UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

R-NW ~~Experimental Forests~~
Port Orford Cedar Natural Area March 27, 1937

REPORT ON THE

PORT ORFORD CEDAR NATURAL AREA

REPRESENTING THE PORT ORFORD CEDAR TYPE

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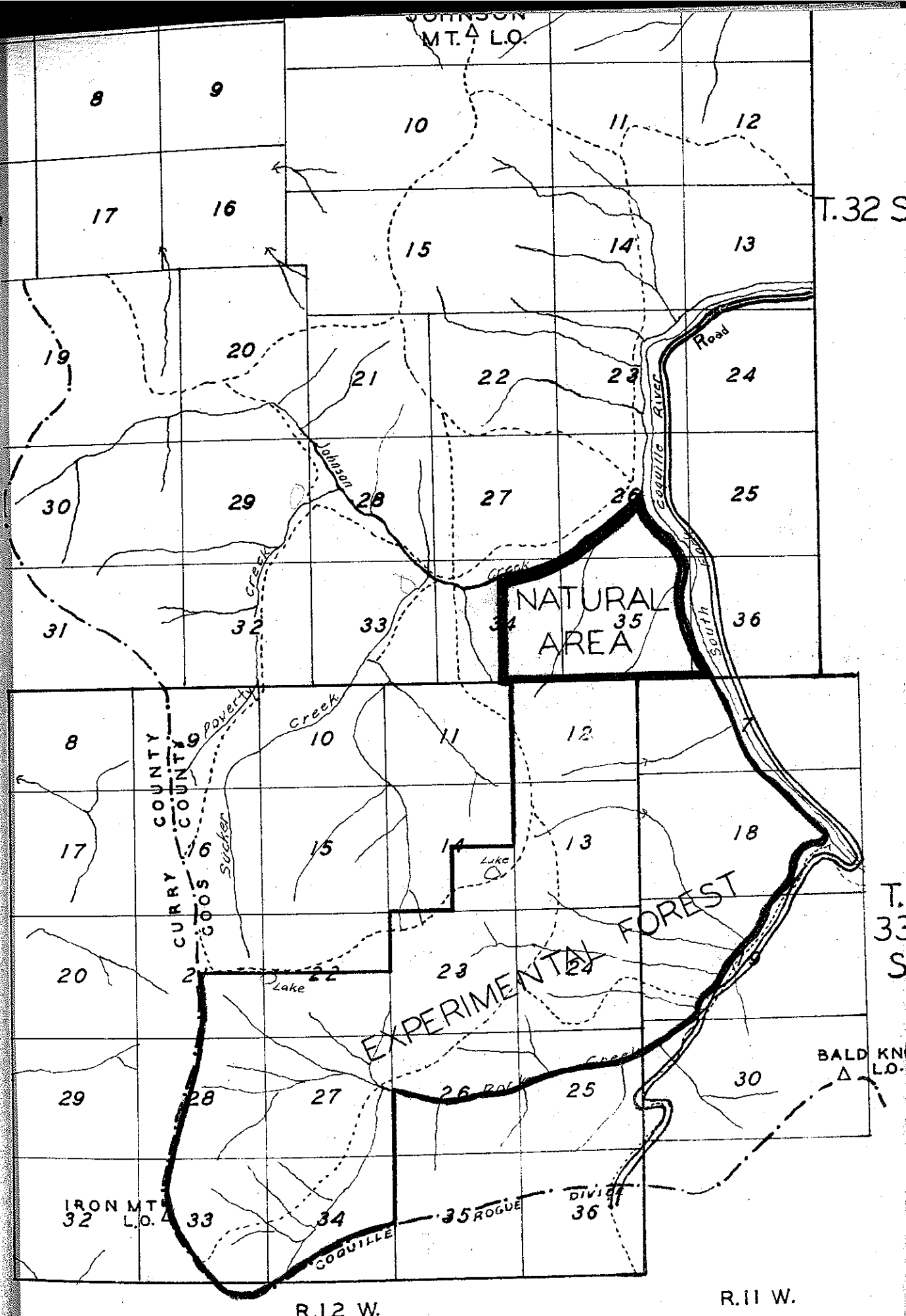
The committee on experimental forests and natural areas, on December 30, 1935, recommended that part of the area described in Donald N. Matthews' report on the Port Orford Cedar Experimental Forest should be set aside for natural areas according to Regulation L-20. Since this committee action was taken a portion of the experimental forest has been intensively cruised and mapped, and it appears to be desirable to formally establish a natural area as soon as possible. After the remainder of the experimental forest has been cruised and mapped additional natural areas representative of other parts of the experimental forest should be established.

Port Orford cedar is not only a timber tree of outstanding commercial importance but it is also an exceedingly interesting and attractive tree in its natural environment. Due to its very limited range and light occurrence within its range, for Port Orford cedar seldom makes up more than 20 percent of the mixed stands of Douglas fir and other species in which it is commonly found, the best stands of this species are disappearing at a rapid rate. Forest Survey figures indicate the total remaining stand is somewhat more than one billion board feet. Port Orford cedar is fast growing for a cedar, it is fire resistant, and hardy. These qualities added to the desirability of the tree as a specialty wood probably insure that Port Orford cedar will have an important place in the managed forests of the future. The urgent need of the present time is that steps be taken to preserve a few examples of typical virgin forest conditions in stands containing Port Orford cedar in order that they may be available for the future.

Location and Description

This natural area includes all of the experimental forest which lies in Township 32 South, Range 12 West, Coos County, Oregon—approximately 1,122 acres. It is admirably suited to the intended purpose both from the standpoint of tree species in the stand and location for preserving virgin forest conditions indigenous to the Port Orford cedar region. Ultimately this area will develop into a climax forest type that will be extremely valuable for research and educational purposes.

The tract is bounded on the north by Johnson Creek and on the east by the south fork of the Coquille River. These natural boundaries isolate the area so that it need not be crossed by utilization or other roads. The south boundary is the township line between Townships 32 and 33 South, Range 12 West. This township line happens to cross topographic features in such a manner as to make it a natural dividing line between the natural area and experimental forest.


JOHNSON MT. L.O.
T.32 S
NATURAL AREA
EXPERIMENTAL FOREST
CURRY COUNTY
COOS COUNTY
Coquille River
South Fork
Johnson Creek
Poverty Creek
Sucker Creek
Lake
Road
BALD KNO L.O.
IRON MT. L.O.
DIVI
ROGUE
COQUILLE
R.12 W.
R.11 W.

The description by legal subdivisions is as follows:

Township 32 South, Range 12 West -

Section 35 - 640 acres

Section 34, East ½ - 300 acres - includes only that portion of the East ½ of Section 34 which lies south of Johnson Creek.

Section 26 - 177 acres - includes only that portion of Section 26 which lies south of Johnson Creek and west of the south fork of the Coquille River.

Section 36 - 5 acres - includes only that portion of Section 36 which lies west of the south fork of the Coquille River.

Reasons for Selecting This Specified Tract

This natural area was selected from the 9,192-acre experimental forest for the following reasons.

1. The area contains samples of some of the finest virgin old-growth Port Orford cedar remaining at the present time.

2. The area should not be adversely affected by future logging and road development because of its natural isolation and rugged topography.

3. The area is relatively safe from fire.

4. It can be readily reached from the experimental forest headquarters site.

5. The area contains a large variety of timber types and species not included in any other natural area.

Physical and Climatic Conditions

The elevation ranges from 850 feet on Johnson Creek and the south fork of the Coquille River along the north and east boundary of the tract to 2,300 feet in the southwest corner. The topography is generally rugged except in the south central portion which is a high bench with several small swamps. The slopes break abruptly into Johnson Creek and the south fork of the Coquille River.

The area lies near the southern extremity of the rainy belt typical of the coast mountains of western Oregon. There are no weather records for the area, but there are probably over 60 inches of precipitation per year. Rainfall is prevalent during about seven months with snowfall to be expected during a portion of the winter period. The temperature at the lower elevations in this locality is generally mild throughout the year with a minimum only slightly below freezing in winter and a maximum of 90° F. in the summer. Snowfall is very light on the lower elevations. The upper slopes experience a more severe temperature in the winter months and a heavier snowfall.

The soil in the southern portion is a deep, sandy loam, and this portion of the tract is classed as Site II and represents the best site quality on the experimental forest. In the northern portion of the natural area the soil is thin and very rocky with many outcrops of rock.

Dominant Cover Types

The dominant cover type of the area consists of mixed stands of mature and overmature Douglas fir (Pseudotsuga taxifolia) and Port Orford cedar (Chamaecyparis lawsoniana). The greater part of these stands consists approximately of 75 percent and 25 percent of the two respective species, although in some places pure stands occur. Pure stands of Port Orford cedar, however, are found only on small areas. In addition to those two principal conifers, lowland white fir (Abies grandis), western hemlock (Tsuga heterophylla), western red cedar (Thuja plicata), and sugar pine (Pinus lambertiana) are also found occasionally throughout the stand. There is a scattering of hardwoods, consisting of Pacific madrone (Arbutus menziesii), tanbark oak (Lithocarpus densiflora), chinquapin (Castanopsis chrysophylla), and California laurel (Umbellularia californica).

A dense growth of brush and herbaceous plants which often reaches a height of 25 feet and is almost impassable covers most of the area. Rhododendron (Rhododendron californicum) attains a diameter of 4 to 6 inches and a height of 25 feet or more. Salal (Gaultheria shallon), sword fern (Polystichum sp.), huckleberry (Vaccinium sp.), small hardwoods, azalea (Azalea californica), and Oregon grape (Berberis sp.) grow very abundantly.

Forest Value

The net merchantable volume of timber on the area of 1,122 acres as determined by a 20 percent cruise on 977 acres in 1936 consists of -

Douglas fir	27,483,000	feet B.M.
Port Orford cedar	9,227,000	" "
Lowland white fir	1,105,000	" "
Western hemlock	827,000	" "
Western red cedar	235,000	" "
Sugar pine	44,000	" "
Hardwoods	865,000	" "
Total	39,786,000	feet B.M.

The diameter (D.B.H.) of Port Orford cedar trees on the tract as shown by a study of the cruise sheets on one section was found to be approximately as follows: 16-30 inches, 41 percent; 32-40 inches, 25 percent; 42-50 inches, 18 percent; 52-60 inches, 10 percent; 62-70 inches, 5 percent; and 72 inches and over, 1 percent. The largest tree recorded in the cruise of this section was 82 inches D.B.H. The tallest tree encountered was estimated to contain 11 16-foot logs (the total height of such a tree would probably be somewhat over 200 feet). Some of the Douglas fir on the tract is of large size and high quality.

Agricultural Value

The area has no present or future agricultural value due principally to the steep and broken topography and rocky soil.

Grazing Value

The proposed area is not used for grazing purposes at the present time. Lack of suitable forage precludes any possibility of future grazing use.

Mineral Value

Although there are several small mining operations nearby on Johnson Creek outside of the boundaries of the area, the area has no known present or future mineral value.

Other Values

The topography is such that the area would be of no value for reservoir development either for irrigation or hydroelectric power except possibly a narrow strip along the streams.

Hunting on the area is very slight because of the topography and dense brush cover.

Public Sentiment

Public sentiment is very much in favor of setting aside a Port Orford cedar natural area. Several letters have recently been received from various individuals and organizations interested in the preservation of forest types, asking what provision is being made for the preservation of an area of Port Orford cedar. The very limited amount of Port Orford cedar and the rapid utilization of the limited stands have indicated to those familiar with the situation that immediate action is necessary.

Accessibility

The area may be reached by going over a State highway to Powers, Oregon. From there the county maintains an all weather road to the boundary of the national forest, connecting with the Forest Service road to Agness which passes along the east side of the natural area on the east bank of the south fork of the Coquille River. The distance from Powers to the experimental forest headquarters is 16 miles.

Management

The Port Orford cedar natural area shall be maintained free from cutting, grazing, or other forms of use insofar as it is possible to do so. No occupancy under special use permit shall be allowed, or the construction of permanent improvements by any public agency be permitted, except as authorized by the Forester or by the Secretary of Agriculture. The forest supervisor will be responsible for protecting the area against fire and against trespass.

The area is so located that setting it aside as a natural area should in no way interfere with the normal administration of surrounding national forest lands.

Approved: _____

Forest Supervisor

(s) Boyd L. Rasmussen
Boyd L. Rasmussen,
Junior Forester

D. N. Matthews
Donald N. Matthews,
Associate Silviculturist

Approved: _____

Regional Forester

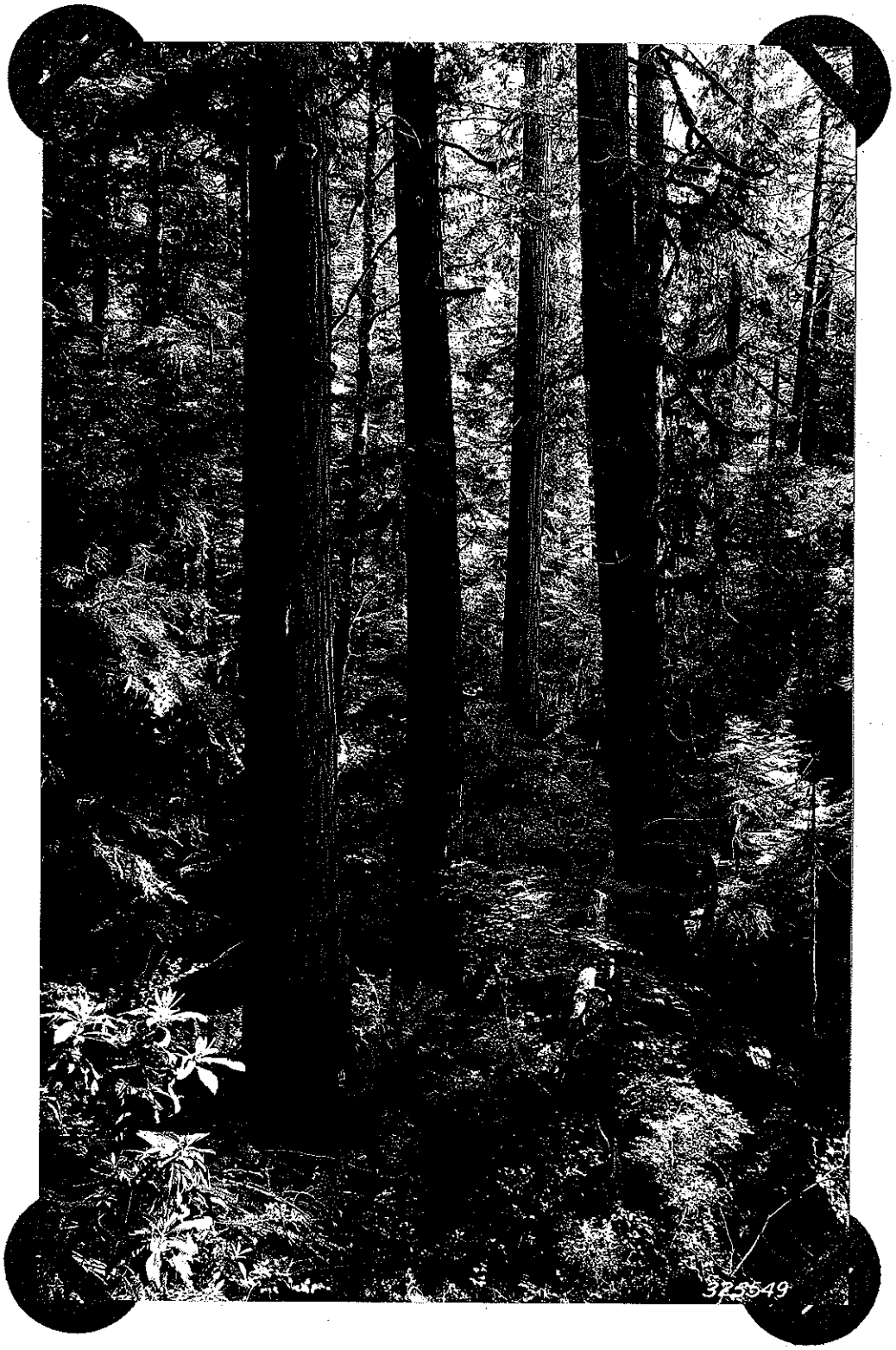
Approved: Aug 18, 1937
H. J. Andrews
acting Director

Washington, D. C.

_____, 193_

By virtue of the authority vested in me by Reg. L-20 of the regulations of the Secretary of Agriculture relating to the occupancy, use, protection, and administration of the National Forests, I do hereby designate as the Port Orford Cedar Natural Area the lands described in a report dated March 27, 1937, by Boyd L. Rasmussen and Donald N. Matthews; said lands shall hereafter be administered as a natural area, subject to the provisions of said regulations and the instructions thereunder.

_____
Forester



Port Orford cedar stand typical of the best stands on the Port Orford Cedar Experimental Forest.

General view of the Port Orford Cedar Natural Area
(looking southwest across the mouth of Johnson Creek
near center of Section 26, T. 32 S., R. 12 W., W.M.)