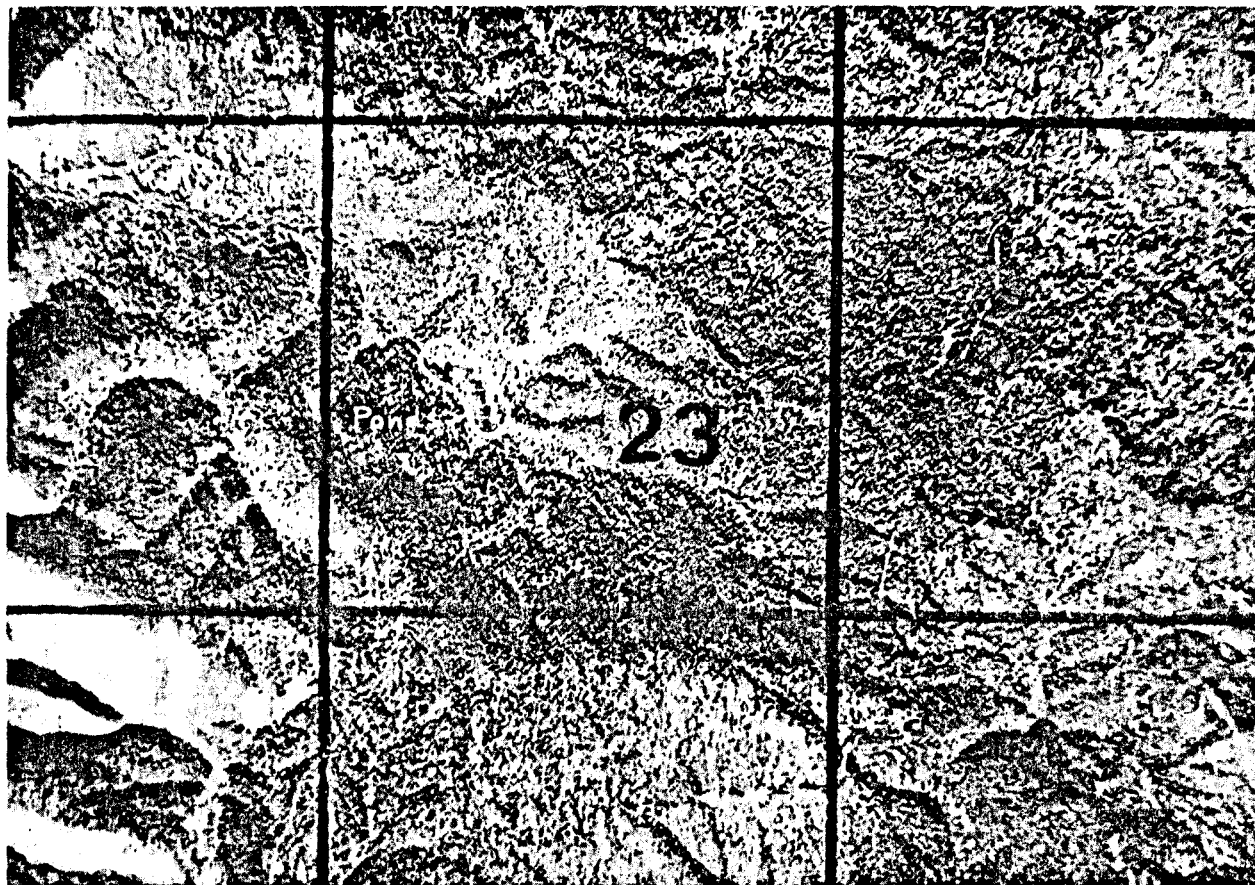
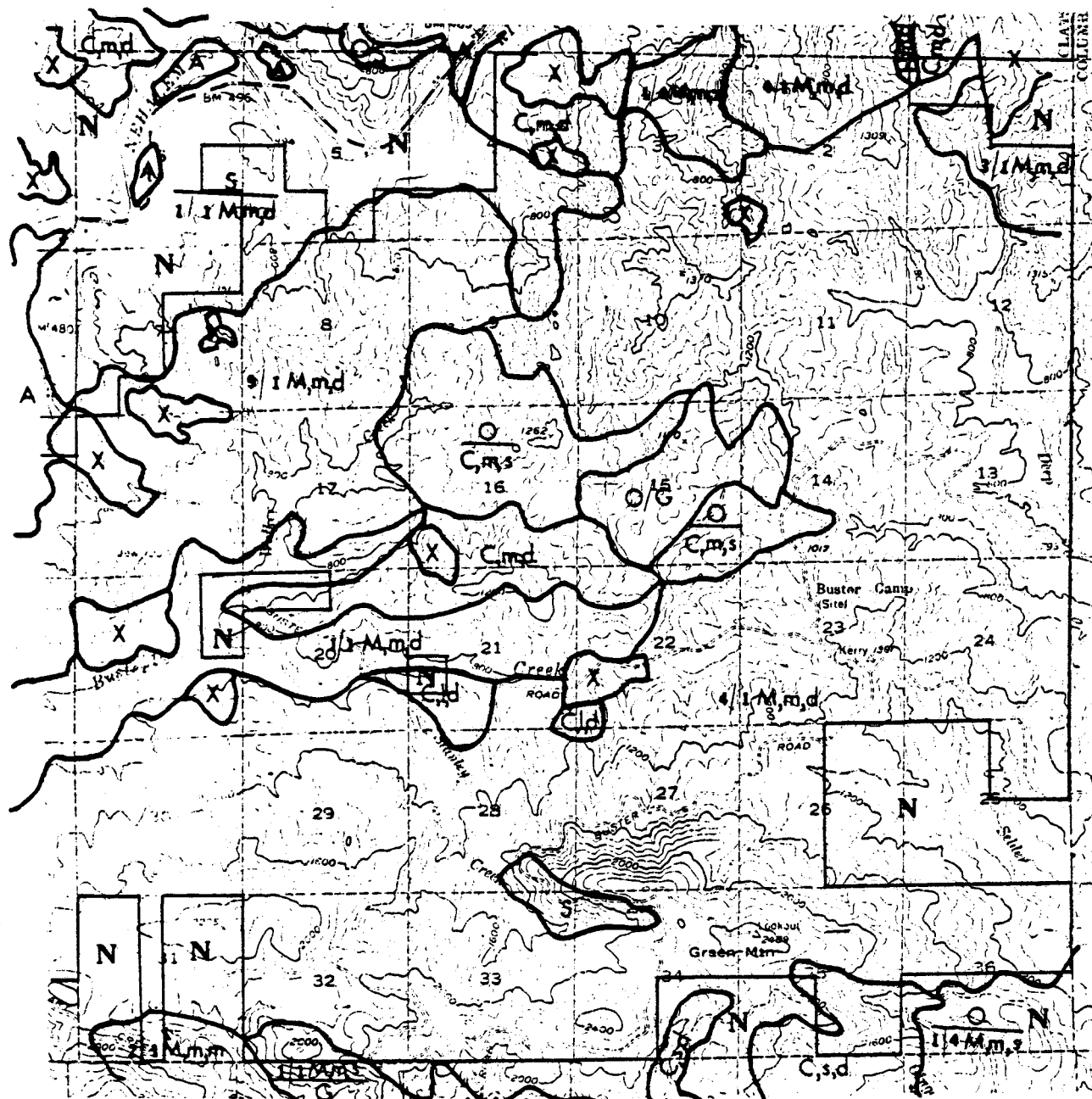


Figure 1. T4N, R6W, Sec. 23. A series of small ponds along an upland stream.

- 3A. Section 36, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Four corners of Clatsop, Tillamook, Washington, and  
Columbia counties.  
Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2120 (1:130,000)
- B. OCR; WHZ; Riparian hardwoods-open hardwoods/young  
coniferous forest (cell 22).
- C. Unit is adjacent to Sunset Highway State Park at four-  
county corner on the N fork of Wolf Creek. Mid-size alder  
community is moderately dense especially along the stream  
bottom. Sparsely distributed in the more open hardwood  
cover on slopes are Douglas fir, western redcedar, and a  
few lodgepole pine.
- D. Some potential for natural area.

T5N, R6W. Approximately sixty-five percent of this township is  
covered with moderately dense, mid-size Douglas fir/western hemlock with  
some areas of red alder and vine maple intermixed. Older alder is especi-  
ally dominant along stream courses. About ten percent of the township  
has been recently logged or is agricultural land. Another ten percent  
shows evidence of past logging and young to mid-age hardwoods, shrubs,  
and young conifers (often planted) is the typical cover. The remainder  
is established red alder (and other hardwoods) forest, particularly along  
the Nehalem River (see map, page 16).

- 1A. Section 21, SW $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 21, SW $\frac{1}{4}$ , NW $\frac{1}{4}$   
Approximately 1.5 miles NW of Green Mountain (SE Clatsop  
County)  
Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)
- B. OCR; WHZ; large Douglas fir/red alder (cells 6, 8).
- C. Present are small, perhaps remnant, stands of large  
Douglas fir adjacent to relatively large alder stands.  
A logging road runs along the N. boundary of the parcel.  
The area is generally a N-facing slope at 900 to 1000  
feet (see Figure 2, page 17).
- D. Although small stands, good potential for natural area.
- 2A. Section 30, all  
Approximately 3 $\frac{1}{2}$  miles W of Green Mountain (SE Clatsop  
County)  
Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000).
- B. OCR; WHZ; Douglas fir/western hemlock with red alder inter-  
mixed-small stands large conifers (cells 13, 16).



Birkenfeld 15' USGS 1955

Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, western hemlock, true firs, Sitka spruce)
- H --- hardwoods (red alder, vine maple, bigleaf maple)
- M --- conifer/hardwood mix
- prefix = C/H ratio, e.g., "1/1M" is 50% conifer and 50% hardwood intermixed
- G --- grass/forbs/ferns      A --- agriculture
- S --- shrub (berries, salal, scrub vine maple and alder)
- O --- old burn or cutover area (>5 yrs.)      X --- recently cutover (<5 yrs.)
- R --- rocky areas or naturally exposed surface

Tree Cover-relative size and cover estimates:

size (second character):

- s --- small
- m --- medium
- l --- large

cover (third character):

- s --- sparse
- m --- moderate
- d --- dense

N --- not state land

1 mile

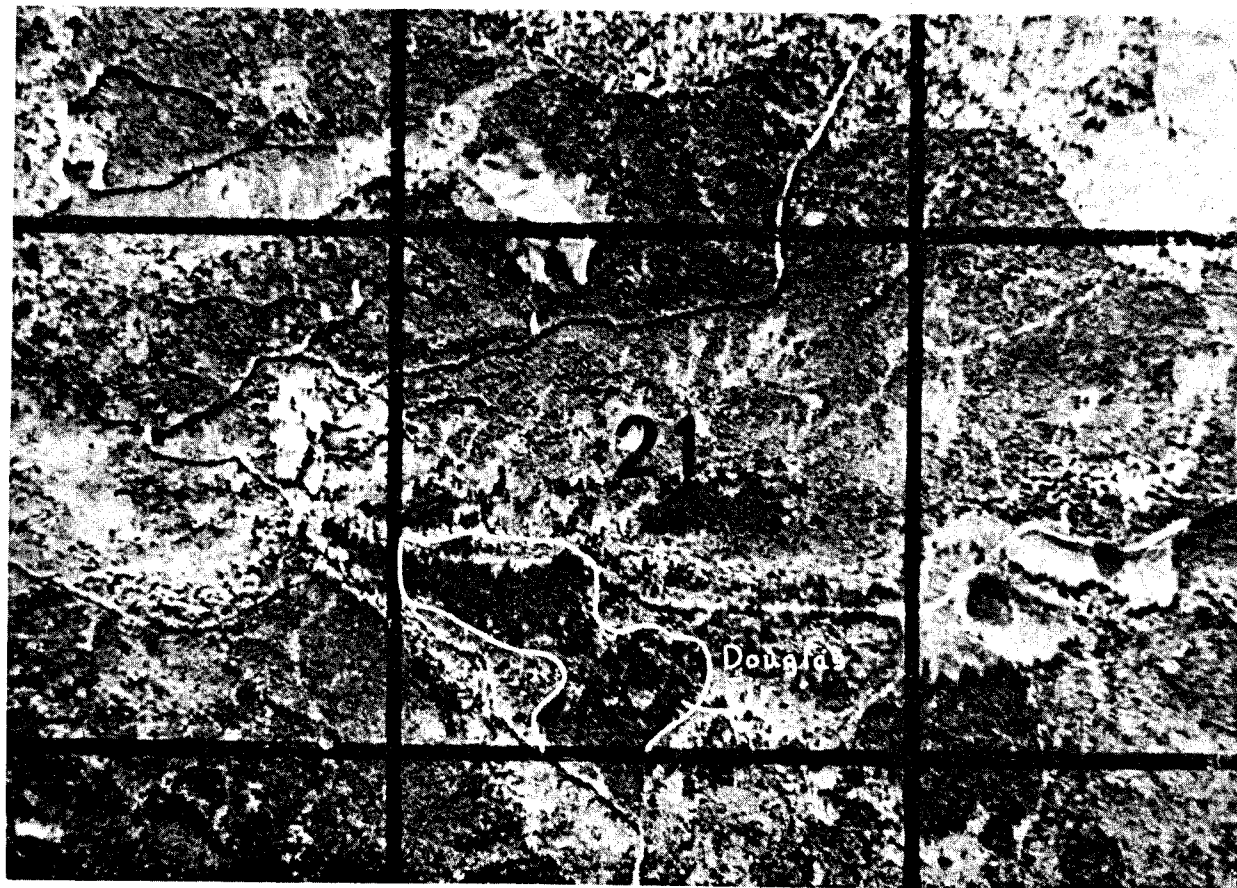


Figure 2. A stand of large Douglas fir in T5N, R6W, Sec. 21.

- C. Much of the vegetation is relatively undisturbed in this section. Elevation ranges from 700 to 2000 feet on N-facing slopes. Communities represented here are typical of the region: a few small stands of older, larger Douglas fir/western hemlock; also, western redcedar and perhaps true fir communities at higher elevations may be present here. Hardwoods (alder, bigleaf maple, and vine maple) and shrub and fern understories may be well developed. Some planted conifers are in W $\frac{1}{2}$ . Access road enters section from N.
- D. Has potential for natural areas representing typical vegetation in the region.

T6N, R6W. Approximately sixty percent of this township has conifer/hardwood forest (typically Douglas fir/red alder) of varying age. This portion is characterized by regenerating "second growth" vegetation following past logging and wild fires. About fifteen percent is young hardwoods, mostly alder, and shrub cover especially in the NW quadrant. This vegetation is young and vigorous indicating a recent disturbance of a productive habitat. Some larger, dense stands of Douglas fir and western hemlock with some western redcedar account for another fifteen percent of the vegetation cover. Much of this is found on state-owned parcels in the south half of the SE quadrant. In parts of this area, the timber is being harvested at present.

Along the middle segment of Northrup Creek in the NW quadrant there are open grass/forb areas reported to be winter grazing areas for elk. Nearly all of this area is Department of Forestry land (see map, page 21).

- 1A. Section 8, all
- Section 9, all
- Section 16, SW $\frac{1}{4}$ , N $\frac{1}{2}$
- Section 16, SE $\frac{1}{4}$ , NW $\frac{1}{4}$
- Section 16, SE $\frac{1}{4}$ , E $\frac{1}{2}$
- Section 16, NE $\frac{1}{4}$
- Section 16, NW $\frac{1}{4}$
- Section 16, SW $\frac{1}{4}$ , SW $\frac{1}{4}$
- Section 17, NE $\frac{1}{4}$

Approximately 2 miles N of confluence of Nehalem River  
and Northrup Creek  
Cathlamet, Oreg.-Wash., 15', USGS, 1953

- B. OCR; WHZ; young Douglas fir/western hemlock with open meadow communities.
- C. Much of the vegetation in the area described in "A" above is a grass/forb type occurring along the mid-portion of Northrup Creek and on a SW-facing slope (Section 9). The tree cover outside of the open meadow area is predominantly



mid-size Douglas fir/western hemlock/red alder. Along Northrup Creek is a large, dense cover of deciduous trees, mostly alder. There are unimproved roads throughout the area (see Figure 3).

- D. Good potential for natural area. Possibly winter habitat for elk.

- 2A. Section 36, NE $\frac{1}{4}$   
Section 36, NW $\frac{1}{4}$ , SW $\frac{1}{4}$   
Section 36, S $\frac{1}{2}$

Approximately 1.5 miles S of old Vesper School on the Nehalem Highway, Nehalem Valley.

Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)

- B. OCR; WHZ; mid-age Douglas fir community/some alder mixed (cell 13).
- C. A large proportion of this area is an even-age, dense stand of Douglas fir on N drainage to Nehalem River. This is possibly a second growth area; age estimate 75-100 years. There is active logging in SE $\frac{1}{4}$ , SE $\frac{1}{4}$ . Two roads lead into this area.
- D. Some potential for natural area.

T7N, R6W. This township is ninety percent state-owned. Twenty percent of the township area is associated with the Nicolai Mountain basalt formation. Vegetation on Nicolai Mountain is thin and apparently limited to shrub, grass, and forbs. Stumps and slash are evident on the landscape indicating a substantial forest cover previous to logging. Young spruce and noble fir, among other conifers, are reported at higher elevations (see Figure 5, page 25).

Areas of older, natural character occur in the NE quadrant. Recent logging in the township covers only a few small areas in the better timber sites (see map, page 23).

- 1A. Section 2, SW $\frac{1}{4}$ , N $\frac{1}{2}$   
Section 2, SW $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 10, all  
Section 11, all

Approximately 2.5 miles SW of Westport on the Columbia River

Cathlamet, Oreg.-Wash., 15', USGS, 1953  
74-165, 2139 (1:130,000); 74-165, 0193 (1:32,500)

- B. OCR; WHZ; larger, dense Douglas fir/western hemlock-hardwood communities on stream banks (cells 6, 13, 22).

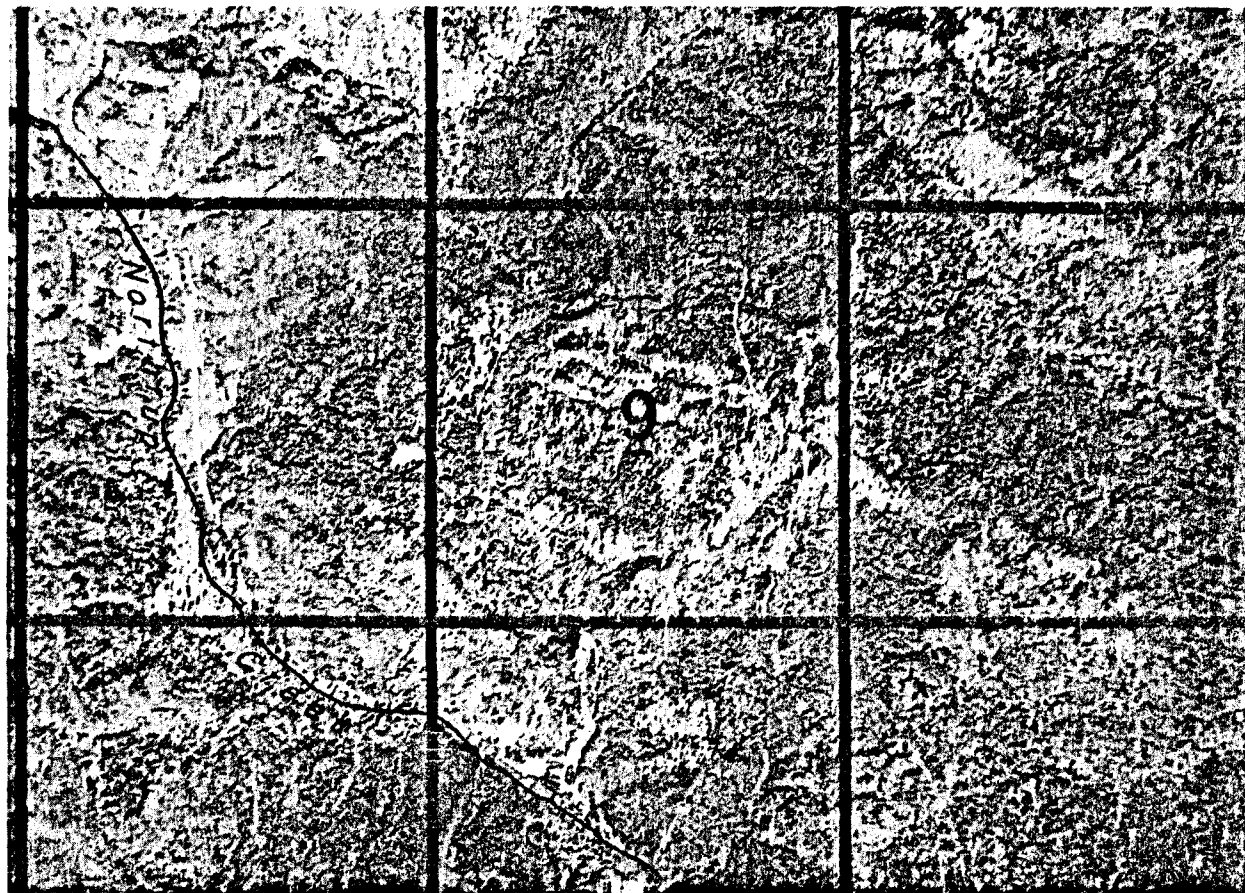
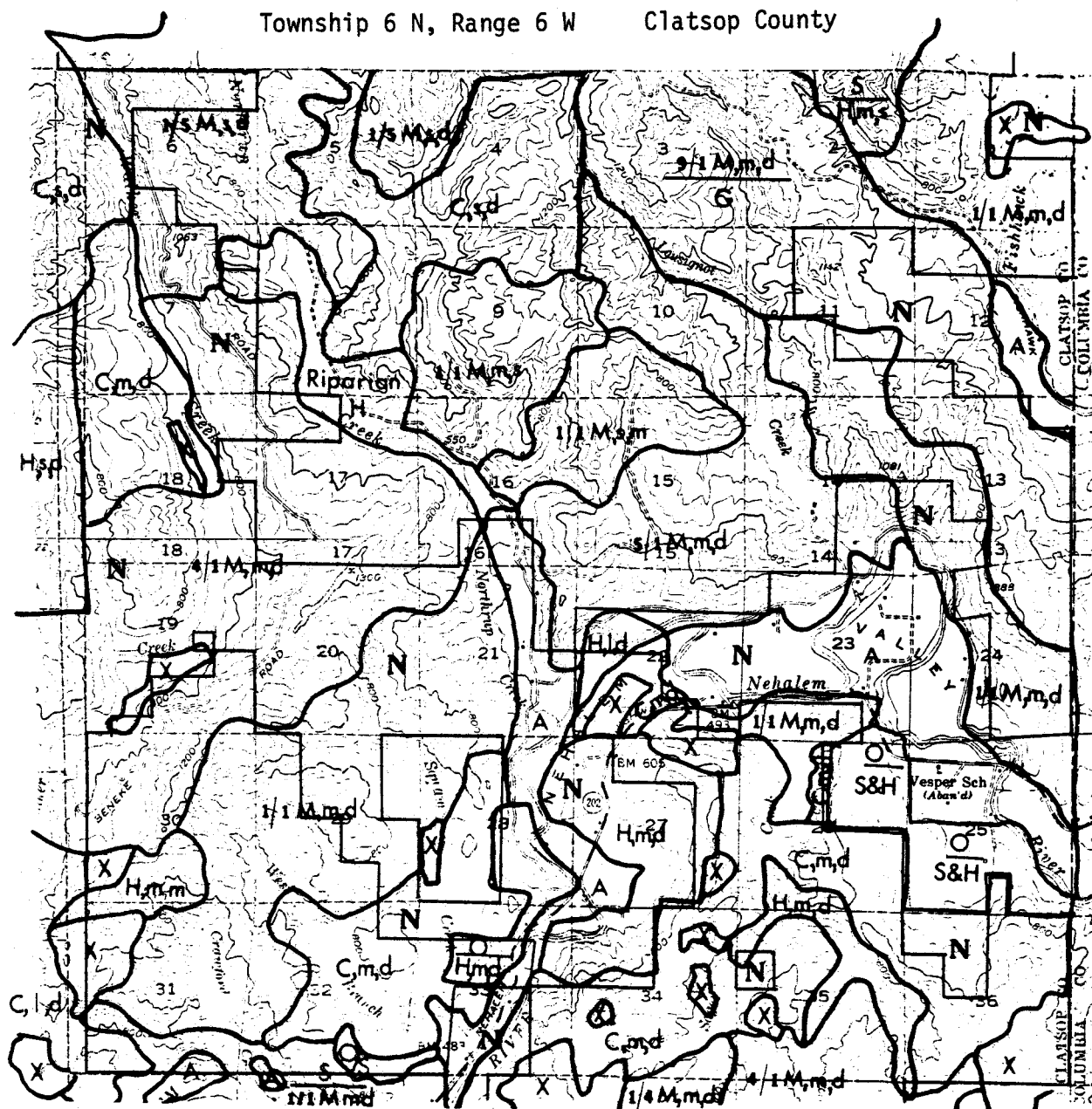


Figure 3. Northrup Creek area. Hardwoods along stream and open meadow areas on SW facing slope in Section 9.



Cathlamet 15' USGS 1953

Bilkenfeld 15' USGS 1955

### Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, western hemlock, true firs, Sitka spruce)  
 H --- hardwoods (red alder, vine maple, bigleaf maple)  
 M --- conifer/hardwood mix  
 prefix = C/H ratio, e.g., "1/1M" is 50% conifer and 50% hardwood intermixed  
 G --- grass/forbs/ferns      A --- agriculture  
 S --- shrub (berries, salal, scrub vine maple and alder)  
 O --- old burn or cutover area (> 5 yrs.)      X --- recently cutover (< 5 yrs.)  
 R --- rocky areas or naturally exposed surface

### Tree Cover-relative size and cover estimates:

size (second character):

- s --- small  
 m --- medium  
 l --- large

cover (third character):

- s --- sparse  
 m --- moderate  
 d --- dense

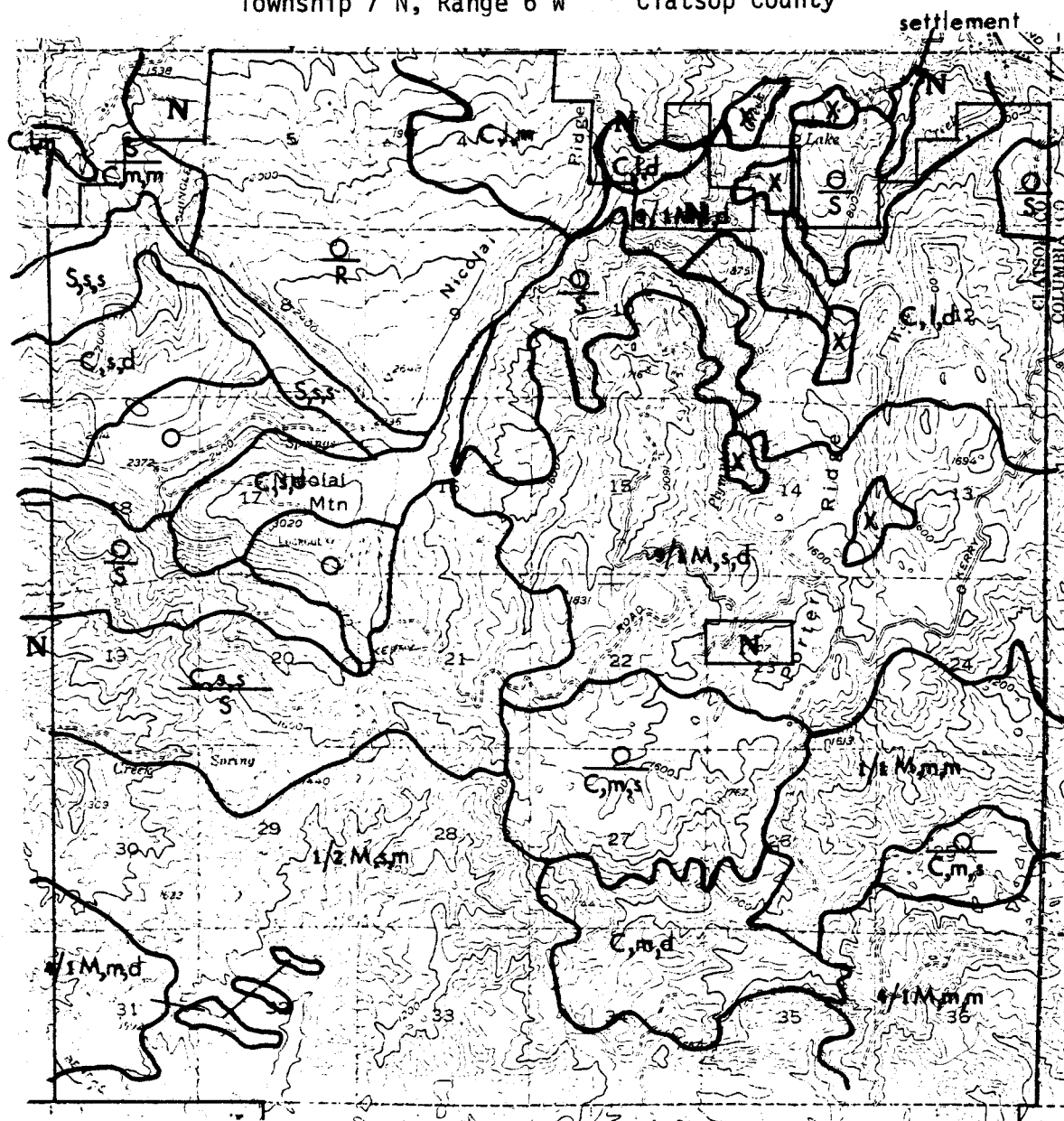
N --- not state land

1 mile

- C. This unit is an extensive, dense 85-90 year old Douglas fir/hemlock community in the deep canyon of Plympton Creek. Established hardwoods occur along the stream. Scenic values include a waterfall. The canyon is about two miles SW of U. S. Highway 30 near Westport on the Columbia River. There is some settlement and associated access roads about one-half mile NE of the area of interest. Section 2, SW $\frac{1}{4}$ , NE $\frac{1}{4}$  has been recently logged (see Figure 4, page 24).
- D. Good potential for natural area.
- 2A. Sections 26, 27, 34, 35  
On tributary of Fishhawk Creek about 3 miles SE of Nicolai Mountain  
Cathlamet, Oreg.-Wash., 15', USGS, 1953  
74-165, 2139 (1:130,000)
- B. OCR; WHZ; Douglas fir/western hemlock forest community (cells 6, 13).
- C. There is a large area within the sections described in "A" above of Douglas fir/western hemlock community on mostly N, S, and E-facing slopes at the headwaters of a W-E stream drainage. Elevation in this area is from 100-1700 feet. Age estimate of trees is between 85-100 years. Some true fir species may occur at higher elevations. An unimproved road has recently been constructed into the area from the N.
- D. Good potential for natural area.
- 3A. Section 18, NW $\frac{1}{4}$ , NW $\frac{1}{4}$   
Western summit of Nicolai Mountain  
Cathlamet, Oreg.-Wash., 15', USGS, 1953  
74-165, 2139 (1:130,000)
- B. OCR; WHZ; high elevation open western hemlock/Douglas fir community with grass areas (cell 20).
- C. This unit is near the western summit of the Nicolai Mountain complex at an elevation greater than 2000 feet. Hemlock and true fir are the important tree species. This may be a formerly logged site although the trees are much larger than any in the surrounding area. A logged portion of the mountain is shown in Figure 5.
- D. Potential for natural area.

T6N, R7W. State-ownership is sixty-five percent in this township. For the entire township, forty percent is mid-sized, relatively dense coniferous forest with Douglas fir and western hemlock as the major components. Much of this vegetation type is in the center tier of sections. Approximately fifty percent is covered by young hardwoods and brush. Some of this type is mixed conifer/hardwood forest of medium stature. These areas

Township 7 N, Range 6 W Clatsop County



Cathlamet 15' USGS 1953

Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, western hemlock, true firs, Sitka spruce)
- H --- hardwoods (red alder, vine maple, bigleaf maple)
- M --- conifer/hardwood mix
- prefix = C/H ratio, e.g., "1/1M" is 50% conifer and 50% hardwood intermixed
- G --- grass/forbs/ferns
- A --- agriculture
- S --- shrub (berries, salal, scrub vine maple and alder)
- O --- old burn or cutover area (> 5 yrs.)
- X --- recently cutover (< 5 yrs.)
- R --- rocky areas or naturally exposed surface

Tree Cover-relative size and cover estimates:

size (second character):

- s --- small
- m --- medium
- l --- large

cover (third character):

- s --- sparse
- m --- moderate
- d --- dense

N --- not state land

1 mile



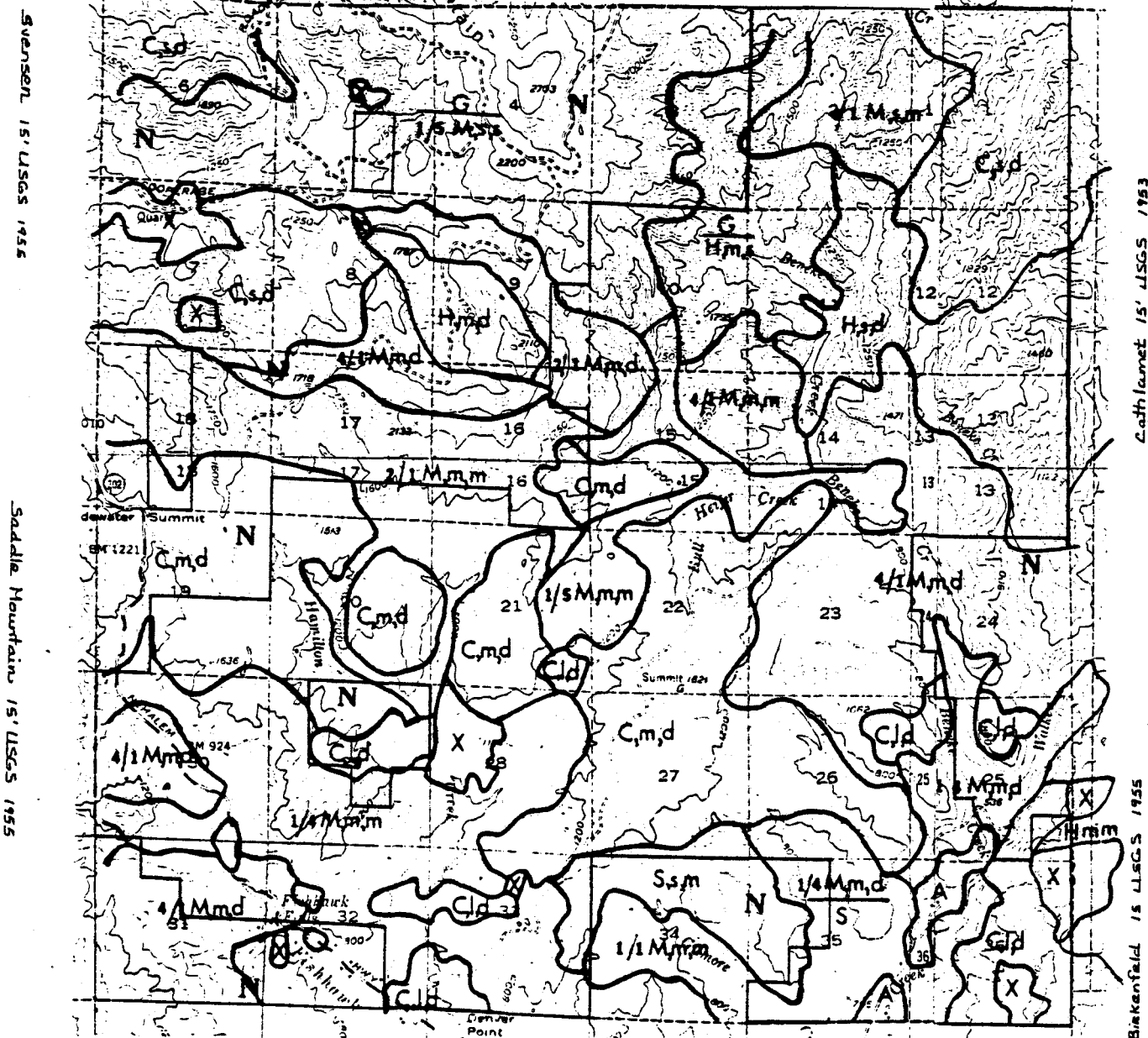
Figure 4. A portion of the Plympton Creek area, T7N, R6W, Sec. 2, 10, and 11.  
A stream canyon with dense stream-side Hardwoods and older conifers.





Figure 5. Clear cut near the summit of Nicolai Mountain.

Township 6 N, Range 7 W Clatsop County



Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, Western hemlock, true firs, Sitka spruce)
- H --- hardwoods (Red alder, Vine maple, Big leaf maple)
- M --- conifer/hardwood mix
- prefix = C/H ratio, e.g., "1/1M" is 50% conifer and 50% hardwood intermixed
- G --- grass/forbs/ferns      A --- agriculture
- S --- shrub (berries, salal, scrub vine maple and alder)
- O --- old burn or cutover area (> 5 yrs.)      X --- recently cutover (< 5 yrs.)
- R --- rocky areas or naturally exposed surface

Tree Cover-relative size and cover estimates:

size (second character):

- s --- small
- m --- medium
- l --- large

cover (third character):

- s --- sparse
- m --- moderate
- d --- dense

N --- not state land

1 mile

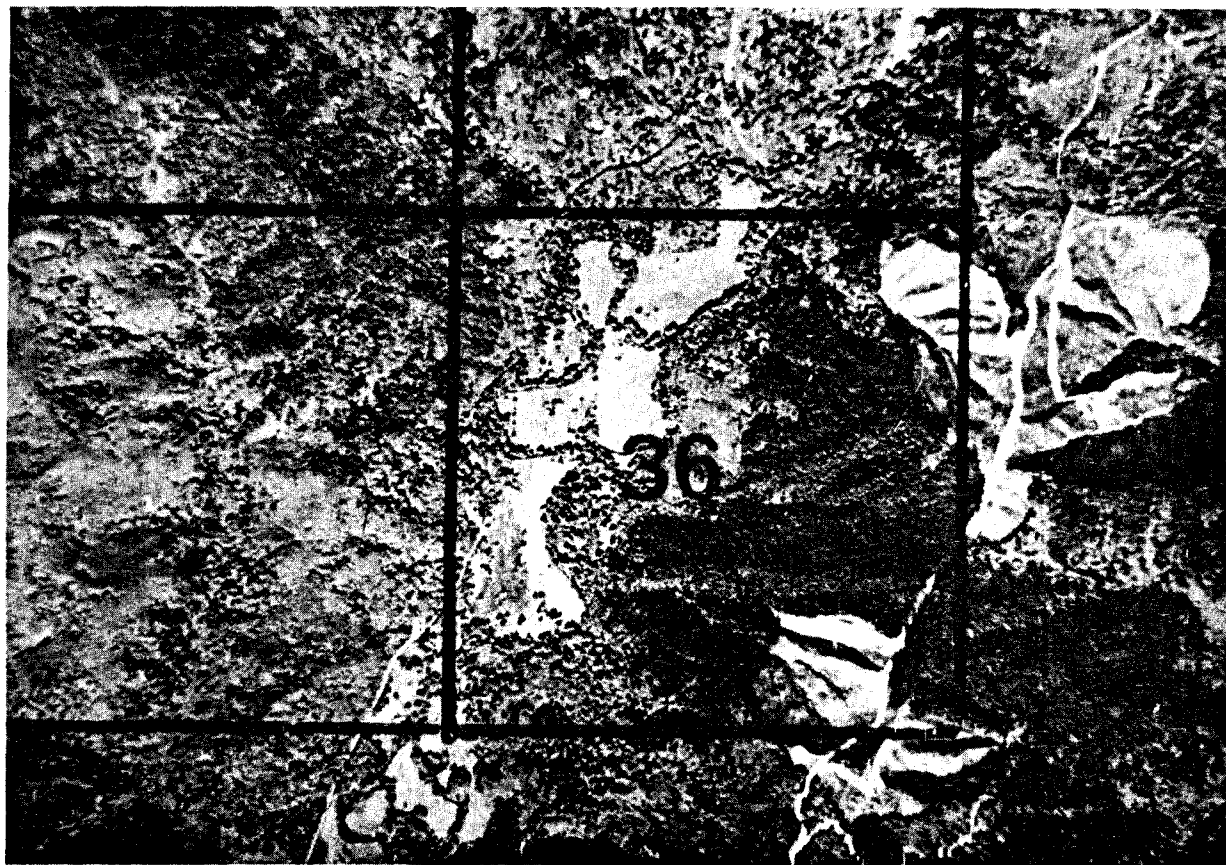


Figure 6. T6N, R7W, Sec. 36. Beneke Creek area.

are generally in the N and S portions of the township. Less than five percent has been recently logged. There is also about forty acres of agricultural land now administered by the Oregon Wildlife Commission in Section 36 along Beneke Creek (see map, page 26).

- 1A. Section 36, E $\frac{1}{2}$   
Section 35, SW $\frac{1}{4}$  NE $\frac{1}{4}$   
Section 36, SW $\frac{1}{4}$ , S $\frac{1}{2}$

Approximately 1.5 miles N of Jewell on State Highway 202  
Birkenfeld, Oreg., and Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)

- B. OCR; WHZ; Douglas fir forest community, 75-100 years, dense (cells 12, 13).
- C. This unit is on a moderately steep W-facing slope E of Oregon Wildlife Commission game management lands on Beneke Creek. Elevation is 800 to 1200 feet. Although the cover is predominantly Douglas fir, some western hemlock and western redcedar are present. Timber is being harvested presently on the margins of the area (see Figure 6).
- D. Some potential for natural area.

- 2A. Section 21, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 28, NE $\frac{1}{4}$ , NE $\frac{1}{4}$   
Approximately 2 miles NE of Fishhawk Falls  
74-165, 2128 (1:130,000)

- B. OCR; WHZ; western hemlock/some Sitka spruce, large, dense (cells 3, 4, 22).
- C. At about 1000 feet elevation, this unit is in a stream bottom on the upper portion of Hamilton Creek. There are comparatively large individual trees of western hemlock and some Sitka spruce. There are some small areas of deciduous trees and shrubs intermixed.
- D. Some potential for natural area.

- 3A. Section 5, SE $\frac{1}{2}$ , W $\frac{1}{2}$   
About one mile S of summit of Elk Mountain  
Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)

- B. OCR; WHZ; western hemlock/hardwoods (red alder, vine maple) (cell 16).
- C. This vegetation is part of a ridge to stream-bottom environment facing S and W. Unimproved, old road access is present. Average elevation is 1500 feet. This is part of a larger, apparently regenerating area, but the deciduous trees are very dense and larger on this particular site. Some brush cover is evident on lower slopes. Western hemlocks of mid-size are scattered on favorable slopes. May have true fir on ridge tops.

D. Some potential for natural area.

- 4A. Section 2, lots 1-11, 14-19, which occur in E $\frac{1}{2}$   
Section 3, SW $\frac{1}{4}$ , SW $\frac{1}{4}$   
Section 11, E $\frac{1}{2}$   
Section 11, W $\frac{1}{2}$

Two and one-half miles SE of summit of Elk Mountain  
Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)

B.. OCR; WHZ; upland hardwoods/meadow communities (cells 16, 20).

C. Elevation of the area is from 1200 to 1700 feet. This is an upland of mostly gentle E-facing slopes. Vegetation is a broken cover of large hardwoods (alder) with open grass/forb areas throughout. May be the result of an old burn. Douglas fir is planted in some portions.

D. Some potential for natural area.

- 5A. Section 31, NE $\frac{1}{4}$   
Section 32, NW $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 32, NE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 32, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 33, SW $\frac{1}{4}$ , SW $\frac{1}{4}$   
Section 33, NW $\frac{1}{4}$ , S $\frac{1}{2}$

In the area of Fishhawk Falls and Denver Point along State Highway 202

Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)

B. OCR; WHZ; Douglas fir/western hemlock (cell 6).

C. Scattered stands of relatively old, dense Douglas fir and western hemlock adjacent or near to Highway 202. Elevation averages 750 feet. All stands are accessible by secondary roads (See Figure 70, page 3 ).

D. Potential for natural area.

*X*  
T4N, R8W. There is just over fifty percent state ownership of land in this township. The vegetation of the entire township is extremely complex, most of which is regenerated from old burns and clearcuts (see map on page 32).

- 1A. Section 10, lots 3-6, 9-16 — *state ownership not shown on page 11*  
W slope of Cougar Mountain  
Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2122 (1:130,000)

B. OCR; WHZ; western hemlock, Douglas fir, Sitka spruce forest communities.

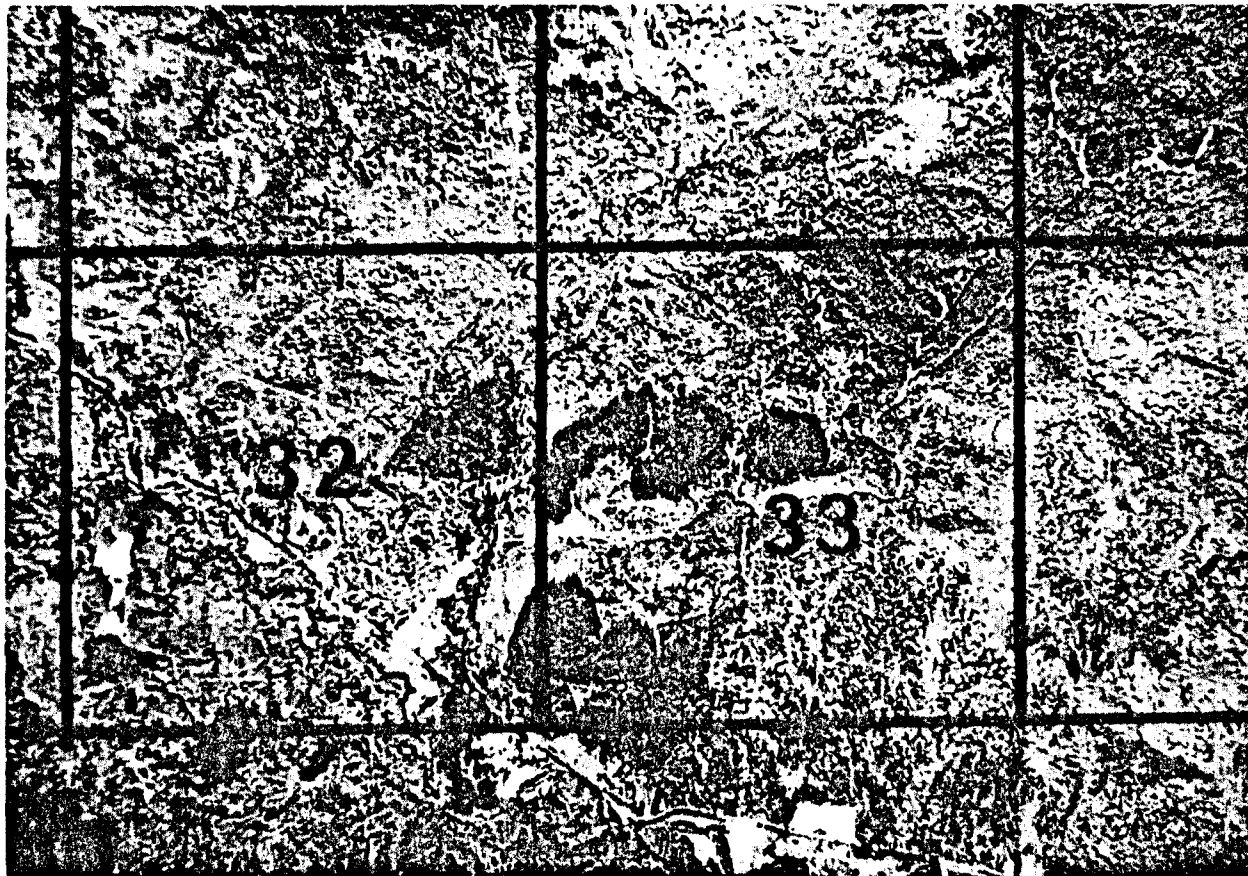


Figure 7. T6N, R7W, Sec. 32, 33. Stands of Douglas fir and western hemlock north of State Highway 202.

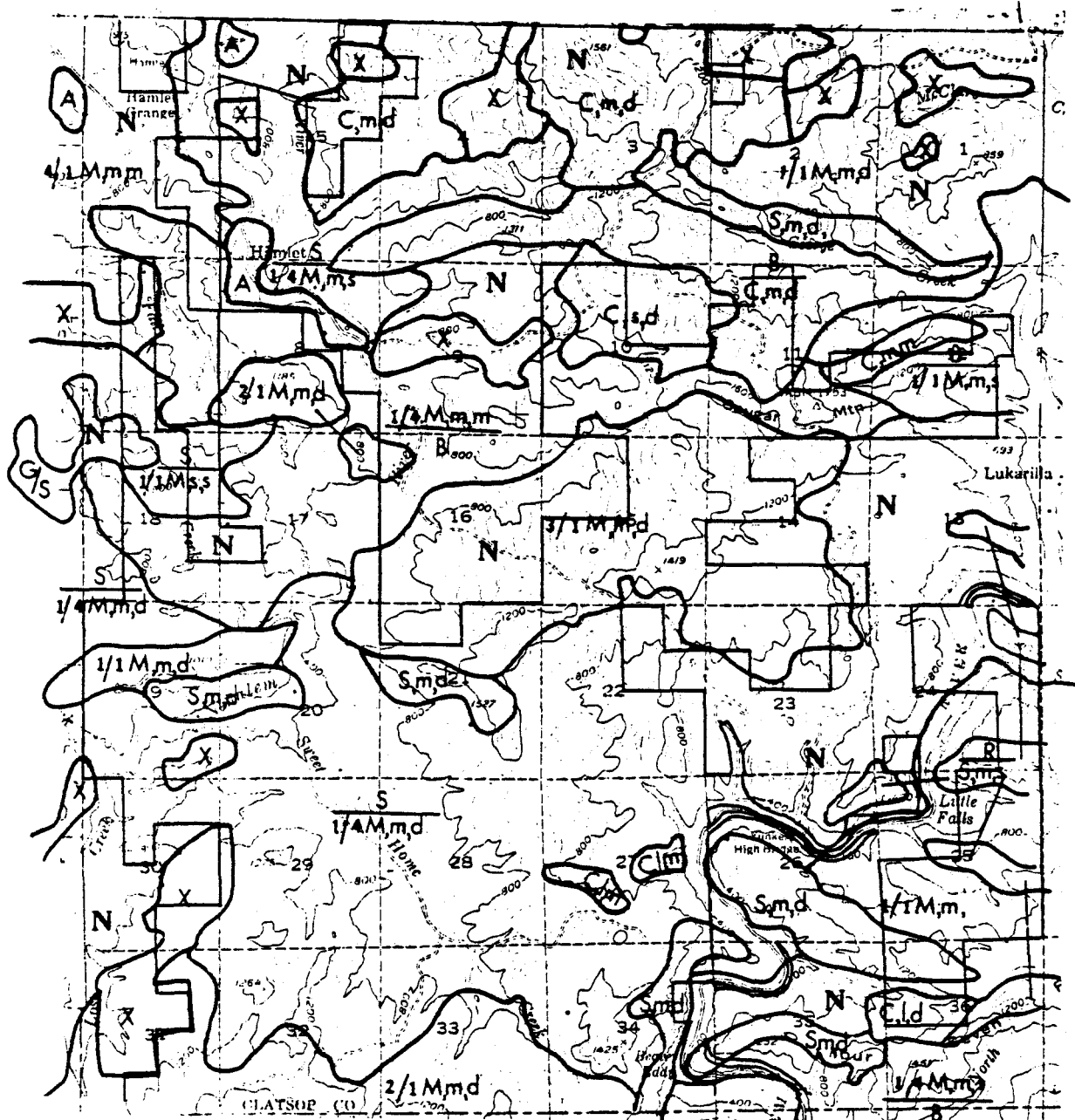
- C. This unit has a tree cover of mid-size western hemlock mixed with Douglas fir and Sitka spruce and some red alder. Elevation is from 800 to 1600 feet. This area is located at the tributary headwaters of the north fork of the Nehalem River. There appear to be large areas of dense shrubs intermixed with tree cover.
  - D. Marginal potential for natural area.
- 2A. Section 12, 13, 24, 25, 26, 27, 34, 35 - those parcels and lots adjacent to the Nehalem River  
Along the Nehalem River between George Creek and Cronin Creek  
Saddle Mountain, Oreg., 15', USGS, 1955
- B. OCR; WHZ; western hemlock/riparian hardwoods (cells 4, 22)
  - C. A scenic, relatively undeveloped, portion of the Nehalem River; steep slopes and tributary stream canyons. Slope vegetation varies from stands of dense western hemlock and Douglas fir to shrubs (vine maple, berry species). Red alder communities occur on river banks. Many exposed rock/soil areas are evident on steep slopes. Although there is much shrub cover, vegetation appears relatively undisturbed.
  - D. Good potential for natural area(s). Suggest intensive investigation.

T8N, R7W.

- 1A. Section 10, SE $\frac{1}{4}$ , NE $\frac{1}{4}$   
Section 10, SE $\frac{1}{4}$ , SW $\frac{1}{4}$   
Section 15, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
North of U.S. Highway 30, approximately 2.5 miles E of Knappa Junction.  
Svensen, Oreg., 15', USGS, 1955  
74-165, 2139 (1:130,000); 74-165, 209, 210 (1:32,500)
- B. OCR; Sitka Spruce Zone (SSZ); Lower Columbia River marsh community.
- C. This unit is on the upper S arm of Blind Slough (Gnat Creek drainage). A marsh community, portions of which are undiked and appear in a near-natural state. Easy road access. Slopes in unit described have young deciduous trees with a few conifers. Scattered Sitka spruce occur on margins of the marsh.
- D. Good potential for natural area.

T8N, R8W.

- 1A. Section 12, lots 1, 2, 3  
Section 13, lot 1  
Section 13, NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , N $\frac{1}{2}$   
Section 13, NW $\frac{1}{4}$ , NE $\frac{1}{4}$ , N $\frac{1}{2}$   
Approximately one mile W of Knappa on Columbia River  
Svensen, Oreg., 15', USGS, 1955  
74-165, 2141 (1:130,000); 74-165, 207 (1:32,500)



### Vegetation Cover Types (first character):

- C --- conifers (Douglas fir, western hemlock, true firs, Sitka spruce)
- H --- hardwoods (red alder, vine maple, bigleaf maple)
- M --- conifer/hardwood mix  
prefix = C/H ratio, e.g., "1/1M" is 50% conifer and 50% hardwood intermixed
- G --- grass/forbs/ferns      A --- agriculture
- S --- shrub (berries, salal, scrub vine maple and alder)
- O --- old burn or cutover area (> 5 yrs.)      X --- recently cutover (< 5 yrs.)
- R --- rocky areas or naturally exposed surface

### Tree Cover-relative size and cover estimates:

size (second character):

- s --- small
- m --- medium
- l --- large

cover (third character):

- s --- sparse
- m --- moderate
- d --- dense

N --- not state land

1 mile



- B. OCR; SSZ; Lower Columbia River marsh/shoreline communities.
- C. This land is adjacent to the Lewis and Clark National Wildlife Refuge on the lower Columbia River. It includes most of an unnamed island near shore and the shoreline. The area is predominantly marsh community with small clumps of Sitka spruce, black cottonwood, and willows on slightly higher land. There are no apparent dikes or levees. A railroad right-of-way passes along the shore.
- D. Good potential for natural area.

T8N, R9W.

- 1A. Section 14, NW $\frac{1}{4}$   
S of U.S. Highway 30 near Tongue Point on the Columbia River  
Astoria, Oreg., Wash., 7 $\frac{1}{2}$ ', USGS, 1949  
74-165, 2141 (1:130,000); 74-165, 203 (1:32,500)
  - B. OCR; SSZ; Coniferous forest community - Sitka spruce/ western hemlock (cell 3).
  - C. This parcel is on a NW-facing slope surrounded by clearcut areas and a road network. The vegetation is a large, dense forest community of western hemlock and Sitka spruce. Some individual trees appear dead or dying. Stand is approximately three miles E of downtown Astoria.
  - D. Good potential for natural area.
- 2A. Section 25, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
Section 25, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
Approximately 2 miles SE of Tongue Point  
Cathlamet Bay, Oreg., 7 $\frac{1}{2}$ ', 1949  
74-165, 2141 (1:130,000)
  - B. OCR; SSZ; Coniferous forest community - Sitka spruce/ western hemlock (cell 3).
  - C. This unit is on a gentle N-facing slope at about 200 feet elevation just S of the John Day River. It is bordered by old clearcut areas on the E, W, and S. This is a relatively dense stand of western hemlock and Sitka spruce that may be part of an old planted stand. Easily accessible by road.
  - D. May have only marginal potential for a natural area.
- 3A. Section 34, SW $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 34, SE $\frac{1}{4}$ , SW $\frac{1}{4}$ , fraction  
Section 27, SW $\frac{1}{4}$ , S $\frac{1}{2}$ , S $\frac{1}{2}$ , fraction  
About one to two miles up the Walluski River from its confluence with the Youngs River. On the S and W banks.
  - B. OCR; SSZ; marsh/estuary shoreline communities.

- C. Both parcels described above provide a vegetation transition from a marsh community in a slough environment to wooded shoreline. Small fractional parcels are involved, therefore boundaries should be confirmed. This area also contains berry brush and riparian hardwoods and possibly blackhaw-thorn species. Some Sitka spruce are evident along the shore. The E shore of Walluski River in Section 34, SE $\frac{1}{4}$ , SW $\frac{1}{4}$  is agricultural.
- D. Good potential for a natural area depending on degree of vegetation disturbance particularly in the non-marsh areas.

T7N, R7W.

- 1A. Section 13, NE $\frac{1}{4}$ , E $\frac{1}{2}$   
see also T7N, R6W, Section 18  
Near western summit of Nicolai Mountain  
Svensen, Oreg., 15', USGS, 1955, and Cathlamet, Oreg., -Wash.  
15', USGS, 1953  
74-165, 2139 (1:130,000)
- B. OCR; WHZ; high elevation conifer/mountain meadow and shrub communities (cell 20).
- C. This unit is adjacent to parcel described under T7N, R6W, Section 18, located on the western summit of Nicolai Mountain, elevation 2600 feet. Western hemlock and noble fir along with Douglas fir are present here. Shrub and grass communities need further investigation. This may be a formerly logged site, although there is a stand of larger conifers near the summit.
- D. Considered with T7N, R6W, Section 18, as having potential for a natural area preserve.

T7N, R8W.

- 1A. Section 22, NE $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 22, NE $\frac{1}{4}$ , SE $\frac{1}{4}$   
On a peak between N fork and middle fork of the Clatskanie River approximately three miles SE of Clatskanie fish hatchery.
- B. OCR; SSZ; western hemlock/Sitka spruce forest community (cell 3).
- C. This unit is on the N-facing slope of a hill 1600 feet in elevation. There is present relatively dense western hemlock with Sitka spruce and western redcedar. Appears undisturbed but may be older "second growth."
- D. Potential as natural area.

T7N, ~~R8W~~ R9W

- 1A. Section 10, NE $\frac{1}{4}$ , S $\frac{1}{2}$ , fraction - No Sitka shown on 1970 map  
Section 10, SE $\frac{1}{4}$ , fraction  
Approximately 7 miles S of Astoria on Youngs River  
Olney, Oreg., 7 $\frac{1}{2}$ ', USGS, 1949  
74-165, 2141 (1:130,000)

- B. OCR; SSZ; marsh community on Youngs River.
- C. Cooperage Slough is a near-natural fresh water marsh habitat on the Youngs River estuary. The land side is bordered by hardwoods and a portion of the shore by relatively dense, large sitka spruce. The S end appears partially diked. Fractional state ownership.
- D. Good potential as natural area.

T6N, R8W.

- 1A. Section 24, NE $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 24, SE $\frac{1}{4}$   
 Section 24, SW $\frac{1}{4}$ , E $\frac{1}{2}$   
 About one-half mile SW of Tidewater Summit on State Highway 202  
Saddle Mountain, Oreg., 15', USGS, 1955  
 74-165, 2128 (1:130,000)
- B. OCR; SSZ to WHZ; Open coniferous forest/grass shrub community.
- C. This unit is on a hill near Tidewater Summit, elevation 1200 to 1600 feet. Coniferous species present include Douglas fir, western hemlock, western redcedar, and Sitka spruce. Moderately dense coniferous forest gives way to open areas of grasses and shrubs near the summit of the hill. The configuration of the vegetation may be due to a former burn or logging in the past.
- D. Some potential for a natural area in a transition area.

T5N, R7W.

- 1A. Section 10, NW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Approximately 2 miles W of Jewell, S of Fishhawk Creek  
Saddle Mountain, Oreg., 15', USGS, 1955  
 74-165, 2128 (1:130,000)
- B. OCR; WHZ; older Douglas fir/western hemlock forest community.
- C. This unit is on the N-facing slope of a hill, 800 feet in elevation above Jewell Meadows Wildlife Management Area. This stand may be a remnant of cutting or an old burn in the area.
- D. Some potential for a natural area.

T5N, R8W.

- 1A. Section 11, SE $\frac{1}{4}$   
 Approximately 3 miles SE of Saddle Mountain  
Saddle Mountain, Oreg., 15', USGS, 1955  
 74-165, 2128 (1:130,000)
- B. OCR; WHZ; mature Douglas fir/western hemlock community-shrub understory.

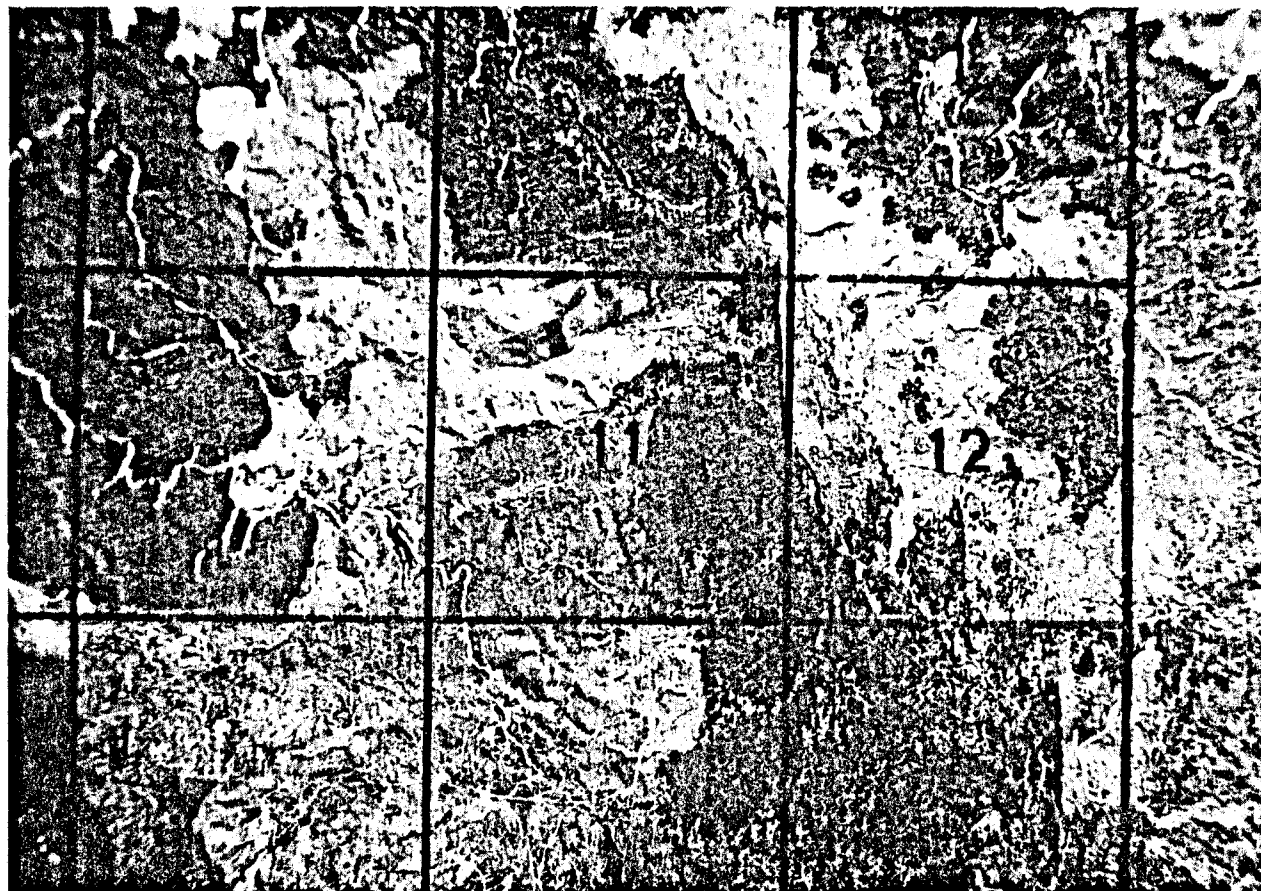


Figure 8. T5N, R8W, Sec. 11, SE $\frac{1}{4}$ . An older coniferous forest in an area of active logging.

C. This low-density forest of Douglas fir and hemlock is on a generally E-facing, gentle slope on upper segment of East Humbug Creek. Elevation averages 1000 feet. Shrub understory is apparent. The area is surrounded by clearcuts. Several logging roads provide access (see Figure 8, page 36).

D. Some potential for a natural area.

T5N, R9W.

- 1A. Section 35, SW $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 35, SE $\frac{1}{4}$ , SW $\frac{1}{4}$   
Approximately two miles S of Necanicum Junction on State Highway 53  
Cannon Beach, Oreg., 15', USGS, 1955  
74-165, 2126 (1:130,000)
- B. OCR; SSZ; western hemlock/Sitka spruce/sword fern community (cell 3).
- C. This unit is on State Highway 53 on the upper portion of Bergsvik Creek. The area adjacent to the road has Douglas fir, western hemlock, and western redcedar species. Some portions have a fern understory. The forest cover to the E in this unit grades into open shrub and is adjacent to clearcut areas. Elevation averages 750 feet.
- D. Potential for natural areas in selected smaller areas within this unit.

T4N, R7W.

- 1A. Section 15, all  
Approximately 3 miles NW of Sterling Guard Station on U.S. Highway 26  
Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2120 (1:130,000)
- B. OCR; WHZ; regenerating forest community.
- C. This section includes Flat Iron Mountain and its N slope on which occur several small accessible ponds or lakes. Fifty percent of the section is a mid-age forest of western hemlock and Douglas fir. Approximately twenty-five percent of the cover is alder and associated brush and the remainder of the section is open grass and shrub communities. The ponds may be of interest for adjacent mesic plant habitats (1700 feet elevation).
- D. Good potential for natural area.
- 2A. Section 25, NW $\frac{1}{4}$ , E $\frac{1}{2}$   
Section 25, NE $\frac{1}{4}$   
About one mile W of Sterling Guard Station  
Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2120 (1:130,000)

- B. OCR; WHZ; western hemlock/Douglas fir/true fir forest community.
- C. This unit includes a dense community of conifers on a N-facing slope W of Sterling Guard Station at about 2000 feet elevation. Is either a remnant of burn or regenerated vegetation in a relatively favorable habitat. True fir are reported in the area.
- D. May have some potential for natural area upon further investigation.

T4N, R9W

- 1A. Section 14, NW $\frac{1}{4}$  (Soapstone Lake area)  
One mile E of Necanicum Highway about 6 miles S of Necanicum Junction  
Cannon Beach, Oreg., 15;, USGS, 1955  
74-165, 2122 (1:130,000)
- B. OCR; SSZ; small lake habitat/regenerating Sitka spruce-western hemlock forest.
- C. Of interest in this section is Soapstone Lake, which is surrounded by formerly cut-over land. Shrub communities dominate the area on the W side of the lake. Some mid-size conifers and hardwoods appear to the NE. Needs further on-site evaluation.
- D. Some potential for natural area.

T4N, R10W.

- 1A. Section 22, E 880 feet of NE $\frac{1}{4}$  — *not shown on map*  
About 4 miles inland E of town of Arch Cape  
Cannon Beach, Oreg., 15', USGS, 1955  
73-127, 201 (1:32,500); 74-165, 2124 (1:130,000)
- B. OCR; SSZ special type; Subalpine conifer/meadow communities.
- C. This is a small strip of state land which includes the N summit of Onion Peak. All of the slopes leading to the summit have been clearcut. A small group of conifers with western hemlock, Pacific silver fir, and western redcedar is present. Small pockets of herbaceous communities are evident. Plant species of special interest have been reported from Onion Peak (see Saddle Mountain State Park, page 42).
- D. Good potential for a natural area preserve.

Catalog of Selected State Parks and Waysides, Clatsop County

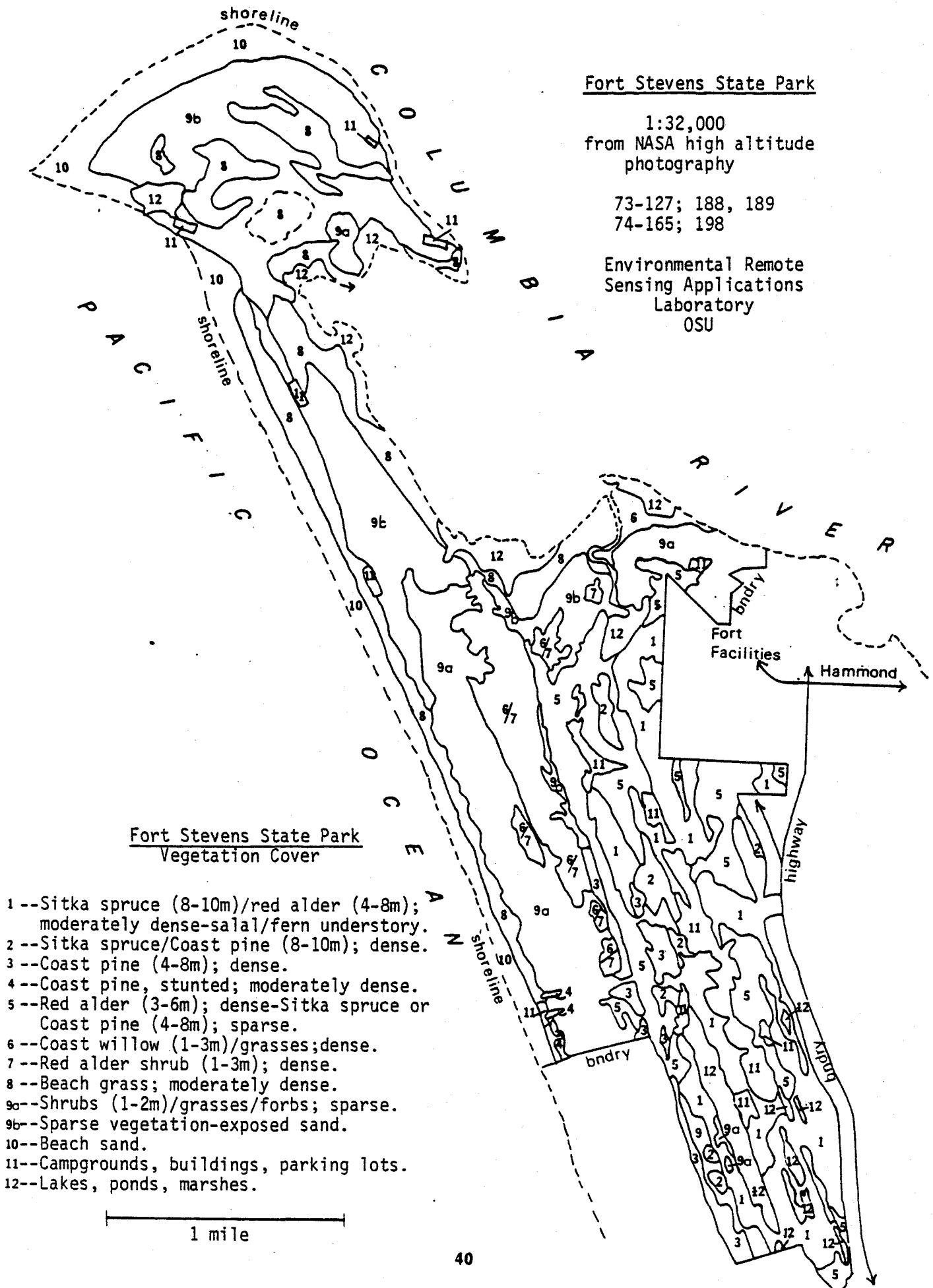
- 1A. Fort Stevens State Park  
On Clatsop Plains W of Warrenton  
Warrenton, Oreg.-Wash., 7½', USGS, 1953  
73-127, 191, 192 (1:32,500)
- B. OCR; Special type; Coastal dunes: deflation plains, spruce marsh, and coast pine ridges (cell 17).
- C. This is a coastal area with heavy recreational use, especially during summer months. Much of the present-day vegetation is the result of planting of beach grass, scotch broom, and coast pine to stabilize sand movement in the area. The topography in the park is characterized by a "dune-swale" pattern of longitudinal dune ridges with established beach grass or coast pine alternating with long swales or depressions with shrubs, hardwoods, or Sitka spruce present, depending on the distance from the ocean shore. Older spruce/hardwood communities in a marsh or lake shore situation, as well as the stabilized dunes, may be of interest as natural areas (see map, page ).
- D. Some areas may be suitable for natural areas.
- 2A. Ecola State Park  
On Tillamook Head N of Cannon Beach  
Cannon Beach, Oreg., 15', USGS, 1955, and Tillamook Head, Oreg., 7½', USGS, 1949  
74-165, 2126 (1:130,000); 73-127, 197 (1:32,500)
- B. OCR; Special types; Coastal headland plant communities.
- C. This park contains a variety of coastal headland vegetation types from sheltered Sitka spruce/western hemlock communities to shrub/grass communities exposed to the ocean (see map, page ).
- D. Some areas may be suitable for natural areas.
- 3A. Bradley Wayside  
On U.S. Highway 30 four miles W of Westport  
Cathlamet, Oreg.-Wash., 15', USGS, 1953  
74-165, 2139 (1:130,000); 74-165, 194 (1:32,500)
- B. OCR; WHZ; Old growth Douglas fir (cell 6).
- C. There are a few old growth Douglas fir trees around the parking area. The wayside overlooks the Columbia River with a good view to the E. Much of the vegetation on the periphery of the area is hardwoods (alder) and younger Douglas fir.
- D. Marginal potential for natural area.

# Fort Stevens State Park

1:32,000  
from NASA high altitude  
photography

73-127; 188, 189  
74-165; 198

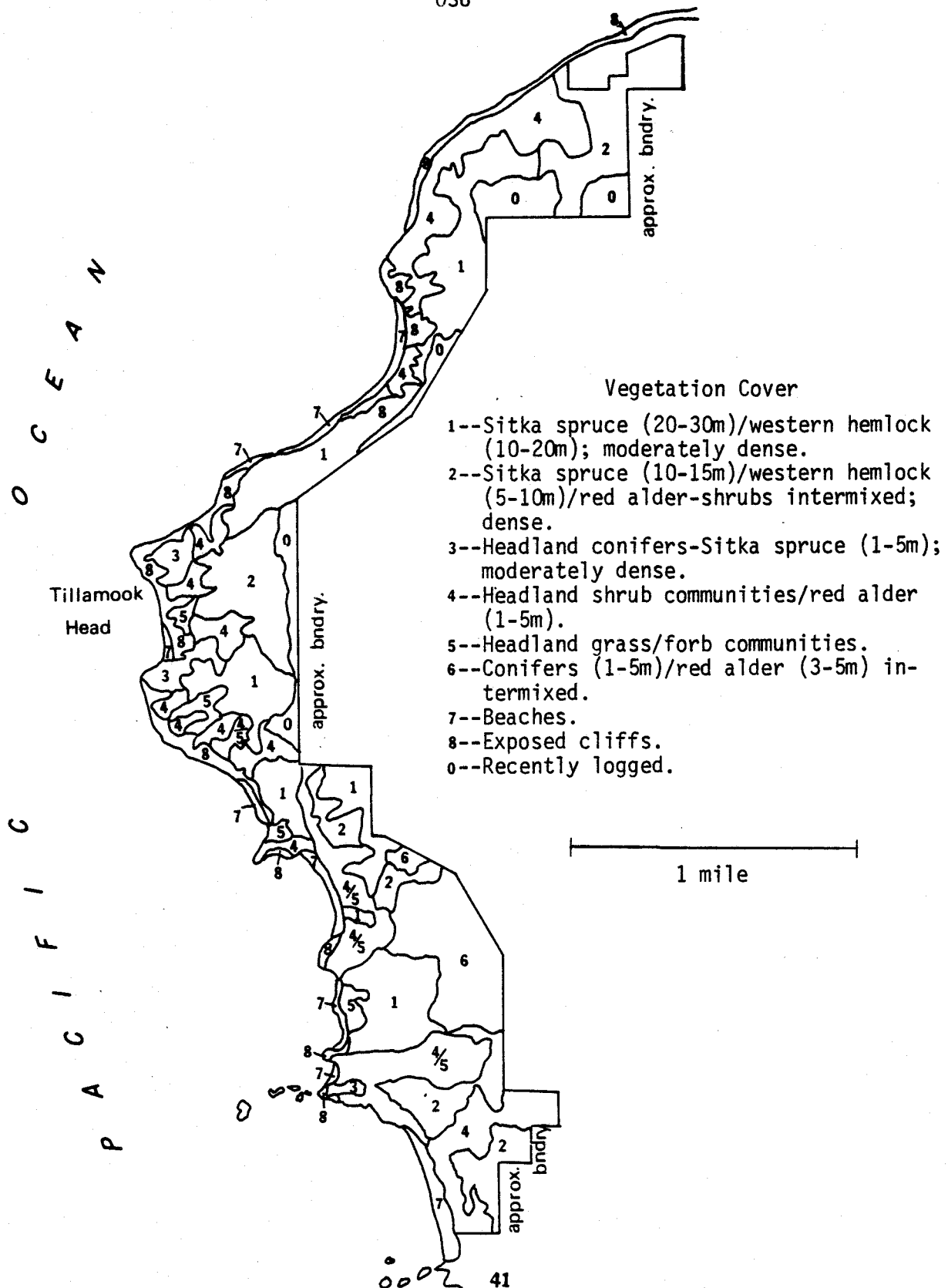
Environmental Remote  
Sensing Applications  
Laboratory  
OSU





# Ecola State Park

from NASA high altitude photography  
73-127; 197, 74-165; 2126  
Environmental Remote Sensing Applications Laboratory  
OSU



- 4A. Saddle Mountain State Park  
About 6 miles N of U.S. Highway 26 half-way between Seaside and Elsie  
Saddle Mountain, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)
- B. OCR; Special types; Subalpine conifer/meadow communities.
- C. There are several plant taxa which are at their southern limit in North America on Saddle Mountain and Onion Peak. Also, Saddle Mountain bittercress (Cardamine pattersonii Henders.) and a variety of western saxifrage (Saxifraga occidentalis Wats. var. latipetiolata C.L. Hitchc.) are considered endemic species (Chambers, 1973). These species occur at higher elevations on the mountain. Noble fir and possibly Pacific silver fir are the significant conifer species present. The peak provides a cool, moist environment and a variety of plant habitats. The parcels within the park which would include these habitats are T6N, R8W: Section 28, SE $\frac{1}{4}$ ; Section 33, N $\frac{1}{2}$ ; and Section 34, NW $\frac{1}{4}$ .
- D. Higher elevations of the peak are strong potential candidate areas.

Oregon Wildlife Commission Lands, Clatsop County

- A. Jewell Meadows and Beneke Creek game management areas W and N of Jewell, Oregon along Fishhawk Creek and Beneke Creek respectively.  
Saddle Mountain, Oreg., and Birkenfeld, Oreg., 15', USGS, 1955  
74-165, 2128 (1:130,000)
- B. OCR; WHZ; Riparian hardwoods (cell 22).
- C. Management of these agricultural lands is for elk winter grazing. Of interest are the communities of large, dense red alder along Fishhawk and Beneke Creeks.
- D. Some potential for natural area.

CROOK COUNTY  
Central Oregon

Crook County, the second largest county in area in the present inventory, is 1,900,000 acres in size. Only one and one-half percent, about 28,000 acres, is state land. Except for a few small state parks and waysides, all parcels are administered by the State Land Board, Division of State Lands. One section is managed by the Department of Forestry. The area bordering the upper portion of Prineville Reservoir is designated as a "state zone" but is U.S. Bureau of Reclamation land. See map of state lands in Crook County on page 44.

Summary of Vegetation on State-Owned Lands.

Most of the north and east portions of the county are in the Blue Mountains physiographic province. Vegetation zones represented here are the Grand Fir/Douglas Fir and Ponderosa Pine vegetation zones (Franklin and Dyrness, 1973). State parcels in the area fall into the Ponderosa Pine Zone only. The south portion of the county is in the High Lava Plains physiographic province. Here the vegetation zones are Western Juniper and Shrub-Steppe. Much of the state ownership is in southeast Crook County and the area south of Prineville. Several state-owned parcels occur in both zones.

Most of the potential natural area candidate units are in the upland areas of the county. They are usually in a zone of vegetation transition from scattered Ponderosa pine forest to a shrub or western juniper dominated vegetation. Grazing and recreation-sight seeing are important activities in Crook County and on many sites described in the catalog natural vegetation disturbance may be significant enough to preclude preserve status.

Catalog of Selected Parcels, Crook County

- 1A. T13S, R16E  
Section 16, NE $\frac{1}{4}$ , NE $\frac{1}{4}$   
Approximately 10 miles N of Prineville  
Prineville, Oreg., 15', USGS, 1962  
72-134 (1:32,500)
- B. Ochoco, Blue, and Wallowa Mountains (OBWM); Shrub-Steppe-Ponderosa Pine Zones; big sagebrush/bunchgrass and Ponderosa pine/bunchgrass (cells 21, 9).

JEFFERSON COUNTY

WHEELER COUNTY

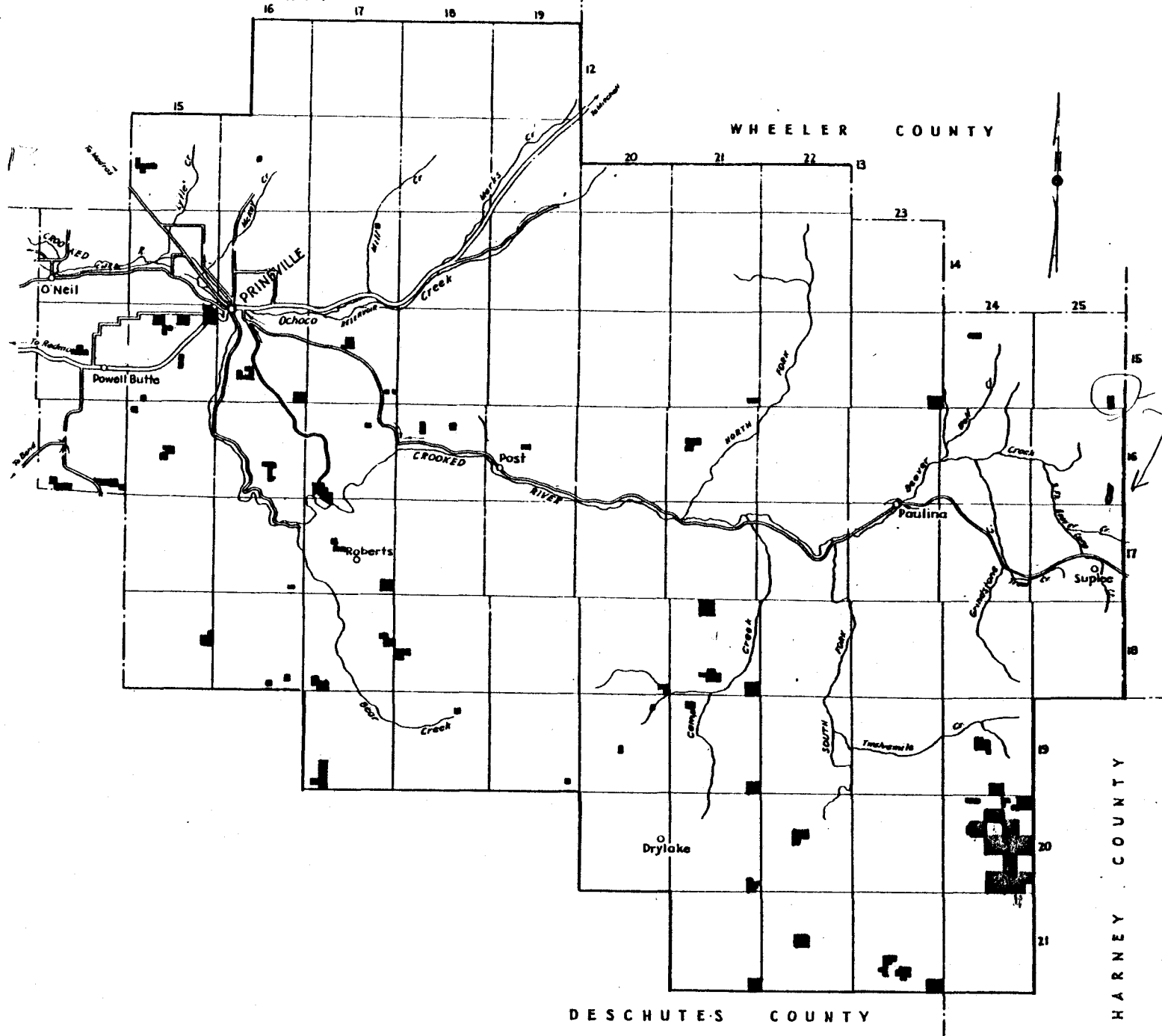
DESCHUTES COUNTY

CROOK COUNTY

CROOK COUNTY

HARNEY COUNTY

DESCHUTES COUNTY



- C. This forty acre parcel is on a ridge spur (3400-3900 feet) with a NW and SE- facing slope near the confluence of Allen Creek and one of its tributaries. A light duty road provides access within a few hundred yards. The S-facing slope is big sagebrush/bunchgrass with some sparse western junipers and possibly some Ponderosa pine. The N-facing slope has a good Ponderosa pine cover descending to riparian communities on the edge of Allen Creek Drainage.
  - D. Some potential for natural area.
- 
- 2A. T14S, R17E  
 Section 2, SE $\frac{1}{4}$ , SW $\frac{1}{2}$   
 Approximately 5 miles N of Ochoco Reservoir on the W slope of Mahogany Butte  
Ochoco Reservoir, Oreg., 15', USGS, 1948  
 73-106, 221 (1:32,500)
    - B. OBWM; Western Juniper Zone; western juniper/big sagebrush/bluebunch wheatgrass communities (cell 6).
    - C. This forty acre unit is centered on the W slope (3500-4250 feet) of Mahogany Butte just to the E of Mill Creek. Vegetation is mostly big sagebrush cover with some western juniper. Ponderosa pine is apparent in ravines on the slope. This is a transition area from western juniper to Ponderosa pine vegetation types.
    - D. Some potential for natural area.
  - 3A. T15S, R16E  
 Section 36  
 Approximately 6 miles SE of Prineville near Juniper Canyon Road  
Powell Buttes, Oreg., 15', USGS, 1962  
 73-106, 156 (1:32,500)
    - B. OBWM; Western Juniper-Ponderosa Pine Zones (transition area); western juniper/big sagebrush/bunchgrass and Ponderosa pine/bitterbrush/bunchgrass communities.
    - C. A flat top hill, elevation 4200 feet, is centered in this section with an intermittent stream channel on the E and W slopes flowing S. Very small stands of Ponderosa pine appear on the NE slope of the hill and along the stream channels. The remainder of the area has a moderate cover of western juniper. Although adjacent sections have road development, as if subdivided, this section appears little disturbed.
    - D. Potential for a natural area.

- 4A. T15S, R21E  
 Section 36, N $\frac{1}{2}$   
 Near Cabin Butte on the N fork of the Crooked River, about  
 10 miles NW of Paulina  
 Crook County Highway Map, sheet 2, OSHD, 1971  
 73-106, 139 (1:32,500)
- B. OBWM; Ponderosa Pine Zone; complex of xeric to mesic plant  
 habitats (cell 9).
- C. Riparian communities are apparent along Rough Canyon Creek  
 grading to xeric, flat hilltops of Ponderosa pine and  
 western juniper. There are some large areas of big sage-  
 brush and bunchgrass. Barren rocky areas are on steeper  
 canyon walls. The average elevation in the area is 4500  
 feet.
- D. Good potential for natural area preserve.
- 5A. T16S, R17E  
 Section 11, SE $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Adjacent to Eagle Rock  
Eagle Rock, Oreg., 15', USGS, 1946  
 73-106, 153 (1:32,500)
- B. OBWM; Western Juniper Zone; western juniper/big sagebrush/  
 bunchgrass-mesic communities (cell 6)
- C. This forty acre unit is on a N-facing slope SW of Eagle Rock.  
 There may be a spring or natural water seepage. Deciduous  
 trees, shrubs, and herbaceous cover are evident around this  
 area. Western juniper and big sagebrush are dominant in the  
 remainder of the parcel. Soil in much of the area appears  
 stony and shallow.
- D. Some potential for natural area. Spring and scenic considera-  
 tions may be significant.
- 6A. T16S, R18E  
 Section 8, NW $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Section 8, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Between Pilot Butte and Eagle Rock  
Eagle Rock, Oreg., 15', USGS, 1946  
 73-106, 152 (1:32,500)
- B. OBWM; Western Juniper-Ponderosa Pine Zone (transition area);  
 western juniper and mesic communities.
- C. An intermittent stream channel runs the length of this unit. In  
 SE $\frac{1}{4}$ , NE $\frac{1}{4}$ , the land appears to be cleared and irrigated by "water"  
 spreading. In NW $\frac{1}{4}$ , SE $\frac{1}{4}$  are some Ponderosa pine in more mesic  
 habitats than of surrounding sparsely covered western juniper  
 hillsides.

- D. May be some potential for natural area. Suggest further investigation.
- 7A. T16S, R18E  
 Section 10, NE $\frac{1}{4}$ , SW $\frac{1}{4}$   
 About 1 $\frac{1}{2}$  miles SE of Pilot Butte  
Eagle Rock, Oreg., 15', USGS, 1946  
 73-106, 152 (1:32,500)
- B. OBWM; Western Juniper-Ponderosa Pine Zones (transition area); western juniper (open)/sagebrush/bunchgrass communities.
- C. This unit is on the SE slope of Pilot Butte just below the Ponderosa Pine Zone on the butte. Dense western juniper woodland with a few Ponderosa pine occur in protected areas. An area of natural water seepage is evident to the E of this parcel.
- D. Potential for natural area. Suggest further investigation.
- 8A. T16S, R21E  
 Section 16, lots 1-4, 6-10, 12  
 Section 16, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 16, SW $\frac{1}{4}$ , S $\frac{1}{2}$   
 About 4 miles N of Crooked River, approximately 15 miles W of Paulina  
 Crook County Highway Map, sheet 2, OSHD, 1971  
 72-134, 74 (1:32,500)
- B. OBWM; Western Juniper-Ponderosa Pine Zones (transition area); riparian and intermittent mesic habitats, Ponderosa pine-western juniper/big sagebrush/bunchgrass communities on ridge.
- C. This parcel includes at least three ecosystems: 1) riparian along intermittent streams; 2) meadow-marsh; and 3) protected, relatively mesic Ponderosa pine sites. Western juniper/big sagebrush/bunchgrass communities occur on S facing slopes. Elevation is about 4500 feet.
- D. Some potential for natural area. Suggest further investigation.
- 9A. T16S, R25E  
 Section 36, W $\frac{1}{2}$  *not shown*  
 Approximately 15 miles due E of Paulina  
 Crook County Highway Map, sheet 2, OSHD, 1971  
 73-106, 121 (1:32,500) *Probably should be Township 15 South, not 16.3*
- B. OBWM; Ponderosa Pine-Shrub-Steppe Zones; Ponderosa pine/big sagebrush/bunchgrass.

- C. Small stands of Ponderosa pine are in an area of open bunchgrass (species indeterminant) communities. Big sagebrush is also evident. The elevation in this unit averages 5200 feet.
  - D. Some potential for natural area.
- 10A. T17S, R17E  
 Section 16, NW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 16, SE $\frac{1}{4}$ , S $\frac{1}{2}$   
 Approximately 2 miles S of Crooked River near Alkali Flat  
Eagle Rock, Oreg., 15', USGS, 1946  
 73-106, 95 (1:32,500)
- B. OBWM; Western Juniper-Ponderosa Pine Zones (transition area); western juniper, big sagebrush, bunchgrass communities.
  - C. In the NW $\frac{1}{4}$ , NE $\frac{1}{4}$  are western juniper mixed with Ponderosa pine. Big sagebrush and bunchgrass are evident in this portion. In SE $\frac{1}{4}$ , S $\frac{1}{2}$  are western juniper communities with big sagebrush and bunchgrass.
  - D. Some potential for natural area.
- 11A. T17S, R17E  
 Section 36, N $\frac{1}{2}$   
 Section 36, S $\frac{1}{2}$ , N $\frac{1}{2}$   
 Approximately 1 mile S of Alkali Butte  
Eagle Rock, Oreg., 15', USGS, 1946  
 72-134, 119 (1:32,500)
- B. OBWM; Western Juniper Zone; western juniper woodland/big sagebrush/bunchgrass community.
  - C. The western juniper woodland is on a SW facing slope with a few Ponderosa pine mixed. There is evidence of small openings of bunchgrass communities within the woodland.
  - D. May have potential for natural area. Suggest further investigation.
- 12A. T18S, R17E  
 Section 13, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 13, SE $\frac{1}{4}$ , W $\frac{1}{2}$   
 Section 13, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 T18S, R17E  
 Section 24, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
 Approximately 1 mile W of Cofelt Ranch  
 72-134, 119 (1:32,500)



- B. OBWM; Western Juniper-Shrub-Steppe Zones; western juniper/  
bunchgrass.
  - C. Section 24, NE $\frac{1}{4}$ , N $\frac{1}{2}$  has sagebrush communities on S-facing  
slopes. Some western juniper are present here. Section 13  
is mostly western juniper woodland with sagebrush and grass  
areas. There are possibly a few Ponderosa pine in the area.  
Elevation averages 4300 feet.
  - D. Some potential for natural area.
- 13A. T18S, R17E  
 Section 31, lots 3, 4  
 Section 31, NW $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Section 31, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 31, SE $\frac{1}{4}$   
 Approximately 10 miles NW of Brothers  
Brothers, Oreg., 7 $\frac{1}{2}$ ', USGS, 1967  
 72-134, 117 (1:32,500)
- B. OBWM-High Lava Plains (HLP); Western Juniper Zone; western  
juniper/sagebrush/bunchgrass communities.
  - C. In Section 31, SE $\frac{1}{4}$  on NW facing slopes is a moderately dense  
western juniper woodland. Fifty percent of the sloping area  
is rocky surface. Some bunchgrass areas are evident in the  
woodland. In NE $\frac{1}{4}$ , SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ , NW $\frac{1}{4}$  (Sage Hollow) are  
riparian communities on an intermittent stream course. There  
is some evidence of grazing along the stream bottom. There  
is also a highway right of way. The remainder of the unit  
described in "A" above is an open western juniper woodland.
  - D. Possibly some potential for natural area.
- 14A. T18S, R21E  
 Section 16, W $\frac{1}{2}$  — Not shown  
 Approximately 4 miles NE of Barnes  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 72-134, 133 (1:32,500)
- B. OBWM; Ponderosa Pine Zone; Ponderosa pine, mountain mahogany,  
sagebrush, bunchgrass communities.
  - C. The W $\frac{1}{2}$  straddles the middle segment of David Creek which  
flows W to E. The S rim of the creek canyon is basalt cliff  
with dense mountain mahogany communities apparent on favorable  
sites. The lower portion of this N-facing slope has mixed  
mountain mahogany and Ponderosa pine. There are riparian  
plant communities along the creek bottom. Across the stream  
on the S facing slope are western juniper and Ponderosa pine  
communities with sagebrush and bunchgrass in some areas.
  - D. Good potential for natural area.

- 15A. T18S, R21E  
 Section 36, all  
 Approximately 5 miles S of Severance Reservoir, E of road intersection  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 72-134, 135 (1:32,500)
- B. OBWM; Western Juniper Zone; western juniper/sagebrush/bunchgrass communities (cell 6).
- C. This section includes a basalt "table top" hill with an intermittent lake on top. The summit area is a sagebrush/bunchgrass community. The NW-facing slope has a western juniper/sagebrush cover.
- D. May only be suitable from standpoint of topography.
- 16A. ~~T20S~~ <sup>T19S</sup>, R20E - No state owned land shown in this town ship  
 Section 16, SE $\frac{1}{4}$ , W $\frac{1}{2}$   
 Approximately 3 miles SW of Barnes  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 73-106, 19 (1:32,500)
- B. OBWM; Ponderosa Pine-Western Juniper Zones (transition area); western juniper/sagebrush/bunchgrass communities.
- C. This parcel contains a draw with a few Ponderosa pine and apparently abundant grass communities associated with unusual ground moisture. Remainder of the hillside is western juniper and big sagebrush cover.
- D. May have potential for natural area. Needs further investigation.
- 17A. T19S, R24E  
 Section 16, SE $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 16, NW $\frac{1}{4}$   
 Section 16, S $\frac{1}{2}$ , N $\frac{1}{2}$   
 Section 16, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Approximately 10 miles NE of G.I. Ranch  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 73-106, 8 (1:32,500)
- B. OBWM-HLP (transition area); Shrub-Steppe communities; low sagebrush/bunchgrass.
- C. Apparently this is a stony, gravelly soil area with much stream dissection. Some intermittent riparian habitats are present but the area is mostly covered by low sagebrush. There is evidence of ant mounds. This unit is irregularly fenced and has road access. A small part of the parcel is affected by water spreading from Lillard Reservoir on the south fork of Twelvemile Creek.

- D. Good potential as natural area for low sagebrush community, but disturbance may disqualify.
- 18A. T19S, R24E  
 Section 34, all  
 Approximately 8 miles NE of G.I. Ranch  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 72-134, 11 (1:32,500)
- B. OBWM-HLP (transition area); Shrub-Steppe communities; low sagebrush/bunchgrass.
- C. Much of this unit has a bare, gravelly soil surface with low sagebrush and some bunchgrass. Apparently some shrub species other than sagebrush are present, e.g., bitterbrush.
- D. Marginal potential for natural area.
- 19A. T20S, R24E  
 Section 1, all  
 Section 2, lots 2, 3, 4  
 Section 2, NE $\frac{1}{4}$ , SW $\frac{1}{4}$   
 Section 2, NW $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 2, SW $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 2, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Approximately 10 miles ENE of G.I. Ranch  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 72-134, 10, 11 (1:32:500)
- B. HLP-OBWM (transition area); Shrub-Steppe; big sagebrush, bitterbrush, bunchgrass communities.
- C. Section 2, SE $\frac{1}{4}$ , SE $\frac{1}{4}$ , is possibly low sagebrush and/or bitterbrush community on the NW facing slope. The remainder of the section is dominated by big sagebrush. A few scattered western juniper are present. A corner of this parcel touches the Twelvemile Creek drainage. Section 1 is dissected by dry stream courses. Big sagebrush and bitterbrush are evident here.
- D. Some potential for natural area.
- 20A. T20S, R24E  
 Section 36, N $\frac{1}{2}$ , N $\frac{1}{2}$   
 Section 36, NW $\frac{1}{4}$ , SW $\frac{1}{4}$   
 Section 36, SW $\frac{1}{4}$   
 About 13 miles E of G.I. Ranch  
 Crook County Highway Map, sheet 4, OSHD, 1971  
 72-134, 17 (1:130,000)

- B. OBWM; Ponderosa Pine Zone; Ponderosa pine/bitterbrush/  
bunchgrass communities.
- C. This section borders Ochoco National Forest in SE Crook County.  
It is fenced and possibly grazed. Two small man-made ponds are  
evident. About forty percent of the section is stony-surfaced  
soil with little vegetation except possibly low sage. The  
remainder of the vegetation cover is moderately dense Ponderosa  
pine with a shrub understory of bitterbrush.
- D. Good potential for natural area except that grazing use may  
disqualify.
- OK. 21A. T21S, R24E *— No state owned land shown in this Township*  
Section 2, S $\frac{1}{2}$   
Section 2, N $\frac{1}{2}$ , S $\frac{1}{2}$   
Section 2, lots 1, 2, 3, 4  
About 10 miles E of G.I. Ranch  
Crook County Highway Map, sheet 4, 1971  
72-114, 3132 (1:130,000)
- B. OBWM; Ponderosa Pine-Shrub-Steppe Zones; low sagebrush, stiff  
sagebrush/bluegrass communities.
- C. The W facing slopes in this unit are adjacent to the Ochoco  
National Forest. Ridges are rocky and barren except for  
low sagebrush-stiff sagebrush. Ravines have some Ponderosa  
pine. There appears to be a fault zone running through this  
section.
- D. Some potential for natural area. Interesting for topography  
as well.

State Parks and Waysides, Crook County.

None of the state parks or waysides were considered suitable for  
natural area preserve consideration based on small individual size,  
intense recreation usage, and status of vegetation. Interpretive notes  
were made on maps provided by the Oregon State Highway Department and  
submitted with other working maps for this report.

## CURRY COUNTY

### Southwestern Oregon Coast

About one percent of the area of Curry County is state-owned land. The string of state parks along the coast accounts for over eighty percent of the total state acreage (see map, page 54). The remaining twenty percent is State Land Board land managed by the Department of Forestry and is located primarily inland.

#### Summary of Vegetation on State Lands, Curry County.

The bulk of state land (state parks) in Curry County falls into the Sitka Spruce Zone along the coast. Some parcels farther inland occur within the Mixed Evergreen and Mixed Conifer Zones (Franklin and Dyrness, 1973). One or two units have knobcone pine forest communities in them and in the river valleys on the extreme south coast of the county a state park and partial section contain coast redwoods.

#### Catalog of Selected Parcels, Curry County.

- 1A. T32S, R14W  
Section 5, SW $\frac{1}{4}$ , E $\frac{1}{2}$   
Approximately 5 miles E of Sixes  
Langlois, Oreg., 15', USGS, 1954  
74-115, 1226 (1:130,000)
- B. Siskiyou Mountains; Mixed Evergreen Zone; Douglas fir and evergreen hardwoods (cell 8).
- C. This eighty acre parcel is at approximately 800 feet elevation about ten miles from the coast in the Sixes River drainage. The plant community is large Douglas fir with bigleaf maple and California laurel intermixed. This is an older "second growth" forest.
- D. Some potential for natural area.

- OK.
- 2A. T32S, R13W  
Section 16, SW $\frac{1}{4}$  - may not be shown on map  
On Mt. Avery about 13 miles E of Sixes  
Langlois, Oreg., 15', USGS, 1954  
74-115, 1177 (1:130,000)

- B. Siskiyou Mountains; Mixed Conifer Zone; Douglas fir community.

# CURRY COUNTY

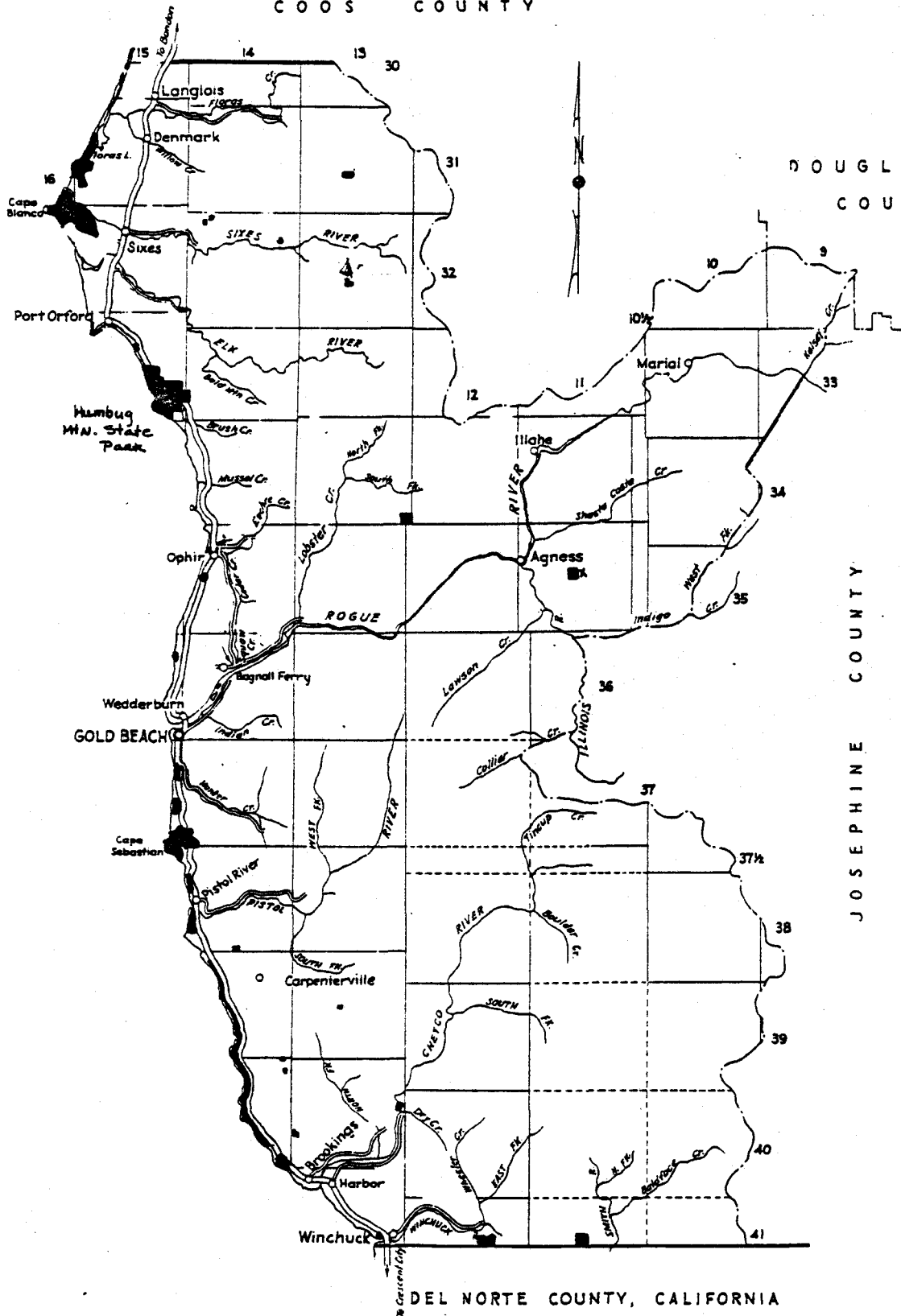
COOS COUNTY

DOUGLAS COUNTY

JOSEPHINE COUNTY

PACIFIC OCEAN

PACIFIC OCEAN



- C. This unit is located near the summit of Avery Peak (elevation 2500 feet). The vegetation is a remnant of clearcutting on the south slope. Components are principally Douglas fir, western hemlock, and tanoak on the margins.
  - D. Some potential for natural area.
- 3A. T39S, R13W  
 Section 16, NE $\frac{1}{4}$ , SW $\frac{1}{4}$   
 Section 16, NW $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 16, lots 1-5  
 About one and one-half miles SW of Bosley Butte  
Cape Ferrelo, Oreg., 15', USGS, 1954  
 74-115, 1125 (1:130,000)
- B. Siskiyou Mountains; Mixed Evergreen Zone; knobcone pine forest community (cell 11).
  - C. This unit is primarily on south-facing slopes near the headwaters of the Chetco River. Elevation averages 1400 feet. A road runs through the parcel. Vegetation appears little disturbed although there has been recent logging immediately to the south. Knobcone pine forest and Douglas fir/hardwood mixed forest make up most of the vegetation cover. The knobcone pine cover is possibly on serpentine or other distinctive soil type. See map, page 67.
  - D. Good potential for natural area.
- 4A. T41S, R12W  
 Section 16, lots 13-15, 17-20  
 About 6 miles inland in the Winchuck River watershed on the Oregon-California border  
Mt. Emily, Oreg., 15', USGS, 1954  
 74-115, 1121 (1:130,000)
- B. Siskiyou Mountains; Sitka Spruce Zone; coast redwood forest (cell 2).
  - C. The coast redwoods present here are not in an ideal redwood forest environment, but this is one of the few state parcels in which they may be found. The extent of their coverage in the S $\frac{1}{2}$  of the section is limited. The dominant conifer is Douglas fir. Some moderately dense stands are up to eighty-five years old. Hardwoods are present on old cutover areas and in stream channels. See map, page 66.
  - D. Good potential for natural area preserve.

- 5A. T41S, R11W  
Section 16, all  
On the Oregon-California border approximately 12 miles from  
the coast  
Mt. Emily, Oreg., 15', USGS, 1954  
74-115,1120 (1:130,000)
- B. Siskiyou Mountains; Mixed Evergreen Zone; knobcone pine  
forest community (cell 11).
- C. White pine/madrone forest communities occur on exposed ridges  
in this section. Douglas fir/incense cedar forest types are  
along the stream bottoms. Knobcone pine and white pine forest  
communities occupy drier slopes. Some of these pine areas  
may be "second growth" forests. Also, serpentine of other  
distinctive soils may be a factor contributing to the forest  
type mosaic in the section. See map, page 67.
- D. Good potential for natural area. Suggest further investigation.



State Parks and Waysides, Curry County.

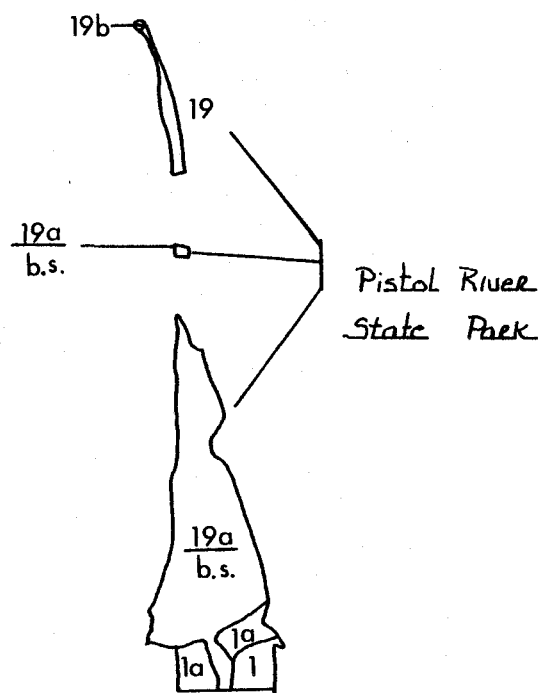
State parks and waysides are abundant in the coastal section of the county and exhibit a variety of plant communities. The maps on the following pages identify the major vegetation types that are found in these parks and waysides. In general, vegetation in the smaller units is under heavy visitor pressure and is sometimes manipulated to meet recreation requirements, e.g., around camping, picnicking, and parking areas. The larger parks have a few relatively isolated forest sites and coastal headlands that are natural in vegetation character.

- 1A. Floras Lake State Park  
Located on the coast just N of the mouth of the Sixes River  
Cape Blanco, Oreg., 15', USGS, 1954  
74-115, 1227 (1:130,000)
  - B. Siskiyou Mountains; Sitka Spruce Zone/Special Types; ocean front coniferous forest-coast pine (lodgepole) forest on Blacklock soil and ocean front shrub and herblands.
  - C. The park has a variety of plant communities. The most significant are the stunted "pygmy" forest of lodgepole pine (Pinus contorta var. contorta) on Blacklock soil and ocean-front Sitka spruce forest. The common understory in these types is made up of salal, ferns, vaccinium, and rhododendrons. Roads access the SW portion of the park which is adjacent to a small airfield. In this area, topography and vegetation resemble a old dune-swale complex. Lodgepole pine/salal is the major community in this area. Older, but somewhat stunted Sitka spruce forest occurs on the ocean-front cliffs in the park. See map, page 59.
  - D. Suitable sites for potential natural areas.
- 2A. Cape Blanco State Park  
About 2 miles S of Floras Lake State Park  
Cape Blanco, Oreg., 15', USGS, 1954  
74-115, 1227 (1:130,000)
  - B. Siskiyou Mountains; Sitka Spruce Zone/Special Types; ocean-front herblands (cells 1, 19).
  - C. The park has typical patches of ocean-front Sitka spruce forest, herbaceous headlands, and herb/shrub headlands. Of interest is the grassland at the mouth of the Sixes River which is within the park. This is apparently part of the floodplain of the river. Sand dunes are abundant closer to the ocean here. At a higher elevation in the central park area there is also grassland. There was evidence of grazing by sheep in the area when field checked.
  - D. Some potential for natural area.

# Legend for Curry County

- 1 Oceanfront coniferous forest
- 1a Sitka spruce
- 1b Open Sitka spruce/red alder
- 1c Good old growth stand: Sitka spruce; Douglas fir, western hemlock intermixed
- 1F Not a good example of type
- 2 Redwood forest near northern limits of range
- 3 Port Orford cedar/Douglas fir
- 4 Douglas fir/western hemlock
- 6 Pacific ponderosa pine with Douglas fir
- 8 Mixed evergreen forest (Douglas fir & evergreen hardwoods)
- 8h Hardwood predominates
- 8o 2nd growth--50-100 years
- 8y Old growth--excellent stand
- 11 Knobcone pine
- 19 Shrub/herbland complex
- 19a Herb headlands
- 19b Shrub headlands: salal, baccharis
- 19c Sitka spruce/herbaceous/shrub mixed
- 21 Pygmy lodgepole pine on Blacklock soil
  - o Open < 50% tree canopy
  - c Closed > 50% tree canopy
- bs Bare sand
- ~~XXXX~~ Deleted (clearcut, plowed, parking, campground, etc.)
- 22 Riparian hardwood forest (red alder, bigleaf maple, California laurel)

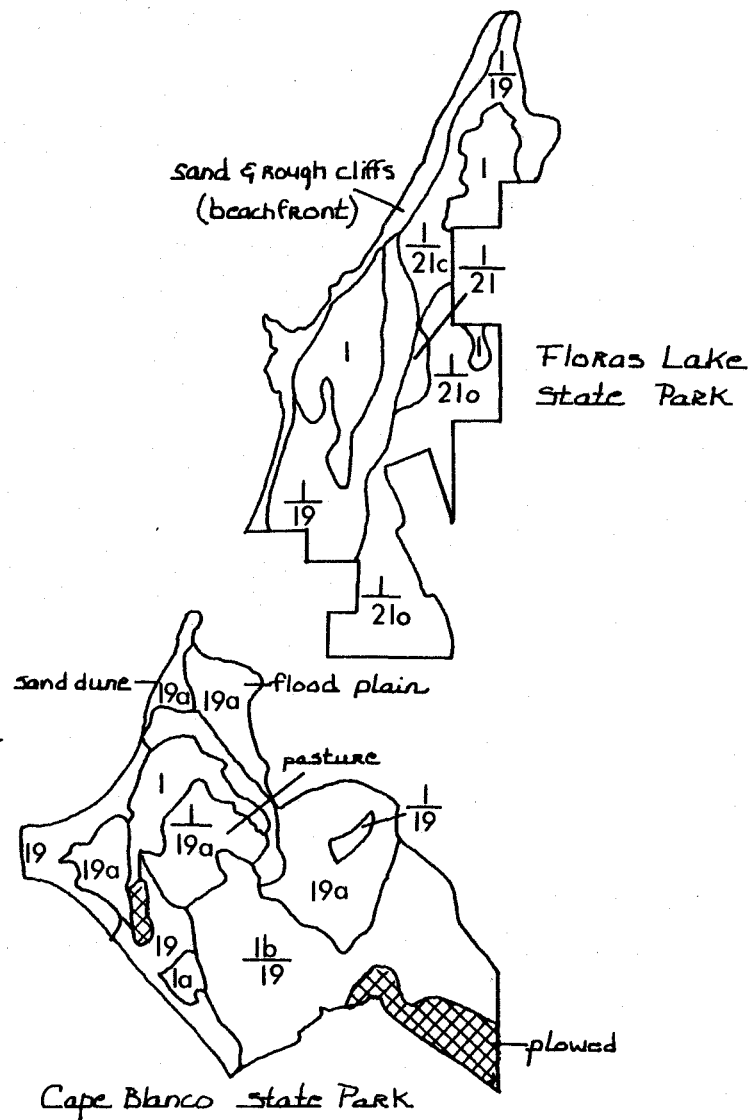
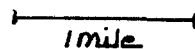
(Legend closely follows that of the terrestrial cells, Siskiyou Mtns. Province in Wemme report)



Gold Beach Quad.

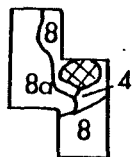
Curry County

scale



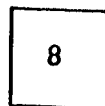
Cape Blanco Quad.

Curry County



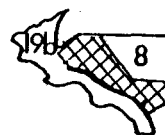
Forest Wayside State Park  
Cape Ferrello Quad.

T40S R13W Sec 19  
SW $\frac{1}{4}$ , N $\frac{1}{2}$ ; NW $\frac{1}{4}$ , SW $\frac{1}{4}$ ;  
SW $\frac{1}{4}$ , SE $\frac{1}{4}$



Cape Ferrello Quad.

T40S R14W Sec 12  
SW $\frac{1}{4}$ , E $\frac{1}{2}$   
SE $\frac{1}{4}$ , W $\frac{1}{2}$



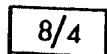
Harris Beach State Park  
Cape Ferrello Quad.



Cape Ferrello Quad.

T38S R14W Sec 33

09



Cape Ferrello Quad.

T40S R14W Sec 1  
NW $\frac{1}{4}$ , N $\frac{1}{2}$



Powers Quad.  
T31S R13W Sec 21  
NE $\frac{1}{4}$ , S $\frac{1}{2}$



Langlois Quad.  
T31S R15W Sec 33

Port Oxford Cedar State Park


Scale



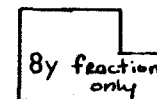
Curry County

80

Langlois Quad.  
T32S R14W Sec 5 SW $\frac{1}{4}$ , E $\frac{1}{2}$


 clearcut

Langlois Quad.  
T32S R14W Sec 11 NE $\frac{1}{4}$ , SE $\frac{1}{4}$

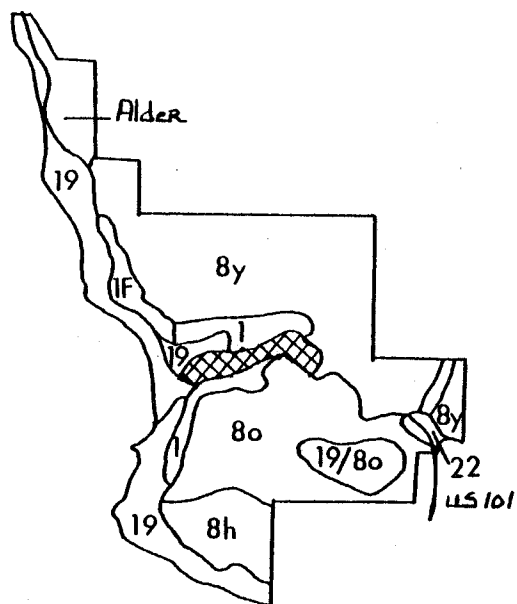
 8y fraction  
only

Langlois Quad.  
T32S R13W Sec 16  
SW $\frac{1}{4}$ ; SW $\frac{1}{4}$ SE $\frac{1}{4}$

Powers Quad.

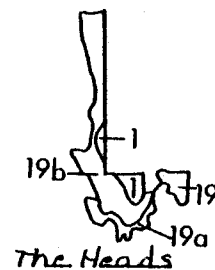
Scale   
1 mile

Curry County



Part Orford Quad.  
Humboldt Mt. State Park

Curry County



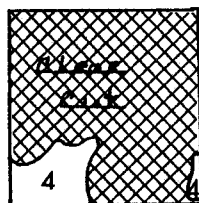
$\frac{bs}{19}$

19a-1a Rocky Point

Part Orford Quad.  
The Heads  
Rocky Point

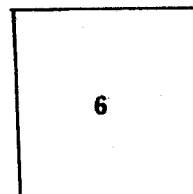
scale





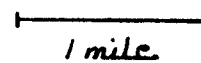
Agness Quad.  
T 34S R 13W sec 36

Cherry County

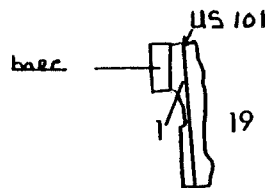


Agness Quad.  
T 35S R 11W sec 16

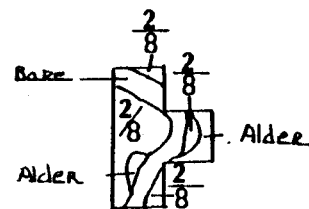
Scale



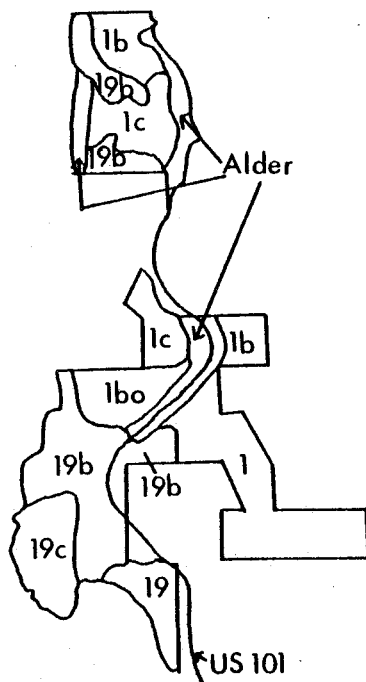
1 mile



Buena Vista should probably  
be deleted as there is  
considerable disturbance




Mt. Emily Quad.  
Alfred A. Loeb State Park



Gold Beach Quad.

Cape Sebastian  
State Park

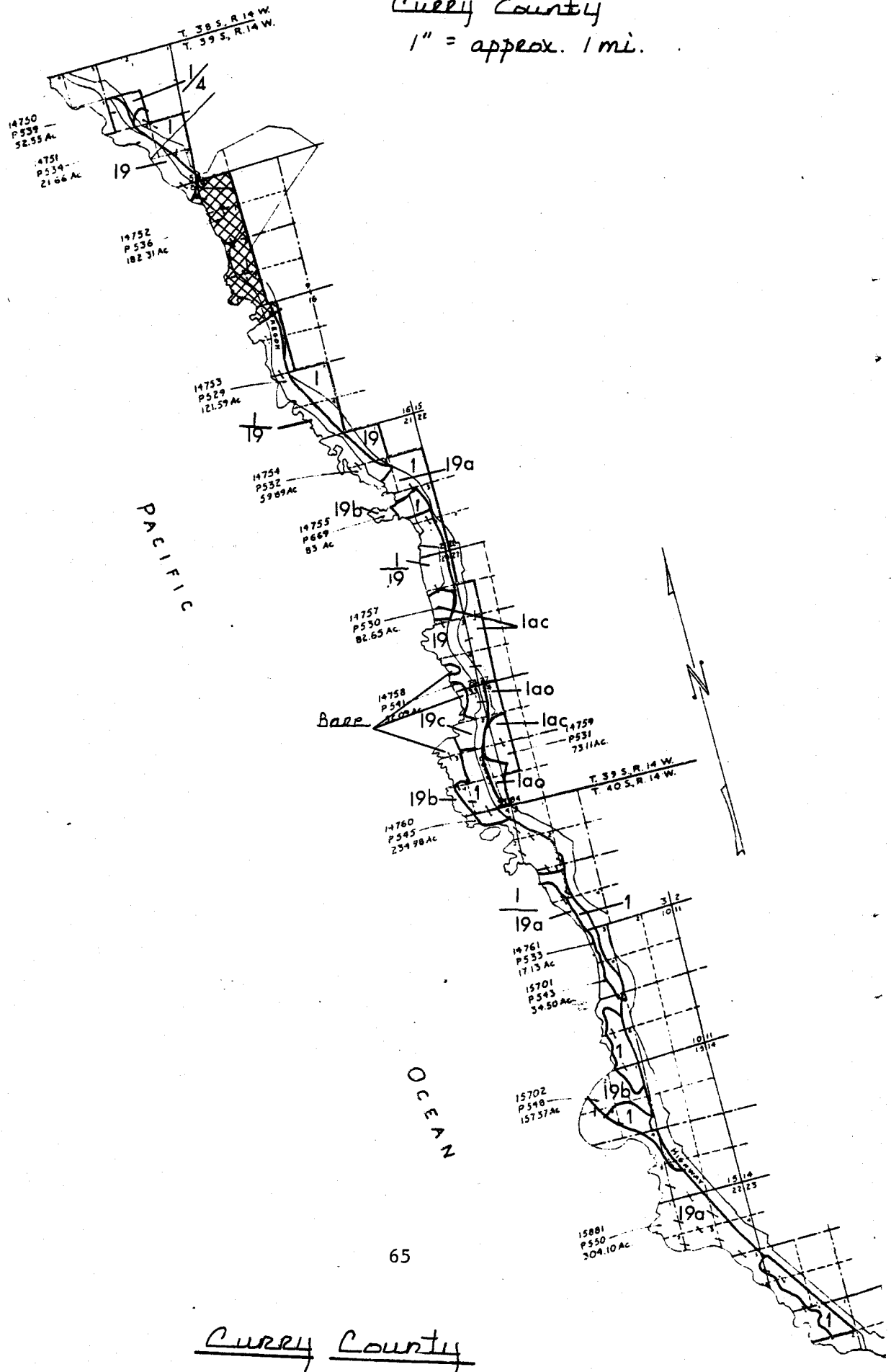
Scale   
1 mile

Curry County



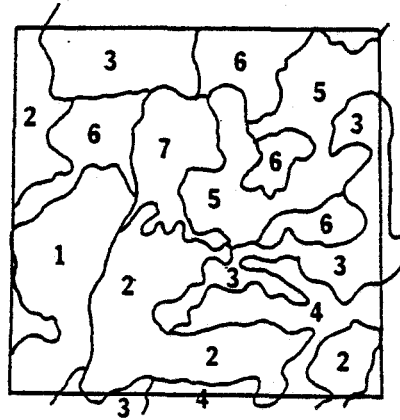
Samuel H. Boardman State Wayside  
Curry County

1" = approx. 1 mi.



Curry County

- 1-Redwood, Douglas fir, some western hemlock mix.
- 2-Douglas fir.
- 3-Red alder, hardwood, shrub.  
(see 6)
- 4-Douglas fir, red alder, redwood.
- 5-Douglas fir, old cut.
- 6-Red alder, shrub, old cut.  
(see 3)
- 7-Redwood, hemlock, Douglas fir.

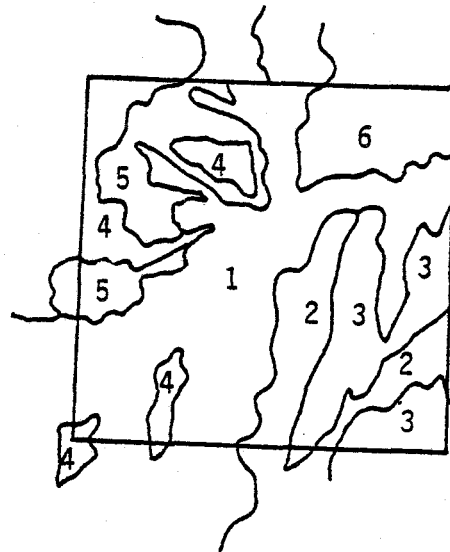


(Approximate sec. boundary)

Curry County T41S, R12W, Sec. 16

- 1-Douglas fir 40-50 years, incense-cedar.
- 2-Knobcone pine.
- 3-Douglas fir, white pine.
- 4-White pine, hardwood.
- 5-Madrone, hardwood.
- 6-Old burn, shrub, etc.

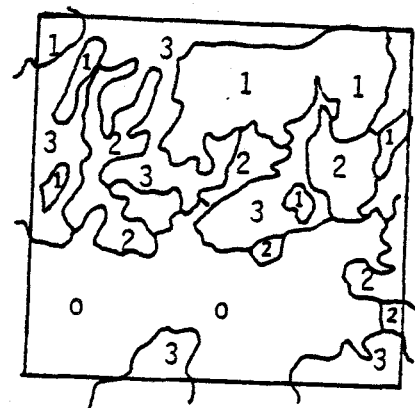
(Approximate sec. boundary)



Curry County T41S, R11W, Sec. 16

- 0-Recent logging.
- 1-Knobcone pine.
- 2-Douglas fir, hardwood mix.
- 3-Hardwood, shrub.

(Approximate sec. boundary)



Curry County T39S, R13W, Sec. 16, NW $\frac{1}{4}$ , S $\frac{1}{2}$ ,  
NE $\frac{1}{4}$ , SW $\frac{1}{4}$ ,  
Lots 1-5

- 3A. Pistol River State Park  
Approximately 11 miles S of Gold Beach  
Gold Beach, Oreg., 15', USGS, 1954  
73-127, 326 (1:32,500); 74-115, 1124 (1:130,000)
- B. Siskiyou Mountains; Sitka Spruce Zone/Special Types; ocean-front conifers (coast pine) and shrub and herb headlands (cells 1, 19).
- C. Most of the park is south of the mouth of Pistol River. South from the river, active sand dunes grade into more stabilized sandy soil areas characterized by a ridge and swale topography. The least disturbed area of the park is in its SE corner. Ridges in this area have coast pine forest communities with some wax myrtle, evergreen huckleberry, baccharis, and blackberry present. In general, swales in the area have a grass/shrub cover, but have more sand and less vegetation cover toward the ocean.
- D. Some potential for natural area.
- 4A. Humbug Mountain State Park  
About 10 miles S of Port Orford  
Port Orford, Oreg., 15', USGS, 1954  
73-127, 311, 312 (1:32,500); 74-115, 1175 (1:130,000)
- B. Siskiyou Mountains; Sitka Spruce Zone/ Special Types; ocean-front coniferous forest and ocean-front shrub and herblands (cells 1, 19).
- C. The park has an excellent forest of Douglas fir, grand fir (younger), and some western hemlock, mixed with bigleaf maple tanoak and California laurel on the north slopes of Humbug Mountain. Some of the ocean headlands of shrubs (salal, baccharis) and grass may be of interest.
- D. Some potential natural area sites.

## JEFFERSON COUNTY

### Central Oregon

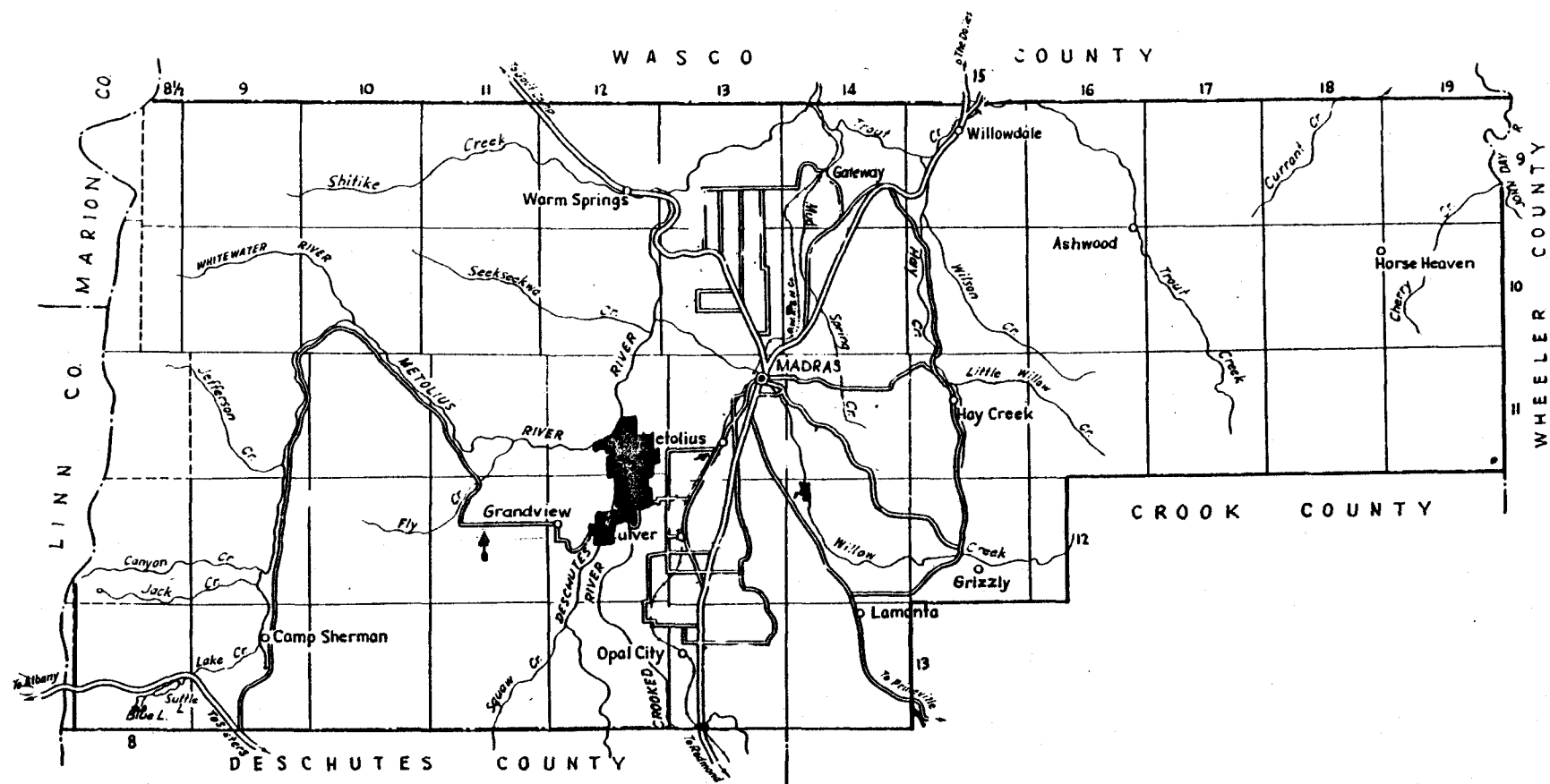
A very small percentage of Jefferson County is state-owned land. State parks account for nearly all of the acreage. See map, page .

#### Summary of Vegetation on State Lands, Jefferson County.

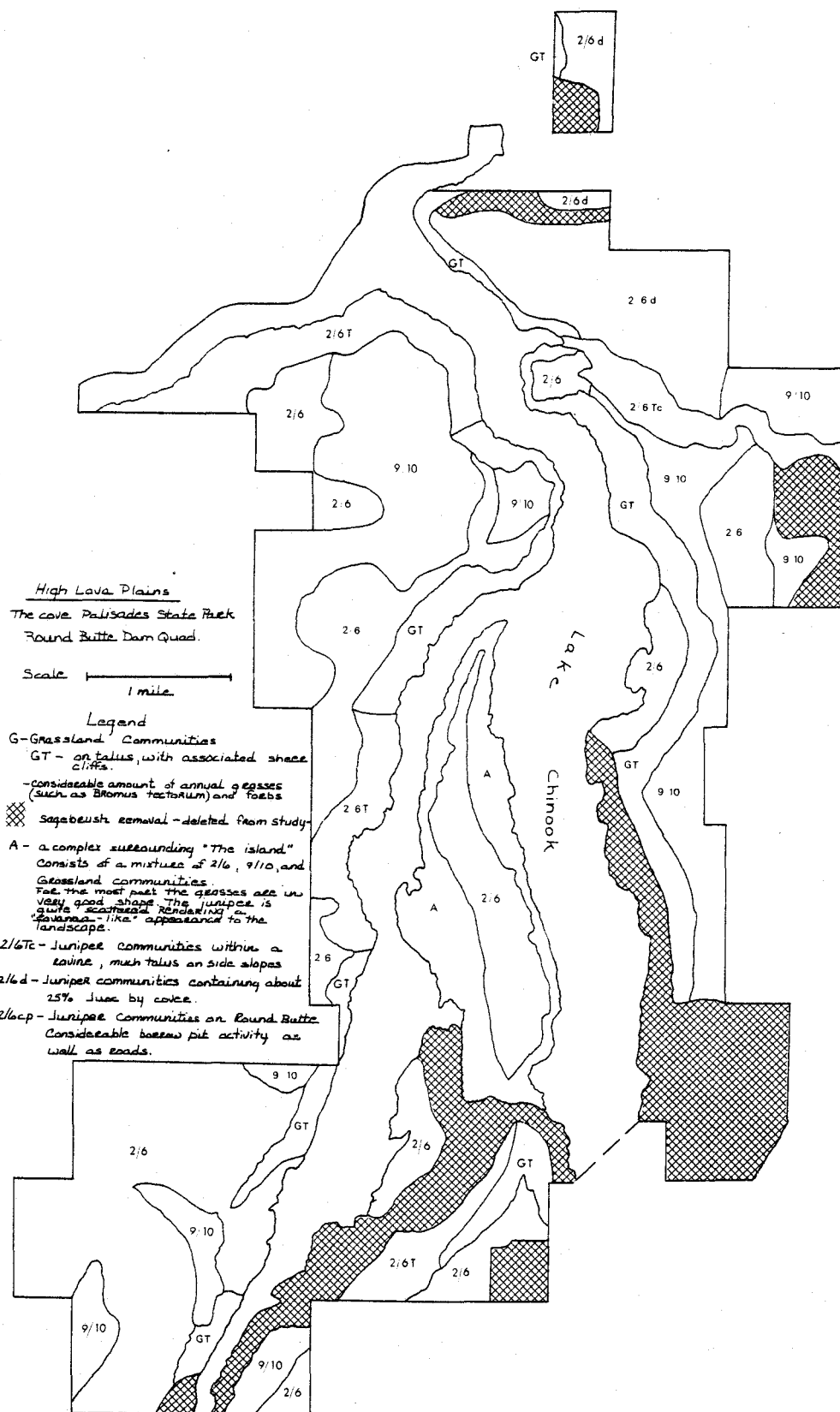
Locations of interest for natural areas are generally in established state parks. The largest park, Cove Palisades, is in a transition area between the High Lava Plains and the Columbia Basin (in Oregon) physiographic provinces. Vegetation in this park is classified as western juniper/sagebrush/bunchgrass type. Certain high quality natural areas occur within the park. A map and explanatory key to vegetation is on page 71. Other selected units in Jefferson County have been mapped on the following pages. Some plant species describing the vegetation are identified by acronyms listed in Northwest Range Plant Symbols, Pacific Northwest Forest and Range Experiment Station, USDA, 1967.

#### Catalog of Selected Parcels, Jefferson County.

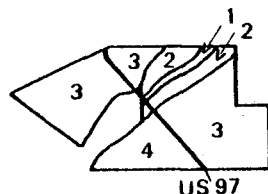
- OK 1A. T12S, R11E  
Section 16, SE $\frac{1}{4}$ , E $\frac{1}{2}$  - MAP NOT BE SHOWN ON MAP?  
About 6 miles W of Cove Palisades State Park  
Fly Creek, Oreg., 7 $\frac{1}{2}$ ', USGS, 1962  
72-134, 360 (1:32,500)
- B. Columbia Basin in Oregon/High Lava Plains; Ponderosa pine/western juniper communities with big sagebrush/bitterbrush understory.
- C. This unit is part of an intermittent stream drainage at approximately 3000 feet elevation. The moderately dense tree cover is Ponderosa pine and western juniper mixed. Upper slopes are sparsely covered with western juniper. Shrub layer is bitterbrush and big sagebrush. Grasses are bluebunch wheatgrass and Idaho fescue. There is dirt road access into the parcel.
- D. Some potential for natural area.



JEFFERSON COUNTY



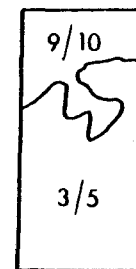
Jefferson County



High Lava Plains OPA City Quad.  
 Peter Skene Ogden State Park  
 Part of S 32 T13 S R13 E  
 Northern half of State Park is  
 in Jefferson County

### Legend

- ① Crooked River  
includes riparian zone - good cond.
- ② talus slopes a mixture of -  
 -9- Artemisia spp. / Agropyron spicatum  
 -10- Artemisia spp. / Festuca idahoensis
- ③ Upland plain  
 a mixture of  
 -2- Juoc / Artr / Agsp } in fair cond.  
 -6- Juoc / Fcid
- ④ excluded from study - Roads, etc.



High Lava Plains  
 Fly Creek Quad.  
 T125 R11E S16  
 E 1/2 SE 1/4

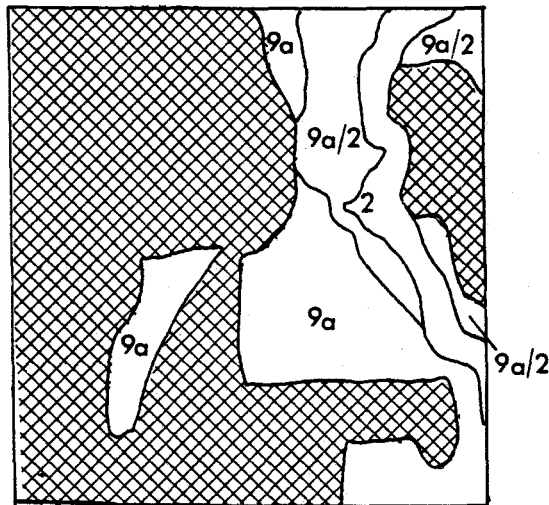
### Legend

- 3/5 what is indicated as 3/5 is a mixture of Pipo & Juoc approx. 25% Juoc Understore is Artr Putr some Chno, Festuca idahoensis and Agropyron spicatum.
- 9/10 Putr - sagebrush communities with Purshia tridentata.

Scale  1 mile

Jefferson County





High Lava Plains Buck Rock Quad.  
 Lot 4, S6 T12S R14E  
 map is of entire section

9a *Artemesia tridentata* / *Agropyron*  
*spicatum* with *Chrysothamnus* spp.

delated due to sagebrush treatment

2 western juniper on sleeper slopes

State Parks and Waysides, Jefferson County

- 1A. The Cove Palisades State Park  
About 10 miles SW of Madras  
Round Butte Dam, Oreg., 7½', USGS, 1962  
73-106, 295, 296 (1:32,500)
- B. Columbia Basin in Oregon/High Lava Plains; western juniper/  
sagebrush/bunchgrass communities.
- C. See map and explanatory key on page 71.
- D. Certain sites have some potential.
  
- 2A. Elliot R. Corbett II Memorial State Park  
On Blue Lake E of Santiam Pass  
Three Fingered Jack, Oreg., 15', USGS, 1959  
73-106, 193 (1:32,500)
- B. Eastern Slopes, Oregon Cascades; Ponderosa Pine/Douglas Fir  
Zones; Douglas fir, Ponderosa pine, manzanita communities.
- C. The park vegetation is mostly mixed conifer forest with open  
areas of ceanothus and manzanita. Coniferous species are  
Douglas fir, grand fir, some silver fir, and Ponderosa pine  
on drier sites. The park's 63 acres is on the south shore of  
Blue Lake. A well-used trail provides access from the west  
and the east. Elevation is approximately 3600 feet.
- D. Potential for natural area site(s).
  
- 3A. Peter Skene Ogden State Park  
On the Crooked River at the crossing of U.S. Highway 97  
Opal City, Oreg., 7½', USGS, 1962  
73-106, 208 (1:32,500)
- B. Columbia Basin in Oregon/High Lava Plains; western juniper/  
sagebrush/bunchgrass communities (cell 2).
- C. The park is on a scenic portion of the Crooked River. The river  
canyon is about 300 feet deep at this point. The plain on  
either side of the canyon is primarily scattered western juniper,  
big sagebrush and bunchgrass. Sites in the canyon include rip-  
arian plant communities and sagebrush-steppe. See map, page 72.  
Scenic values important.
- D. Some potential for natural areas in canyon.

## LINN COUNTY

### Willamette Valley - Western Cascades

There are approximately 23,500 acres of state land in Linn County. This is less than two percent of the total county area. A large block of land managed by the State Department of Forestry is located southeast of Mill City. This block accounts for eighty percent of the state land in the county (see map, page 76). The remainder is in a few scattered Department of Forestry parcels, Cascadia State Park, Bower's Rocks State Park (undeveloped), Sodaville Springs State Park, Brownsville State Wayside (undeveloped), Willamette River Park corridor (undeveloped), and the Beach property (State System of Higher Education).

#### Summary of Vegetation on State Lands, Linn County.

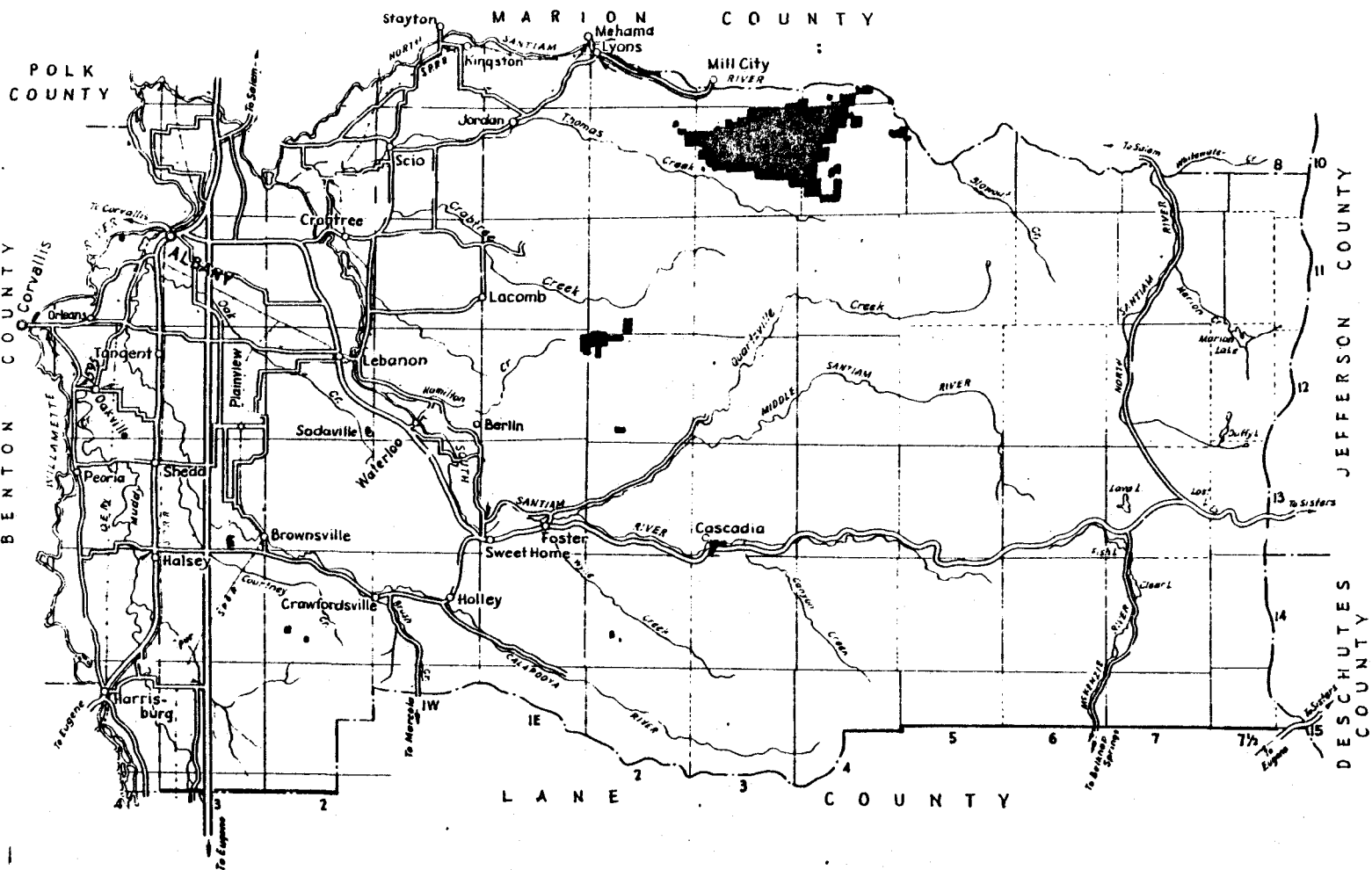
Linn County covers part of the mid-Willamette Valley and the Western Cascades. Vegetation falls principally into the Willamette Valley and Western Hemlock vegetation zones of Franklin and Dyrness (1973). These zones are characterized by coniferous forests, riparian hardwood forests, oak woodlands, grasslands, and shrub communities. The block of state land in northern Linn County is largely mid-age Douglas fir forest with western hemlock and western redcedar present. Red alder and bigleaf maple are important hardwood species. There is vegetation within this block that represents successional stages of western hemlock forest. Relatively undisturbed communities of hardwoods are also present. State lands in the Willamette Valley proper have been agricultural in use and may not be suited for natural areas. Exceptions may be found in the Willamette River Park corridor. Cascadia is the only major state park in the county and its level of development and use may limit consideration of potential natural area sites within its boundaries.

#### Catalog of Selected Parcels, Linn County.

- 1A. 

|           |   |
|-----------|---|
| T10S, R2E | } Blocked area, northern Linn County (see map, page 78a). |
| T10S, R3E |   |
| T10S, R4E |   |

Quartzville, Oreg., 15', USGS, 1956  
74-164, 2051 (1:130,000)
- B. Western Cascades; Western Hemlock Zone; Douglas fir/western hemlock forest communities (cell 1).



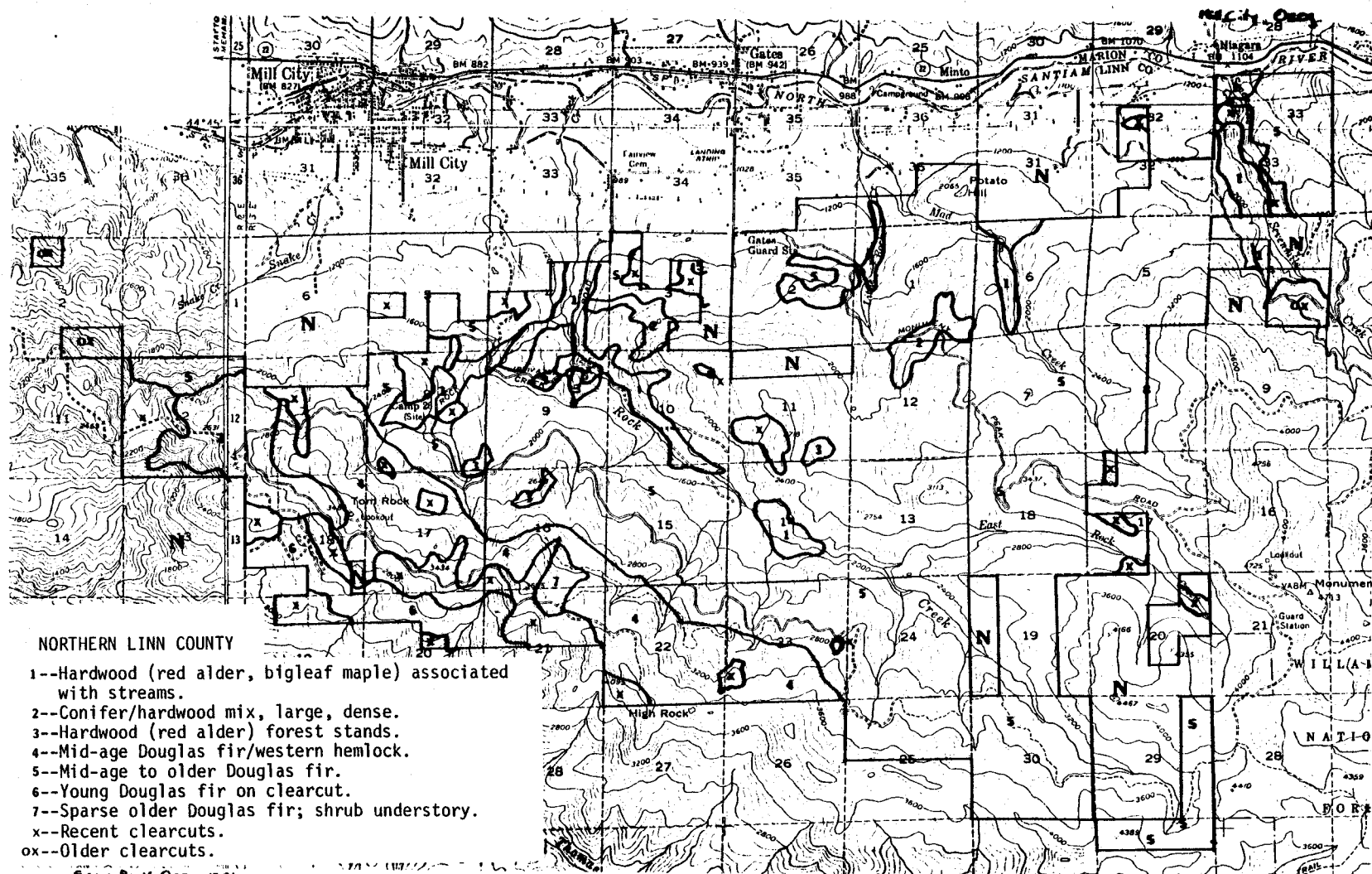
LINN COUNTY



Figure 9. An older "second growth" Douglas fir forest community,  
T10S, R3E, Sec. 9, NW $\frac{1}{4}$ , N $\frac{1}{2}$ .



Figure 10. Mature red alder, fern community in northern Linn County.



Snow Peak, Oreg. 1951

QUANTICO, OREG. 1956

- C. This large block is "second growth" forest of Douglas fir and Douglas fir/western hemlock mixed at higher elevations (3000-3400 feet). There are a few individuals of western redcedar present, but no pure stands. Small communities of red alder, ferns, and some bigleaf maple occur in the area (see Figure 10, page 78). Along Rock Creek, T10S, R3E, Section 4, are red alder and bigleaf maple forest communities. Ferns make up the understory. In T10S, R3E, Section 9, NW $\frac{1}{4}$ , NE $\frac{1}{4}$  is a relatively mature, dense, Douglas fir forest (18-20" DBH) with young western hemlock and ferns. This may provide an example of forest succession. In T10S, R3E, Section 9, NW $\frac{1}{4}$ , N $\frac{1}{2}$  is a mid-age, dense Douglas fir forest (see Figure 9, page 77).
- Most of the periphery of this block has been recently clearcut. Only a few small areas within the block have been recently logged, however, there is a large expanse of young regenerating forest (10-25 years old). See map, page 78a. Only a few small areas, some mentioned above, have regained a "natural" character. Some areas of mature vegetation in the block have been set aside for woodcutting by permit and timber sale.
- D. Selected sites have potential for natural areas. Suggest more intensive investigation.
- 2A. T12S, R2E  
 Section 32, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
 Summit and NW slopes of Green Peter, 8 miles NE of Sweet Home  
Sweet Home, Oreg., 15', USGS, 1951  
 74-165, 2031 (1:130,000)
- B. Western Cascades; Western Hemlock Zone; Douglas fir/western hemlock forest communities (cell 1).
- C. This eighty acre parcel is sixty percent clearcut. The remainder, which is just N of the summit of Green Peter, is apparently an older stand of "second growth" forest possibly Douglas fir and western hemlock mixed. Elevation is from 3000 to 3900 feet.
- D. Marginal potential for natural area.



State Parks and Waysides, Linn County.

- 1A. Brownsville State Wayside  
About one-half mile E of Halsey I-5 Interchange  
Halsey, Oreg., 15', USGS, 1957  
73-120, 279 (1:32,500)
- B. Willamette Valley (Western Oregon Interior Valleys); Oak Woodland;  
Oregon white oak/grass savanna (cell 5).
- C. This fifty-acre site is agricultural land. Approximately fifteen  
acres has been used for a field crop, perhaps grass seed. Another  
twenty acres is a grass pasture with scattered Oregon white oak.  
The remaining fifteen acres is a dense stand of Oregon white oak.  
See notes on working map.
- D. Marginal potential for natural area. Oregon white oak community  
may be of interest.
- 2A. Cascadia State Park  
About 16 miles E of Sweet Home on U.S. Highway 20  
Cascadia, Oreg., 15', USGS, 1955  
73-120, 120 (1:32,500)
- B. Western Cascades; Western Hemlock Zone; Douglas fir/western  
hemlock-riparian hardwood forest communities (cells 1, 3,  
special types 8).
- C. Facilities are well developed in the park. Camping, picnicking,  
parking, and recreational areas take up about one-third of the  
park area. The portion S of Highway 20 appears to be a logged  
area with brush and vehicle tracks. Only a few conifers are  
evident. The area E of the main park activity area N of the  
Santiam River has a mixed vegetation cover of conifers and  
hardwoods.
- D. May have a small site for natural area along the river or in  
the NE corner of the park. Suggest more intensive investigation.
- 3A. North Santiam State Park  
About 4 miles E of Lyons on the S bank of the North Santiam River  
Lyons, Oreg., 15', USGS, 1951  
74-165, 63 (1:32,500)
- B. Willamette Valley-Western Cascades; riparian hardwood-conifer  
forest communities.
- C. This small 1.54 acre portion of North Santiam State Park on the  
S bank of the river has a few "old growth" Douglas fir with many  
younger conifers at the W end of the parcel. The E end appears  
subject to flooding at high water. Several bigleaf maples and  
other hardwoods are on the bank here. The area surrounding the  
parcel is undisturbed and appears in a near-natural state.
- D. Some potential for natural area.

4A. Willamette River Park Corridor

described separately

Other State Land, Linn County.

The "Beach property," State System of Higher Education, has been developed by Oregon State University primarily for athletic and agricultural programs. This development and subsequent use precludes natural area consideration.

MALHEUR COUNTY  
Southeastern Oregon

Malheur County has 276,000 acres of state owned land, nearly all of it under the jurisdiction of the State Land Board, Division of State Lands. There are several areas of "blocked-up" land together totaling over 100,000 acres. Much of the land in the blocks has been treated for range grass improvement. Outside of the blocked areas, the pattern of ownership follows the "school sections," numbers 16 and 36, from each township. See map, page 83.

Summary of Vegetation on State Lands, Malheur County.

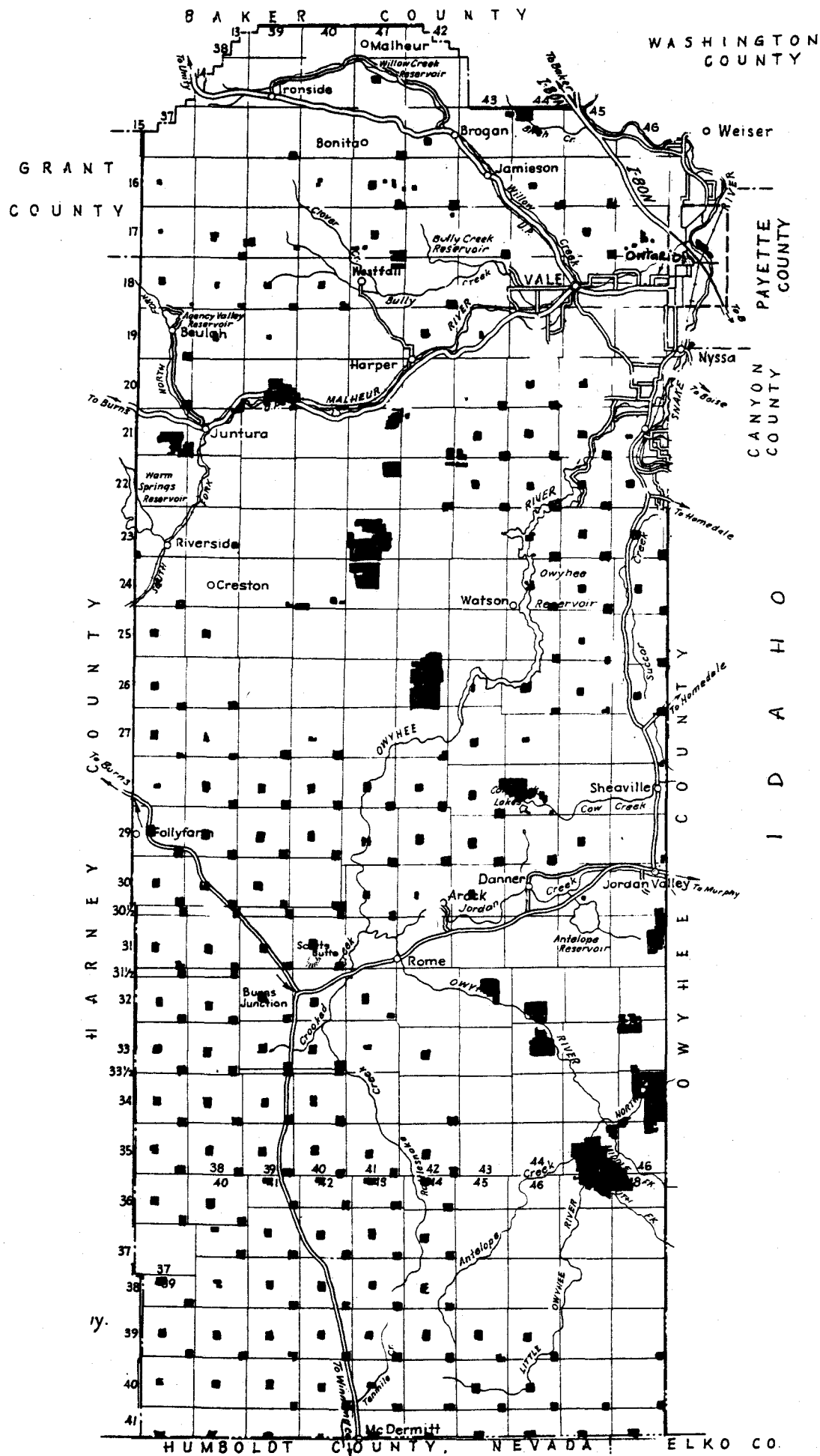
Three physiographic provinces are represented in Malheur County:

1) Blue Mountains; 2) Owyhee Upland; and 3) Basin and Range. The principal vegetation zones are Shrub-Steppe and Desert Shrub (Franklin and Dyrness, 1973). Most of the county is part of the Owyhee Upland Province and this landscape is characterized by a repetitive sagebrush-steppe vegetation type.

Catalog of Selected Parcels, Malheur County.

- 1A. T14S, R41E, Section 16, all  
Approximately 12 miles ENE of Ironside on Malheur Reservoir  
Malheur County Highway Map, sheet 1, OSHD, 1972  
Bridgeport, Oreg., 15', USGS, 1964  
No NASA high altitude photography available
- B. Ochoco, Blue, and Wallowa Mountains (OBWM); Shrub-Steppe zone; big sagebrush/indeterminant bunchgrass.
- C. This unit is on mostly NE-facing slopes and rolling uplands. The NE corner of the section touches the shore of Malheur Reservoir. Big sagebrush is the dominant shrub. The vegetation is in fair to good condition.
- D. Some potential for natural area.
- 2A. T15S, R44E  
Section 5, S $\frac{1}{2}$   
Section 5, N $\frac{1}{2}$ , S $\frac{1}{2}$   
Section 5, lots 1, 2, 3, 4  
Section 6, SE $\frac{1}{4}$   
Section 6, SW $\frac{1}{4}$ , E $\frac{1}{2}$   
Section 6, NE $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 6, NW $\frac{1}{4}$ , SE $\frac{1}{4}$

MALHEUR COUNTY



Section 6, lots 1, 2, 3, 4, 5, 6, 7  
Section 7, lot 1  
Section 7, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
Section 7, NW $\frac{1}{4}$ , NE $\frac{1}{4}$   
Approximately 7 miles W of Interstate 80N, near the N boundary  
of Malheur County  
Malheur County Highway Map, sheet 2, OSHD, 1972  
Huntington, Oreg., 15', USGS, 1951  
No NASA high altitude photography available

- B. OBWM; big sagebrush-bitterbrush/bunchgrass, e.g., bluebunch wheatgrass, Idaho fescue (cell 19).
- C. A blocked area located on the upper portions of Birch Creek. Includes bottomlands, slopes, and scabland areas. Significant plant species are big sagebrush and bitterbrush/bluebunch wheatgrass and Idaho fescue (on N-facing slopes). No significant tree cover.
- D. Some potential for natural area.

3A. T16S, R41E  
Section 14, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 15, NE $\frac{1}{4}$ , NE $\frac{1}{4}$   
Section 23, NE $\frac{1}{4}$ , NE $\frac{1}{4}$   
On the N-facing slopes of Cottonwood Mountain, 12 miles W of Jamieson  
Malheur County Highway Map, sheet 1, OSHD, 1972  
Brogan, Oreg., 15', USGS, 1964  
No NASA high altitude photography available

- B. OBWM; Shrub-Steppe; big sagebrush-bitterbrush bunchgrass (indeterminant), also some western juniper, blackhawthorn, and common chokecherry.
- C. These parcels are on the upper, NE-facing slope of the Cottonwood Mountain ridge. Elevations range from 4800 to 6000 feet. Shrubs are big sagebrush and bitterbrush. Bunchgrasses are present but the species not identified. Other species of interest are western juniper, blackhawthorn, and common chokecherry. Section 23, NE $\frac{1}{4}$ , NE $\frac{1}{4}$  is the most promising.
- D. Potential for natural area.

4A. T16S, R41E  
Section 16, all  
About 15 miles W of Jamieson of Cottonwood Mountain  
Malheur County Highway Map, sheet 1, OSHD, 1972  
Brogan, Oreg., 15', USGS, 1964  
No NASA high altitude photography available

- B. OBWM; Shrub-Steppe; sagebrush/bunchgrass (stiff sagebrush cell).
  - C. This section includes the NW summit of Cottonwood Mountain, elevation 5834 feet. Low sagebrush occurs on exposed ridges and big sagebrush in upper streambeds. The bunchgrasses present are probably bluebunch wheatgrass and Idaho fescue. The vegetation includes some tree cover, species undetermined.
  - D. May have some potential. Suggest more intensive investigation.
- 5A. T16S, R42E  
 Section 20, SE $\frac{1}{4}$ , W $\frac{1}{2}$   
 About 8 miles W of Jamieson on the lower NE slope of Cottonwood Mountain  
 Malheur County Highway Map, sheet 2, OSHD, 1972  
Brogan, Oreg., 15', USGS, 1964  
 No NASA high altitude photography available
- B. OBWM; Shrub-Steppe; sagebrush/bunchgrass.
  - C. This parcel is on the NE slope of Cottonwood Mountain at about 4800 feet elevation. Although big sagebrush is most abundant here, longlobe sagebrush and silver sagebrush do occur.
  - D. Marginal potential for natural area. Presence of longlobe sagebrush and silver sagebrush may be important.
- 6A. T17S, R41E  
 Section 25, S $\frac{1}{2}$ , S $\frac{1}{2}$   
 Section 26, SE $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 35, NE $\frac{1}{4}$ , N $\frac{1}{2}$   
 Section 35, NE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Section 35, SE $\frac{1}{4}$   
 Section 36, all  
 Approximately 15 miles WSW of Willow Creek on U.S. Highway 26  
 Malheur County Highway Map, sheet 1, OSHD, 1972  
Brogan, Oreg., 15', USGS, 1964  
 No NASA high altitude photography available
- B. OBWM; Owyhee Upland (OU); Shrub-Steppe; Sagebrush communities (OBWM cell 23, OU cell).
  - C. This area has examples of stiff sagebrush/Sandberg's bluegrass, and big sagebrush/bluebunch wheatgrass-Sandberg's bluegrass communities. Elevation ranges from 3600 to 4000 feet.
  - D. Marginal potential for natural area.

- 7A. T17S, R45E  
 Section 16, all  
 Approximately 12 miles WNW of Ontario  
 Malheur County Highway Map, sheet 2, OSHD, 1972  
Moore's Hollow, Oreg., 15', USGS, 1951  
 No NASA high altitude photography available
- B. Owyhee Upland (OU); Shrub-Steppe; Sagebrush communities; big sagebrush-low sagebrush-purple sage (cells 1, 3).
- C. There has been some brush control treatment in the area. Purple sage (Salvia dorrii (Kell.) Abrams) occurs on open slopes with big sagebrush. Nearly all of this section is on the NW-facing slope of a prominent ridge.
- D. May be of interest for purple sage.
- 8A. T18S, R38E  
 Section 36, N $\frac{1}{2}$   
 About 8 miles ENE of Beulah Reservoir on Bendire Ridge  
 Malheur County Highway Map, sheet 3, OSHD, 1972  
Beulah, Oreg., and Westfall Butte, Oreg., 15', USGS, 1966  
 72-128, 2050 (1:130,000)
- B. OBWM; Shrub-Steppe; Ponderosa pine/bitterbrush and sagebrush communities (cells 9, 21, 22).
- C. Apparently this area is a transition zone from shrub-steppe vegetation types to a Ponderosa pine zone. A few conifers are evident on the landscape. A small reservoir occupies an intermittent stream bed. Along the stream bed, there are large groups of deciduous trees and meadow-like areas. Significant plant species present in the parcel include Ponderosa pine, blackhawthorn, common chokecherry, bitterbrush, and low sagebrush. Elevation ranges from 4800 to 5500 feet. A curious exposed rock surface occurs within the described area.
- D. Good potential for natural area.
- 9A. T22S, R44E  
 Section 16, all  
 Approximately 6 miles W of Owyhee Dam  
 Malheur County Highway Map, sheet 4, OSHD, 1972  
Grassy Mountain, Oreg., 7 $\frac{1}{2}$ ', USGS, 1967  
 72-128, 2089 (1:130,000)
- B. OU; Shrub-Steppe; Sagebrush communities; big sagebrush/bluebunch wheatgrass (cell 1).

- C. Elevation varies from 3600 to 4300 feet in this section. The parcel includes the relatively flat top of the Grassy Mountain ridge as well as a moderately steep S-facing slope. There is a spring or water seepage in SW $\frac{1}{4}$ , SW $\frac{1}{4}$ . The vegetation is mostly bunchgrass, especially on the flat-top ridge. Significant components throughout the section are big sagebrush and bluebunch wheatgrass. Steep slopes in the S half of the section reveal white tuffaceous rock strata probably associated with miocene formations in the area. The steep slopes have little vegetation.
- D. Good potential for natural area.
- 10A. T22S, R44E  
 Section 36, lots 1-8  
 Section 36, NE $\frac{1}{4}$ , NE $\frac{1}{4}$   
 Section 36, SW $\frac{1}{4}$   
 Section 36, SE $\frac{1}{4}$ , W $\frac{1}{2}$   
 Section 36, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 About 3 miles SSW of Owyhee Dam  
 Malheur County Highway Map, sheet 4, OSHD 1972  
The Elbow, Oreg., 7 $\frac{1}{2}$ ', USGS, 1967  
 72-128, 2089 (1:130,000)
- B. OU; Shrub-Steppe; Sagebrush communities; big sagebrush/indeterminant bunchgrass.
- C. This parcel is located on both the N and S shores of Owyhee Reservoir about 3 miles from the dam and one mile W of Owyhee State Park. Vegetation is a big sagebrush type apparently in good condition. There are small patches of vigorous herbaceous vegetation growing on high slopes above the reservoir probably due to natural water seepage. An intermittent stream in the S $\frac{1}{2}$  has herbaceous and arborescent shrub communities along its banks. Elevation is from 2600 to 3800 feet.
- D. Some potential for natural area. Suggest further investigation.
- 11A. T24S, R44E  
 Section 16, all  
 On Owyhee Reservoir  
 Malheur County Highway Map, sheet 6, OSHD, 1972  
Pelican Point, Oreg., 7 $\frac{1}{2}$ ', USGS, 1967  
 72-128, 2090 (1:130,000)
- B. OU; Shrub-Steppe; Sagebrush communities; big sagebrush/indeterminant bunchgrass.



- C. This unit is on the shore of Owyhee Reservoir. The vegetation is in fair condition and common for the region. There is apparently no road or trail access into the section. A peninsula in the reservoir has sufficient elevation for overlooking the area to the N and S.
  - D. Marginal potential for natural area. May be more suited to recreation.
- 12A. T26S, R43E  
 Section 16, NE $\frac{1}{4}$ , E $\frac{1}{2}$   
 Section 16, SE $\frac{1}{4}$ , E $\frac{1}{2}$   
 At the upper end of Owyhee Reservoir  
 Malheur County Highway Map, sheet 6, OSHD, 1972  
Diamond Butte, Oreg., 7 $\frac{1}{2}$ ', USGS, 1967  
 72-128, 2080 (1:130,000)
- B. OU; Desert-Shrub; black greasewood/spiny hopsage communities.
  - C. This unit is on a gentle W-facing slope at the upper end of Owyhee Reservoir. The dominant shrubs are black greasewood and spiny hopsage. There appears to be herbaceous vegetation along the reservoir shore which may be the result of a change in the water table.
  - D. May be of interest for the shrub cover.
- 13A. T27S, R38E  
 Section 36, N $\frac{1}{2}$ , S $\frac{1}{2}$   
 Section 36, S $\frac{1}{2}$   
 On Turnbull Lake bed about 9 miles SSW of Crowley (site)  
 Malheur County Highway Map, sheet 5, OSHD, 1972  
 72-128, 2043 (1:130,000)
- B. Basin and Range (BR); Desert-Shrub; silver sagebrush and shadscale communities (cells 7, 13).
  - C. This section is on the dry lake bed just E of Dowell Butte. It includes two small natural drainages off of the E slope of Dowell Butte. Alkali surface is apparent especially in W $\frac{1}{2}$ . The remainder of the section has a mosaic of vegetation reflecting moisture patterns on the lake bed surface. Grain/hay agriculture is practiced N of this section. A N-S road runs along the base of the butte through the section.
  - D. Potential for natural area.

- 14A. T28S, R40E  
 Section 16, all  
 Approximately 15 miles E of Folly Farm  
 Malheur County Highway Map, sheet 7, OSHD, 1972  
 72-128, 2058 (1:130,000)
- B. OU/BR; Shrub-Steppe; Sagebrush communities; silver sagebrush and giant wild ryegrass.
- C. A playa flat in a small depression occurs in this section. Bunchgrasses including giant wild ryegrass are present up the draws which surround the depression. Silver sagebrush communities are on the flat. A road access is one-half mile to the NE of the section.
- D. Some potential for natural area.
- 15A. T28S, R41E  
 Section 16, N $\frac{1}{2}$   
 Section 16, S $\frac{1}{2}$ , N $\frac{1}{2}$   
 Section 16, SW $\frac{1}{4}$ , S $\frac{1}{2}$   
 Section 16, SE $\frac{1}{4}$ , SW $\frac{1}{4}$   
 Section 16, SE $\frac{1}{4}$ , SE $\frac{1}{4}$   
 Approximately 15 miles E of Turnbull Lake  
 Malheur County Highway Map, sheet 7, OSHD, 1972  
 72-128, 2058 (1:130,000)
- B. OU; Shrub-Steppe; Sagebrush communities-riparian communities.
- C. This unit is in an extremely rugged area along the Owyhee River. The river itself runs through SE $\frac{1}{4}$ , SE $\frac{1}{4}$ . The riparian vegetation is very dense on the river banks. The canyon slopes are sharply eroded exposing miocene tuffaceous rock strata. Scenic value may be considered also.
- D. Some potential for natural area.
- 16A. T29S, R44E  
 Section 36, all  
 Approximately 15 miles WNW of Jordan Valley  
 Malheur County Highway Map, sheet 8, OSHD, 1972  
Cow Lakes, Oreg., 7 $\frac{1}{2}$ ', USGS, 1969  
 72-128, 2094 (1:130,000)
- B. OU; Shrub-Steppe; Sagebrush Communities; big sagebrush/bluebunch wheatgrass (cell 1).
- C. This unit has a portion of the lava flow associated with Jordan Craters in it. Cow Lakes and lava ponds are one to two miles E of section. No water bodies are apparent in this section. The non-lava bed area (about 40%) of the section has a community of big sagebrush and bluebunch wheatgrass.

D. Some potential for a natural area.

17A. T34S, R37E

Section 36, all

About 12 miles W of Rome Airstrip on U.S. Highway 95

Malheur County Highway Map, sheet 9, OSHD, 1972

No NASA high altitude photography available

B. BR; Desert Shrub; Salt Desert Shrub communities; spiny hopsage/bud sagebrush (cell 13).

C. This section is on the Coyote Lake playa. Sand dune ridges (2-20 feet high, 50-100 feet long) cover about one-half of the section. The vegetation of the area is shrub dominated. Big sagebrush, bud sagebrush, and spring hopsage are important species with shadscale, horsebrush, and rabbitbrush also present. Grasses and forbs in the area include creeping wildrice, needlegrass, bottlebrush squirreltail, Indian ricegrass, and dock (Rumex venosus). The character of the sand dunes and the possibility of uncommon plant communities make this section a good potential natural area candidate - a good example of salt desert. Also, artifacts may be present in the area.

D. Strong potential for a natural area preserve.

18A. T35S, R45E

Section 1, S $\frac{1}{2}$

Section 1, N $\frac{1}{2}$ , S $\frac{1}{2}$

Section 1, lot 1

Section 2, NE $\frac{1}{4}$ , SE $\frac{1}{4}$

Section 2, SE $\frac{1}{4}$ , E $\frac{1}{2}$

Section 12, NE $\frac{1}{4}$

Section 12, NW $\frac{1}{4}$ , N $\frac{1}{2}$

Section 12, NW $\frac{1}{4}$ , SE $\frac{1}{4}$

Section 12, SE $\frac{1}{4}$ , N $\frac{1}{2}$

Section 12, SE $\frac{1}{4}$ , SE $\frac{1}{4}$

Near Three Forks on the Owyhee River

Malheur County Highway Map, sheet 10, OSHD, 1972

72-128, 2099 (1:130,000)

B. OH; Shrub-Steppe: Sagebrush communities; Big sagebrush/bluebunch wheatgrass (cell 1).

C. This unit is nearly all on the E side of the canyon wall of the middle fork of the Owyhee River for 2 miles upstream from Three Forks. Some grazing is evident but much of the vegetation is in good condition. There are a few western junipers scattered up side draws, a moderate amount of big sagebrush on exposed slopes and the stream bottom, and a

few healthy grass communities composed of bluebunch wheat-grass, Sandberg's bluegrass, and Idaho fescue. An additional value is the canyon scenery associated with this unit. Portions of nearby blocks of state land also include the Owyhee River canyon. Most of the blocked land areas are on the flat upland above the canyon. See Figure 12, page 94.

D. Good potential for natural area.

19A. T26S, R45E

Section 16, all

Approximately 10 miles SW of Succor Creek State Park

Malheur County Highway Map, sheet 6, OSHD, 1972

Bannock Ridge, Oreg., 7½', USGS, 1967

72-128, 2092 (1:130,000)

B. OU; Shrub-Steppe; Sagebrush communities-upland tree and shrub communities; western juniper/mountain mahogany.

C. This section is on Grassy Ridge (5500 feet) N of Mahogany Mountain. This is in the upper Leslie Gulch area and the Succor Creek Formation of miocene tuffaceous deposits is evident. The topography is very rugged. Although much of the area is barren of vegetation, sparsely populated big sagebrush and bunchgrass communities do occur on favorable sites. At higher elevation in steep ravines, there are groups of tree and shrub species evident. These are possibly western juniper and/or mountain mahogany and quaking aspen. A new dirt road runs E-W just N of the section.

D. Good potential for natural area.

State Parks and Waysides, Malheur County

- 1A. Succor Creek State Park  
Approximately 30 miles S of Nyssa  
Malheur County Highway Map, sheet 6, OSHD, 1972  
Three Fingers Rock, Oreg., and Pole Creek Top, Oreg., 7½',  
USGS, 1967  
72-128, 2091 (1:130,000)
- B. OU; Desert-Shrub; Sagebrush communities-riparian and canyon shrub and herbaceous communities.
- C. The park is centered around a narrow canyon along Succor Creek. Big sagebrush, willows, white alder, and a few black cottonwood occur along the stream banks. In small ravines on either side of the canyon are prominent communities of bunchgrass (see Figure 13). High canyon cliffs are nesting sites for birds. The area surrounding the park is noted for "rockhound" activities and deer and game bird hunting. See Figures 11 and 13, pages 93 and 95.
- D. Good potential for natural areas, e.g., nesting sites or better bunchgrass communities.



Figure 11. Succor Creek State Park. Big sagebrush/bluebunch wheatgrass on slope east of Succor Creek. Dense big sagebrush next to stream course.

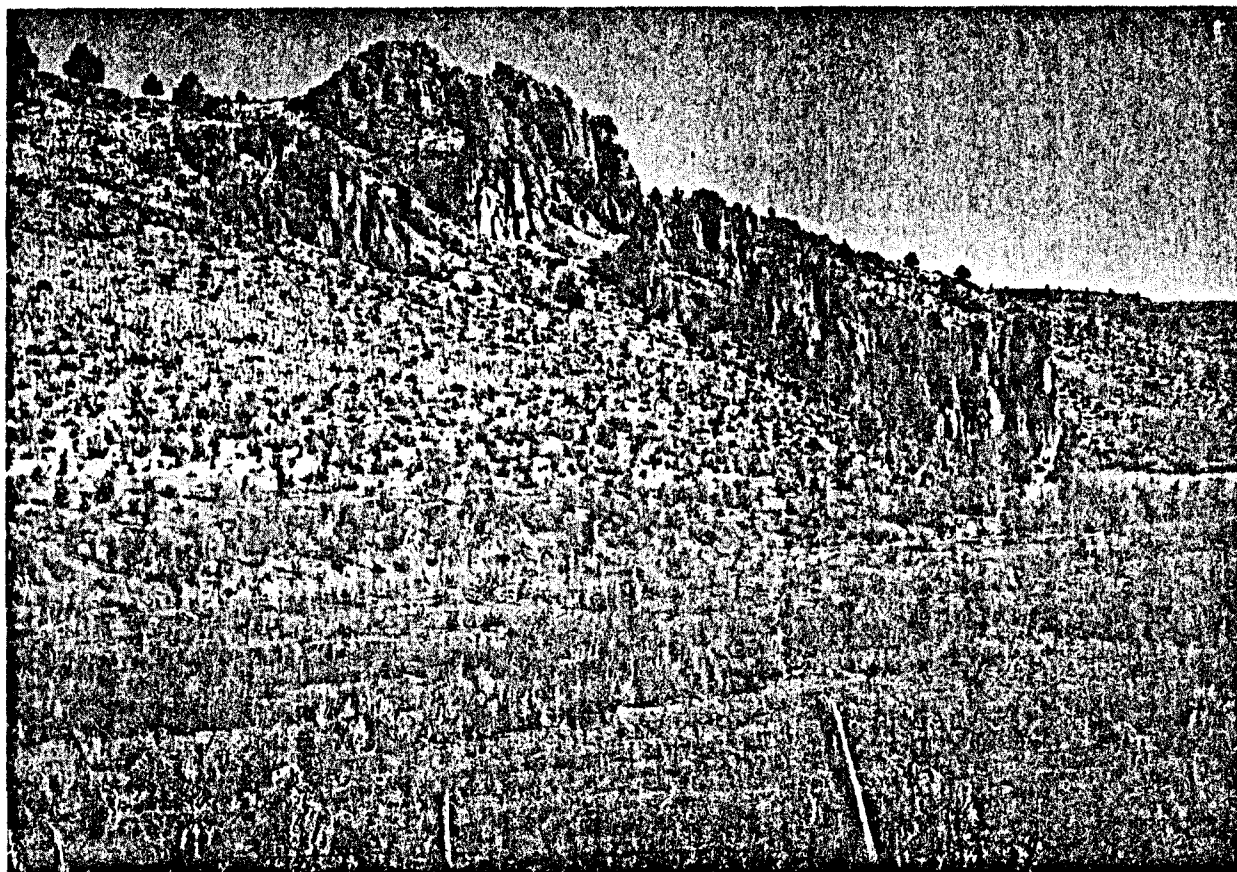


Figure 12. The east side of the middle fork canyon of the Owyhee River just south of Three Forks.



Figure 13. Succor Creek State Park. Bluebunch wheatgrass community with some big sagebrush on west side of canyon.



## Report Summary

Approximately 521,000 acres of state land were examined in the present survey for potential natural area sites. Parcels or areas within parcels selected as suitable for preservation in the seven counties totaled 64,100 acres (12%). These are the units cataloged for vegetation description in this report.

The following table summarizes acreages by county of cataloged parcels:

| <u>County</u> | <u>State land (acres)</u> | <u>Cataloged acreage</u> |
|---------------|---------------------------|--------------------------|
| Benton        | 18,800                    | 870*                     |
| Clatsop       | 156,800                   | 17,100                   |
| Crook         | 28,300                    | 6,760                    |
| Curry         | 11,100                    | 3,434                    |
| Jefferson     | 6,400                     | 4,315                    |
| Linn          | 23,200                    | 18,488                   |
| Malheur       | 276,200                   | 13,120                   |
|               | <u>520,800</u>            | <u>64,087</u>            |

It is anticipated that information presented in the report will be used to determine areas that will be investigated further for possible inclusion in a natural area preserve program in Oregon. Descriptions of individual units are in sufficient detail so that the location of the unit and the description of its vegetation and site factors are clear. Working maps and other materials filed at ERSAL will aid in using this report. The ERSAL staff is prepared to assist in the use of the report in conjunction with working materials.

\* Sites in McDonald and Paul Dunn forests are discussed in the report, but their acreage is omitted in this tabulation.

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## NATURAL AREA PRESERVES ADVISORY COMMITTEE

### GOALS

1. Cooperate in developing a coordinated program of preserving representative samples of Oregon's typical and unique ecosystem types or natural features by dedicating natural area preserves on public lands.
2. Provide educational and research opportunities in Oregon through access to natural area preserves as basic resources.
3. Compile and periodically update a comprehensive list of natural area locations in Oregon, and maintain a list of natural area preserves needs.
4. Assure perpetual protection to dedicated natural area preserves and maintain preserves in as nearly a natural condition as possible.
5. Encourage the establishment of natural area preserves on qualified areas that appropriate local governments, resource agencies or citizens recommend to the State Land Board and advisory committee.
6. Recommend natural area preserves in suitable locations throughout the state, including those within and near Oregon's population centers.
7. Publish and disseminate appropriate information about natural area preserves.