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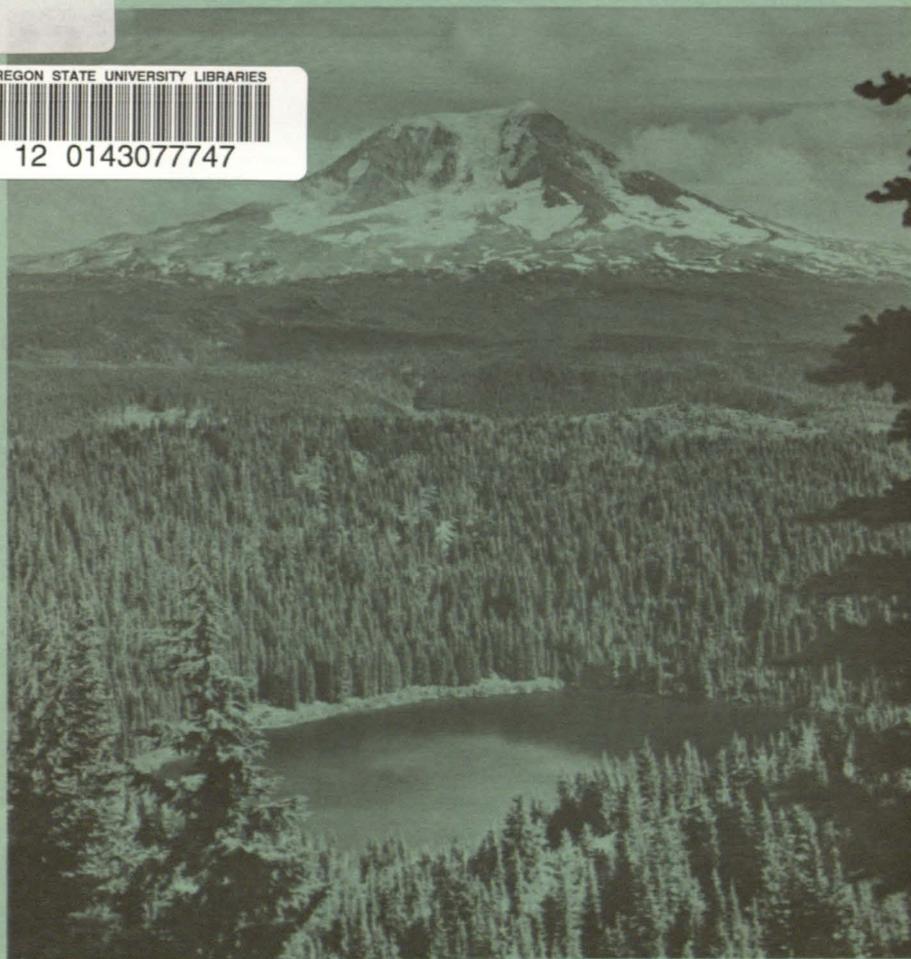
# Multiple Use In Action Pacific Northwest Region

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## *Fifth* WORLD FORESTRY CONGRESS

August 29 to September 10, 1960  
Seattle, Washington, U.S.A.

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE



**Cover Picture: #456933**

**Council Lake and Mt. Adams (12,307 feet), from  
Council Bluff. Gifford Pinchot National Forest.**

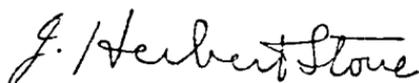
Portland, Oregon  
August 29, 1960

TO MEMBERS OF FIFTH WORLD FORESTRY CONGRESS:

The Pacific Northwest Region of the United States Forest Service is honored to be chosen as the site of the Fifth World Forestry Congress. We are grateful for the opportunity, as professional foresters, to exchange information and ideas with neighbors and friends throughout the world. The Congress focuses distinguished attention on the forests of the Pacific Northwest, and we welcome you with pride as guests to this section of our country which is so rich in forest resources.

The theme of the Congress--Multiple Use--has been the rule and guide to administration of our national forests for over 50 years. All the renewable resources of the national forests, including water, timber, recreation, forage, and wildlife habitat have been and are being managed for sustained yield.

Through research and experience (ours and yours) we have been learning how to improve management of our forests and watersheds for the use and benefit of those dependent upon them. We are sure the exchange of ideas and methods among the many participants in this international group of foresters will be of universal benefit to the management of forest lands in all countries.



J. HERBERT STONE  
Regional Forester

## *Pacific Northwest Region*

The national forests of the United States are divided into ten regions. The Pacific Northwest Region contains 19 national forests and 113 ranger districts. The ranger district is the basic administration unit of the forest.

The federal system contains approximately 186 MM acres, of which more than 23 million acres are included in the Northwest region. There are 6 national forests in Washington State and 13 in Oregon. The headquarters office for the Region is in Portland, Oregon. The map on the last page of this booklet illustrates the location of the 19 forests within the region.



A West-side timber stand. Trees left to right are western hemlock, Douglas-fir, Sitka spruce, and western redcedar.

The Cascade range of mountains, with a north-south axis, is a principal physiographic feature of the region. Average elevations vary from five to six thousand feet. The mountains divide the region into two distinct climatic zones and two broad forest types. The most frequent tree species between the crest of the Cascade Mountains westerly to the Pacific Ocean is Douglas-fir; it is associated with western hemlock, Sitka spruce, and various true firs. This is generally known as the Douglas-fir subregion.



An East-side ponderosa pine forest. The bitterbrush browse (*Purshia tridentata*) provides excellent forage for livestock and wild animals.

The drier climate east of the Cascade crest results in forests predominantly of ponderosa pine. The area east of the crest of the Cascade Mountains is known as the ponderosa pine subregion. Associated species include Douglas-fir, western larch, lodgepole pine, and true firs. The Olympic Peninsula, across Puget Sound from Seattle, is an area within the Douglas-fir subregion which receives more precipitation than the rest of the west slope forests. The heavy precipitation results in the so-called rain forests of dense herbaceous vegetation and trees of very large size.

There are lesser mountain ranges within the region which locally affect forest growth and, consequently, forest practices and culture. Some of the less important ranges are the Coast Mountains of Western Oregon and Washington, the Siskiyou Mountains on the southern border of Oregon, the Blue Mountains of Eastern Oregon and Washington, and the Willowa Mountains of Northeast Oregon.

The variations of topography, climate, soil, and forest growth in this area make the job of forest and watershed management both complex and interesting.



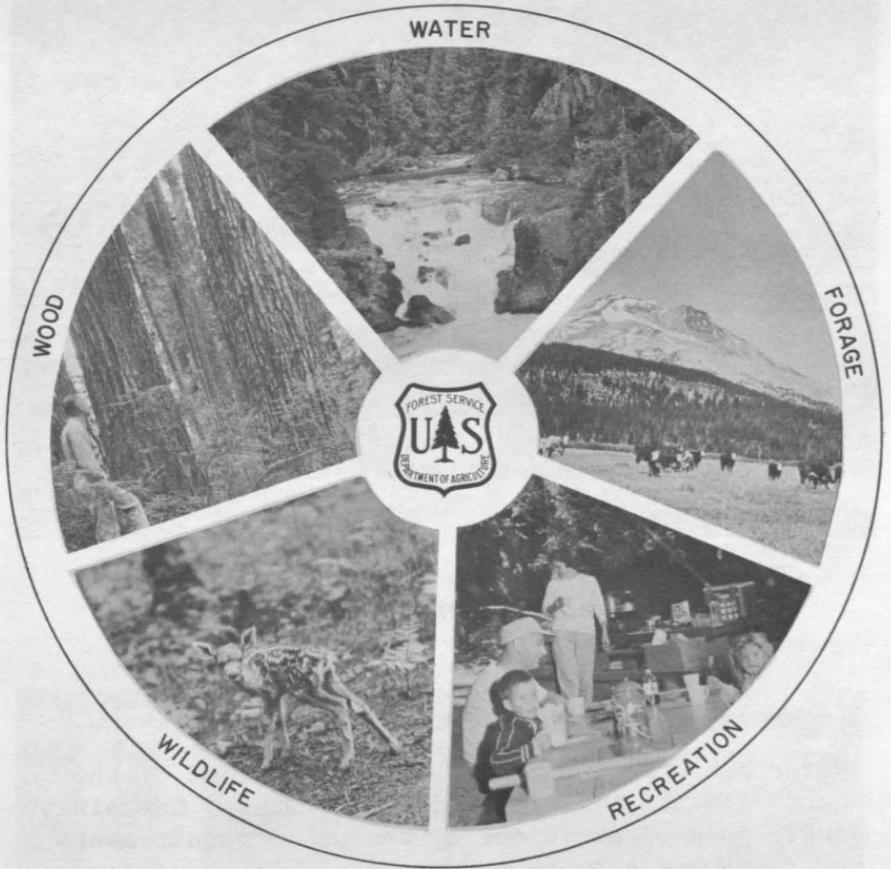
The summit of the Cascade Range.

# *This is Multiple Use*

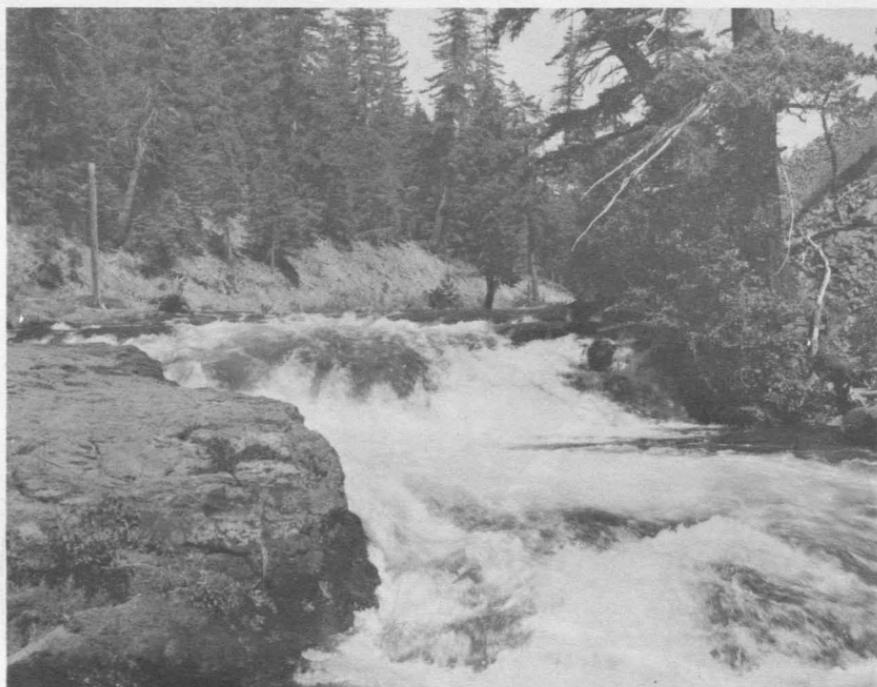
Multiple Use means:

1. The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people.
2. Making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions.
3. That some land will be used for less than all of the resources.
4. Harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

Sustained yield of the several products and services means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land.



## Water



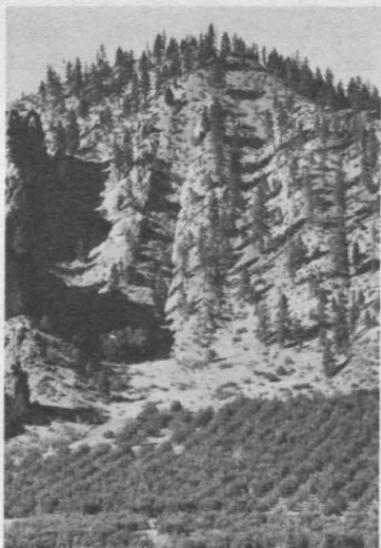
Municipal use of pure mountain water exceeds  
150 gallons per person per day.

Water has often been called the lifeblood of the land--and the lifeblood of civilization. Certainly, ample pure water is one of the prime requirements of a growing economy and nation.

The goal of watershed management on national forest lands is to place and keep our upland watersheds in optimum condition for intake and transmission of water, to conserve water for all beneficial uses, and to reduce losses from destructive runoff and sedimentation.

Water from the forests is used for irrigation of farms, ranches, orchards and gardens; to produce electric power for industry, farms, homes, hospitals, and schools; home consumption; for industrial use in manufacturing; air conditioning; pollution control and transportation; for livestock and wild game; and for public recreation such as fishing, swimming, and boating.

The national forests contribute 44 per cent of the water runoff in Oregon and 45 per cent of the runoff in Washington. Over 150 cities and towns in Oregon and Washington obtain their domestic water directly from national forest lands.



The ponderosa pine forests meet the apple orchards by the miracle of water--irrigation.



A research forester measures water from an experimental watershed.

## *Timber*

The forest types and species of the Pacific Northwest provide raw material for a wide variety of wood products including lumber, veneer or plywood, railway ties, piling, poles, posts, mine timbers, specialty products and fuel. Pulp and paper are a major conversion product. Charcoal, explosives and plastics are among the lesser uses. Other products from northwest forests include Christmas trees, wood chemicals and pulp for stockfeed.

Lumbering and associated activities have long been, and will continue to be, major industries in the Pacific Northwest. Here we have the climate, the soils and an expanding technology to produce, harvest and market a large volume of wood per acre to help sustain a high living standard for the American people. The national forests of the region contain about one-third of 45.4 million acres of commercial forest land in the area. The value of the timber harvested from the national forests of Region 6 approaches \$76 million a year on a sustained yield basis.



Mature Douglas-fir is logged in a staggered setting pattern of cutting.



Timber fallers cut large Douglas-fir tree on a national forest timber sale.



Ponderosa pine crop trees are thinned to increase growth and pruned to improve quality.



Planted Douglas-fir seedling doubles its length in one year.

## Wildlife

The Forest Service includes game animals, upland game birds, and both resident and anadromous fish in the general definition of "wildlife". The principal concern of the Forest Service is management of forest habitat for wildlife. Traditionally, fish, birds, and game are considered to be the property of the states in which they live, and consequently the harvesting of wildlife is managed by the respective state fish and game organizations. Principal big game animals of Northwest national forests are deer, elk, bear, and mountain goats; fur bearers include mink, otter, racoon, beaver, and muskrat; birds include grouse, waterfowl, and numerous song and predatory species.

During the year 1959, the national forests of the Pacific Northwest were visited by more than 600,000 hunters and 1,300,000 fishermen.

The value of the forests to hunters and fishermen cannot be adequately measured in monetary terms; nor is their value to these users even approximated in the dollars spent for equipment, transportation, housing, and similar necessities.



The elusive mountain goat.



Rocky Mountain bull elk.



A mule deer harvested  
from the national forest.



Fly fishing on a  
national forest  
stream.

## Recreation



Glacier Peak from Image Lake.

The outstanding scenic beauty of mountain ranges of the Northwest, on which the national forests are located, attracts recreationists from far and near in ever increasing numbers. The forests were hosts to more than eight million visitors in 1959. Over three million people occupied our 1,000 improved forest camps last year; almost a million enjoyed forest ski areas during the winter of 1958-59. Over 1½ million acres of wild and wilderness areas were used by those who prefer the challenge of undeveloped mountain terrain. National forest recreation includes such diverse activities as camping, picnicking, hunting, fishing, photography, swimming, boating, hiking, riding, pack trips, and scientific observation.



Family groups enjoy camping and picnicking on the national forests.



Many youth groups such as these Boy Scouts use organization camps on national forests.

## Forage

The climate of the national forest east of the crest of the Cascade Mountains is such that the tree cover is somewhat scattered, with complete canopies only on the sites with most favorable moisture relationships. The sites where tree cover is scattered produce grasses, weeds, and shrubs which are palatable and sustaining to wild and domestic animals. The eight million acres of range lands within the northwest national forests produce sufficient forage to support 91 thousand cattle and 141 thousand sheep during the summer grazing season.

This valuable source of livestock forage benefits 1,300 stockmen and is managed compatibly with the other resources and uses of the forests.



Sheep grazing on Muddy Meadows  
in the shadow of Mt. Adams.



Cattle graze on reseeded bunchgrass range.  
Water spreading ditch also provides irrigation.



Range improvements like fences and water develop-  
ments aid in proper control and distribution of  
livestock.

## Summary

Natural resources on forest land are an integral part and play a significant role in the mounting economic, cultural and social needs of the American public. Requirements for both domestic and industrial water are increasing annually; demands for fish and game are soaring; timber and allied industrial needs increase steadily; stockmen seek more forage for livestock; and expansion of recreational facilities is a pressing need. Although the mineral resources of the national forest lands are not renewable, they are an important resource of the land.

The U.S. Forest Service believes the best way to meet these growing and vital needs among the several forest resources is through application of the multiple use and sustained yield principles to management of surface resources of the national forest lands.

To keep these forest lands productive, it is necessary to protect them from fire, insects, and disease, and to apply many silvicultural practices to improve current growing stock and to assure forests for the future.



Lookouts must be on the alert for fires.

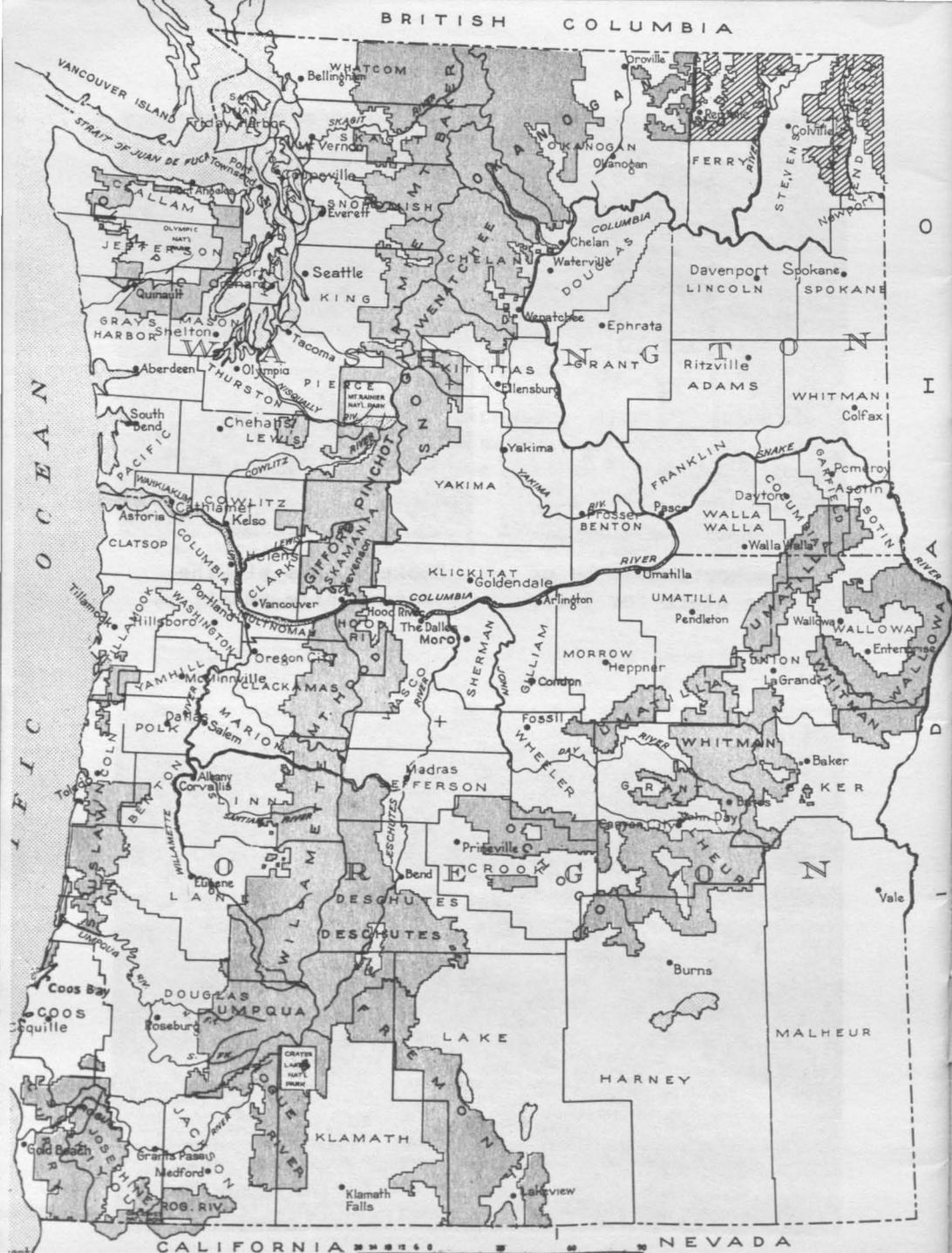


Smokejumpers hit the fires while small.



Spruce budworm spraying.

BRITISH COLUMBIA



LEGEND

-  STATE LINES
-  COUNTY BOUNDARIES
-  NATIONAL FORESTS
-  NATIONAL FORESTS IN ADJACENT REGION

U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
**NATIONAL FORESTS**  
 OF THE  
**PACIFIC NORTHWEST REGION**  
 1960

**SMOKEY SAYS**



**PREVENT  
FOREST FIRES!**