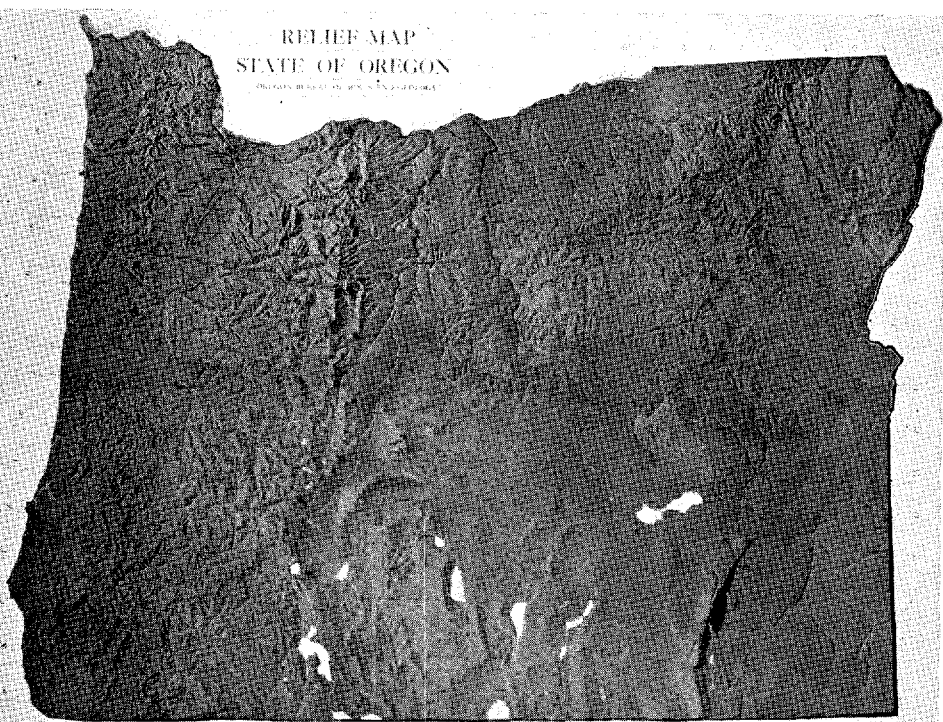


# Graphic Summary of Agriculture and Land Use in Oregon

Preliminary Issue of Selected Maps and Graphs

RELIEF MAP  
STATE OF OREGON



Topography and varying elevations divide the state into six distinct physiographic and agricultural regions—Coast Region, Willamette Valley, Southern Oregon, Columbia Basin, and Blue Mountain Region.

Agricultural Experiment Station  
Oregon State Agricultural College  
Corvallis  
and  
Bureau of Agricultural Economics  
United States Department of Agriculture  
Cooperating

# Graphic Summary of Agriculture and Land Use in Oregon

Preliminary Issue of Selected Maps and Graphs

Prepared by

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United States Department of  
Agriculture.



Agricultural Experiment Station  
Oregon State Agricultural College  
Corvallis  
and  
Bureau of Agricultural Economics  
United States Department of Agriculture  
Cooperating.

## **FARM MANAGEMENT RESEARCH**

### **Dealing with Agricultural Enterprise Costs and Types of Farming Department of Farm Management Oregon Agricultural Experiment Station**

Stump Land Reclamation (Oregon 195)  
Winter Wheat in Sherman County (U. S. D. A. 1446)  
Horse and Tractor Power on Sherman County Wheat Farms  
(U. S. D. A. 1447)  
Alfalfa Hay (Oregon 241)  
Willamette Valley Hays (Oregon 248)  
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Horse Labor on Oregon Farms (Oregon 250)  
Strawberry Production in the Willamette Valley (Oregon 245)  
Pear Production in Rogue River Valley (Oregon 267)  
Prune Production in Western Oregon (Oregon 292)  
Irrigation of Berries in Willamette Valley (Oregon 277)  
Establishing Walnut Groves (Oregon 315)  
Walnut Production (Oregon Cir. Inf. 81)  
Filbert Production (Oregon Cir. Inf. 94)  
Commercial Egg Production (Oregon 287)  
Dairy Farming (Oregon 318)  
Dairy Herd Sires (Oregon 312)  
Dairy Heifers (Oregon 324)  
Production of Turkey Hatching Eggs (Oregon 333)  
Honey Production (Oregon Cir. Inf. 83, 100)  
Bulk Handling of Grain (U. S. D. A. Tech. 287)  
Pasture Production (Oregon Cir. Inf. 129)  
Hop Production (Oregon Cir. Inf. 130)  
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# Graphic Summary of Agriculture and Land Use in Oregon

## FOREWORD

This issue of graphs and maps is a selection from two manuscripts on "*Types of Farming and Land Use in Oregon*," being prepared for publication later in more complete form.

*Tabulations*, by counties and regions, of the data shown graphically on the maps and figures herein may be obtained from the Department of Farm Management, Oregon Agricultural Experiment Station.

*Large scale copies* of all of the maps published herein may be obtained from the Department of Farm Management, Oregon Agricultural Experiment Station, at cost of blue printing.

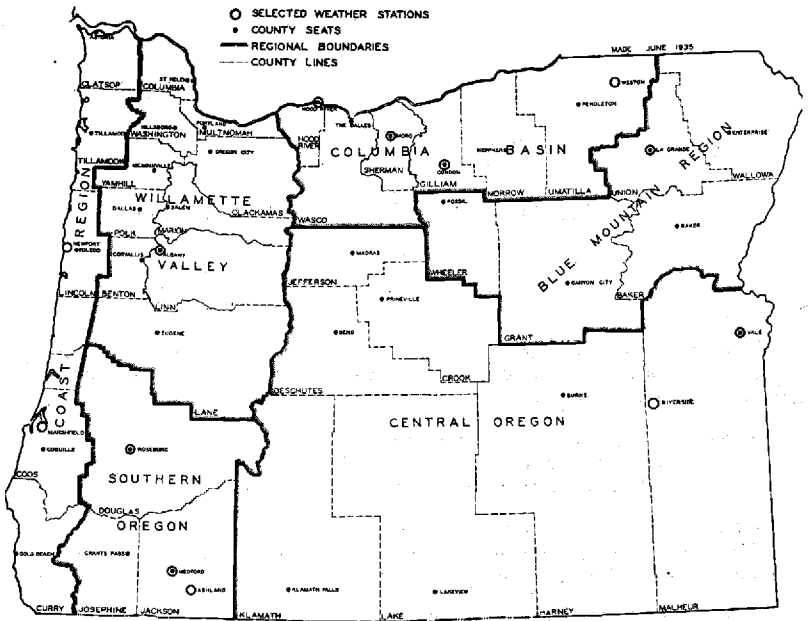
In addition, *large scale colored maps* showing land use and types of farming for the State of Oregon and for each of the Eastern Oregon counties are available. Funds for publishing these land use maps were not available when this publication was authorized.

*Note.* The 1930 census data have been used in preference to 1935 data, where available, because 1930 conditions are believed to be more nearly normal.

## ACKNOWLEDGMENTS

The authors wish to express their thanks and appreciation for services and data supplied by the following: The United States Weather Bureau, Portland; Northwest Forest Experiment Station, Portland; Regional Office, United States Forest Service, Portland; United States Bureau of the Census; United States Reclamation Service; Charles E. Stricklin, State Engineer; F. B. Wire, State Game Commissioner; M. N. Nelson, R. E. Dimick, and F. E. Price, Oregon Agricultural Experiment Station; A. S. Burrier and Carl Merryman, Resettlement Administration, the Supervisors of the National Forests in Oregon; the county assessors and the county agricultural agents of the Eastern Oregon counties; and finally to many individuals who supplied information in the field. Specific credit is given directly on all maps and graphs presented.

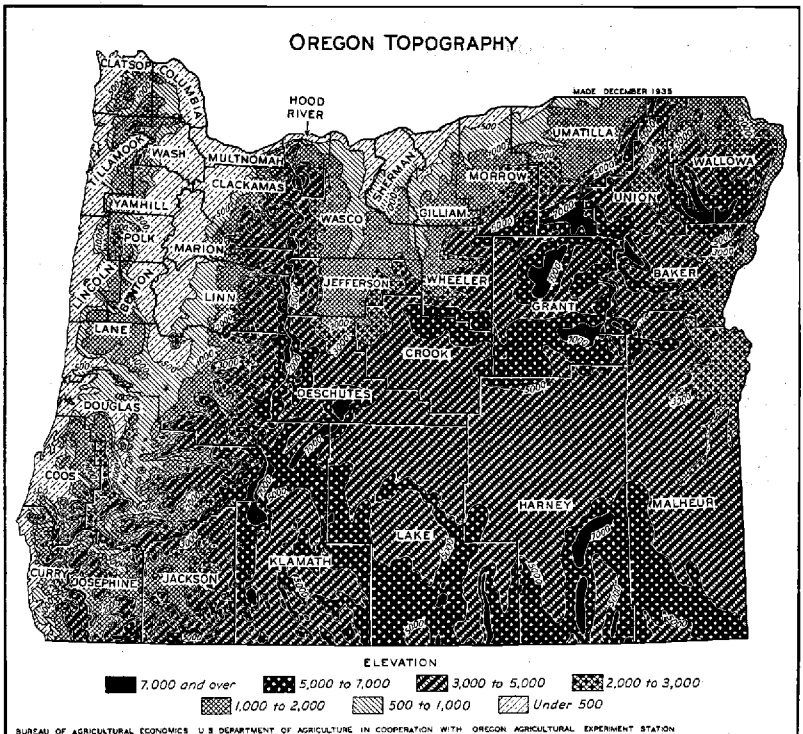
# OUTLINE MAP OF OREGON



PREPARED BY H. D. ROODER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E. S. HUND, BUREAU AGR. ECONOMICS U.S.A.

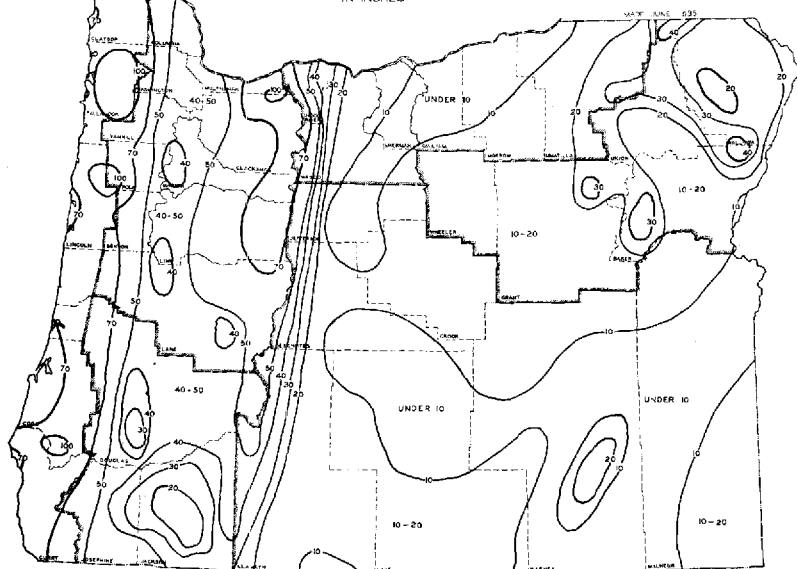
Oregon's six differing agricultural regions—Coast Region, Willamette Valley, Southern Oregon, Columbia Basin, Blue Mountain Region, Central Oregon—are due to different physical conditions.

## OREGON TOPOGRAPHY



Location and extent of the areas of different elevations. Elevation exerts decisive influence on precipitation, growing season, land use and types of farming.

# **OREGON** **AVERAGE ANNUAL PRECIPITATION** IN INCHES

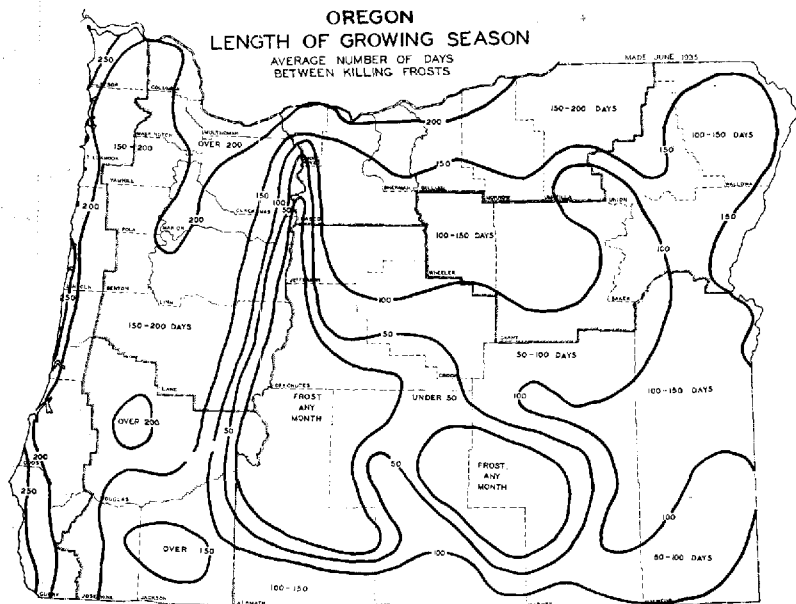


PREPARED BY E. R. HURD, BUREAU OF AGRICULTURAL ECONOMICS AND H. D. SLODGER, OREGON AGRICULTURAL STATION

DATA, U.S. WEATHER BUREAU

Distinct differences in use of land and types of farming result from the great variation in precipitation: 65 inches on the Coast, 42 in the Willamette Valley, 25 in Southern Oregon, 11 in the Columbia Basin and Central Oregon, 20 in the Blue Mountains.

# **OREGON** **LENGTH OF GROWING SEASON** AVERAGE NUMBER OF DAYS BETWEEN KILLING FROSTS



PREPARED BY E. R. HURD, BUREAU OF AGRICULTURAL ECONOMICS, U.S.E.A., AND H. D. SLODGER, OREGON AGRICULTURAL STATION

DATA, U.S. WEATHER BUREAU

Oregon's position in the region of the prevailing westerly winds and the Japan current gives a long frost-free season at the low elevations of the Coast, Willamette and Umpqua valleys, and Columbia Basin, and permits many different types of farming. The reverse is true in Eastern Oregon at the higher elevations.

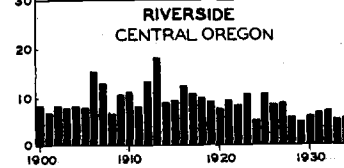
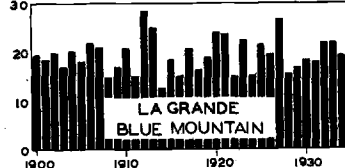
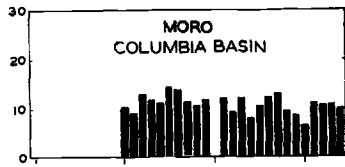
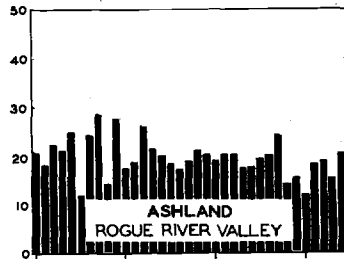
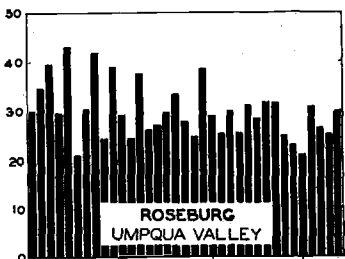
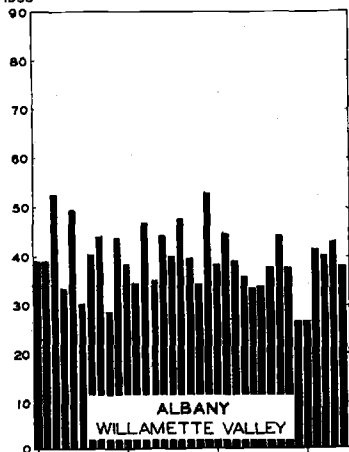
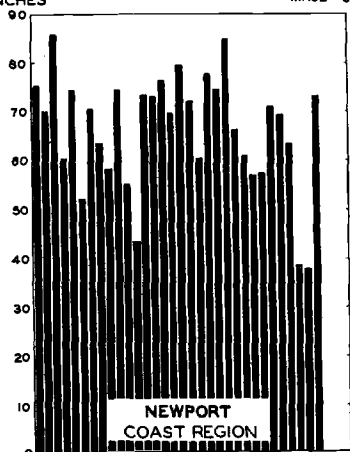


# ANNUAL PRECIPITATION

SELECTED OREGON STATIONS

MADE JUNE 1935

INCHES



YEARS OF OBSERVATION

YEARS OF OBSERVATION

PREPARED BY H.D. SCUDDER OREGON EXP. STATION & E.B. HURD BUREAU AGRI. ECONOMICS, U.S.D.A.  
DATA, U.S. WEATHER BUREAU

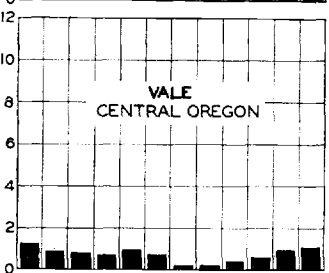
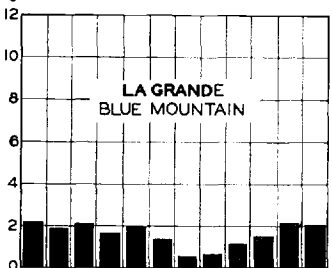
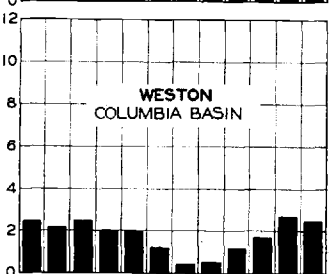
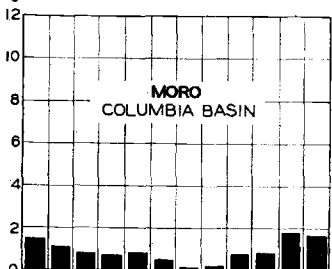
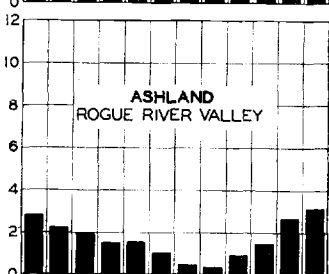
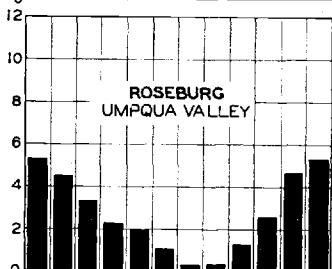
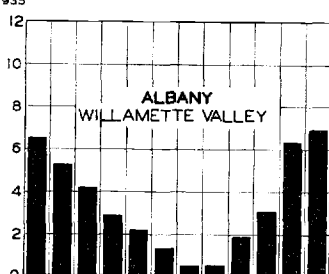
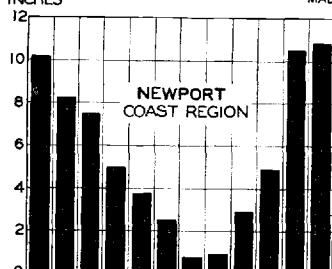
A striking characteristic of Oregon's climate is its uniformity from year to year. Complete crop-destroying droughts have never occurred except on marginal or submarginal non-irrigated lands of very low rainfall in Eastern Oregon.

# NORMAL PRECIPITATION BY MONTHS

PRECIPITATION  
IN INCHES

SELECTED OREGON STATIONS

MADE JUNE 1935



MONTHS OF YEAR

MONTHS OF YEAR

PREPARED BY H.D. SCUDDER, OREGON EXP. STATION, & E.B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.  
DATA, U.S. WEATHER BUREAU

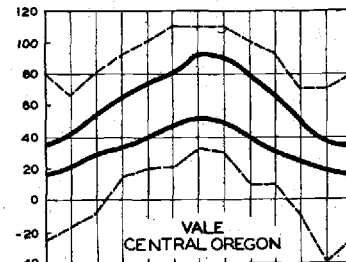
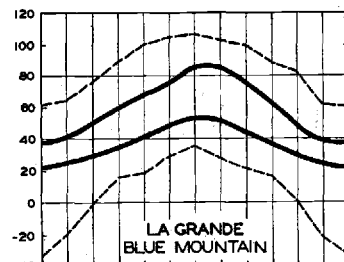
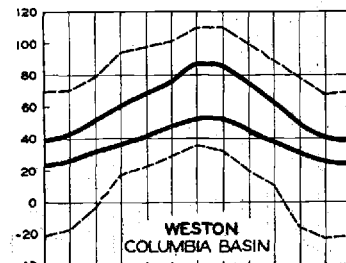
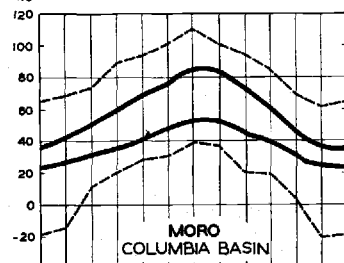
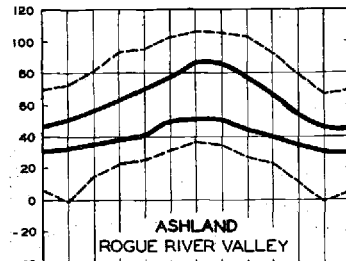
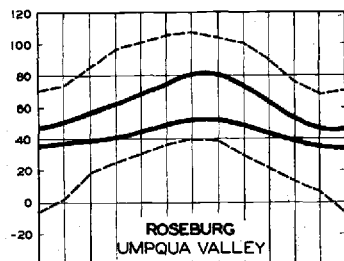
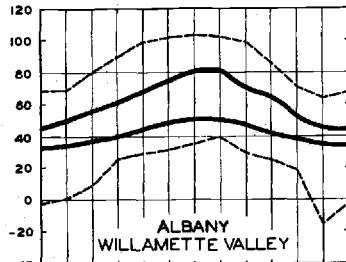
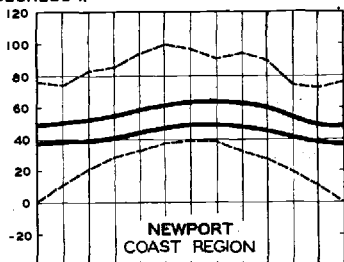
A second striking characteristic of Oregon's climate is the low rainfall during summer months, June to September inclusive, and the proportionately heavy rainfall during the winter months, November to February, inclusive.

# MARCH OF TEMPERATURES BY MONTHS

TEMPERATURE  
DEGREES F.

SELECTED OREGON STATIONS

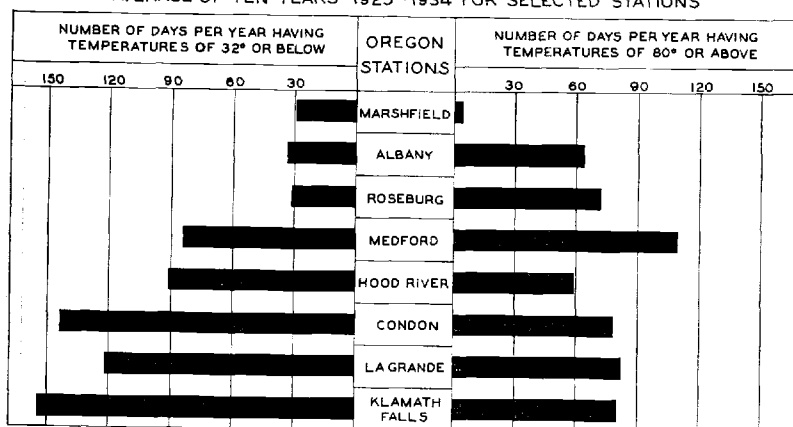
MADE JUNE 1935



— NORMAL MAXIMUM AND MINIMUM TEMPERATURES  
 - - - HIGHEST AND LOWEST TEMPERATURES EVER OBSERVED  
 PREPARED BY H.D. SCUDDER, OREGON EXR STATION, & E.B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.  
 DATA, U.S. WEATHER BUREAU

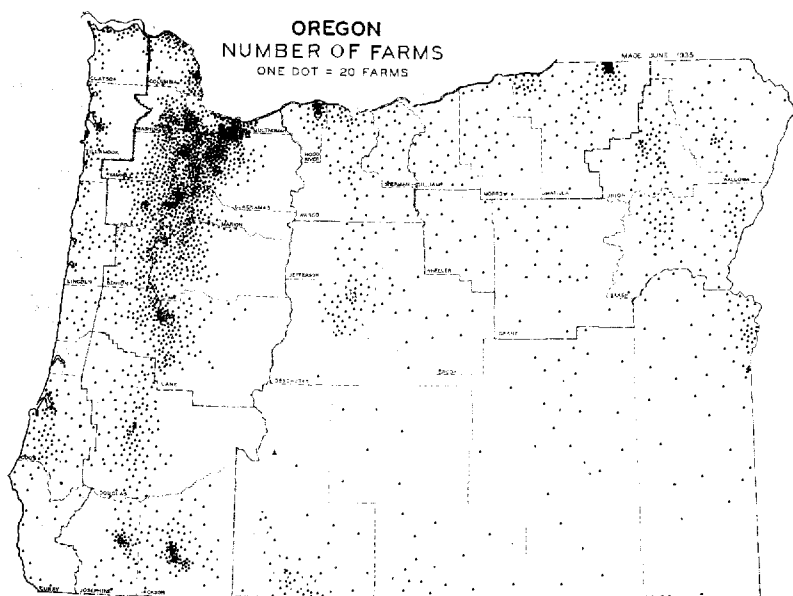
For each typical regional weather station, the top and bottom curving lines show the highest and lowest temperatures ever observed in any month for all years of record. The inner heavy curving lines show the normal. Note the mild climate of Western Oregon and the great range of temperature in Central Oregon.

FREQUENCY OF MINIMUM AND MAXIMUM TEMPERATURES DURING THE YEAR  
AVERAGE OF TEN YEARS 1925-1934 FOR SELECTED STATIONS



PREPARED BY H.D.SCUDDER OREGON EXP. STATION & E.B.HURD BUREAU AGRI. ECONOMICS, U.S.D.A.  
DATA, U.S. WEATHER BUREAU

The infrequent frosty days in winter or hot days in summer attest the long growing season and mild climate of the Coast, Willamette and Umpqua valleys. The higher elevations in some regions of Eastern Oregon show marked contrast in frosty or cold weather and short season.

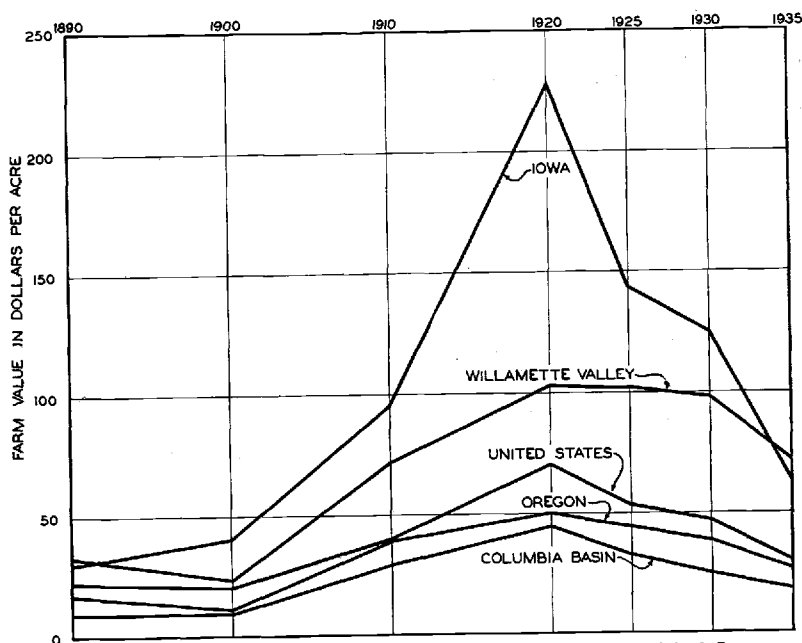


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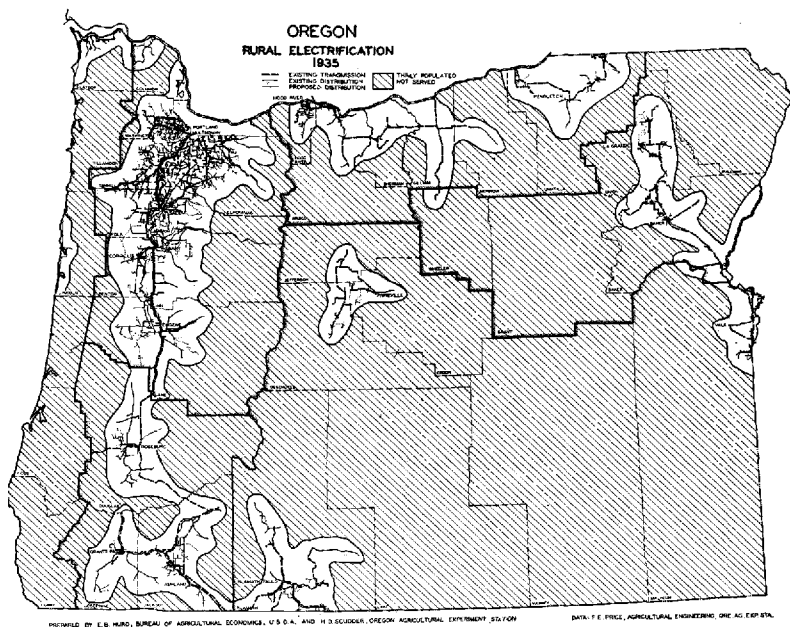
DATA, U.S. CENSUS, 1920

More than half the 64,826 farms of Oregon are in the Willamette Valley. Since pioneer days there has been an average increase in number of farms varying from 500 to 1000 each year. Part-time farming has increased greatly from 1930 to 1935.

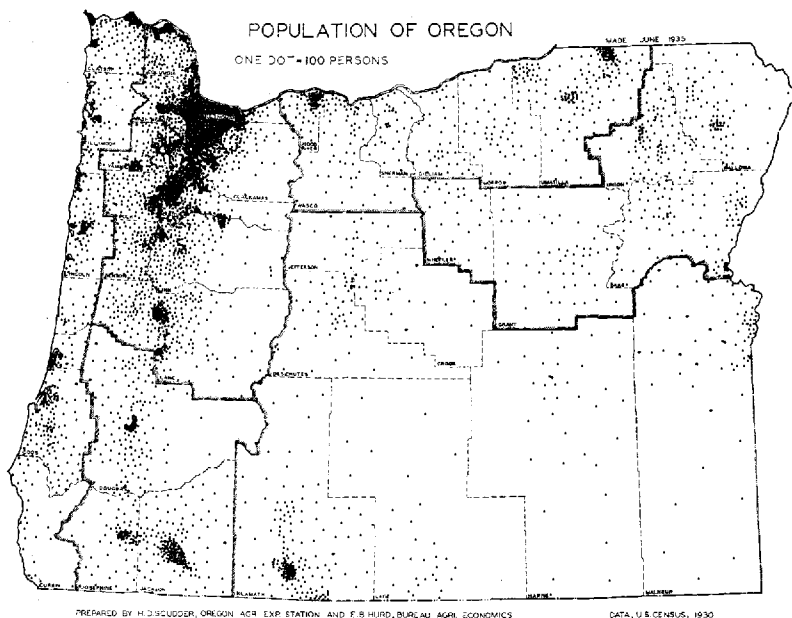
# CHANGES IN FARM LAND VALUES (FARM LAND AND BUILDINGS)



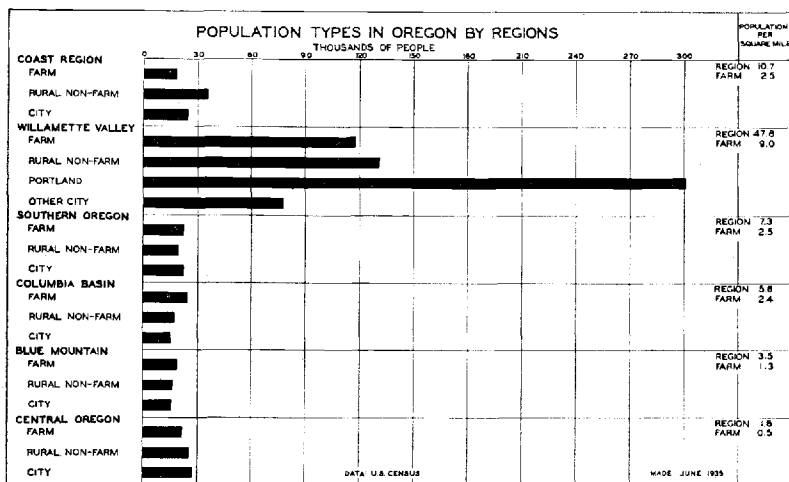
During the period of prosperity, 1900 to 1920, land values in the United States rose rapidly, especially in the corn belt states, and since 1920 have rapidly declined. A decisive factor in the value of the land is the type of farming and use that the land will sustain.



The availability of rural electric power is a factor of considerable importance in certain of the more intensive types of farming. Existing and proposed rural power lines follow closely the more intensive farming areas.



Density of population is of profound importance to farming. Except for the Lower Willamette Valley, Oregon is thinly populated (953,786 in 1929) and the local markets are unable to consume the farm products grown in the state. Disposal of the surplus is a major economic problem in every type of farming.

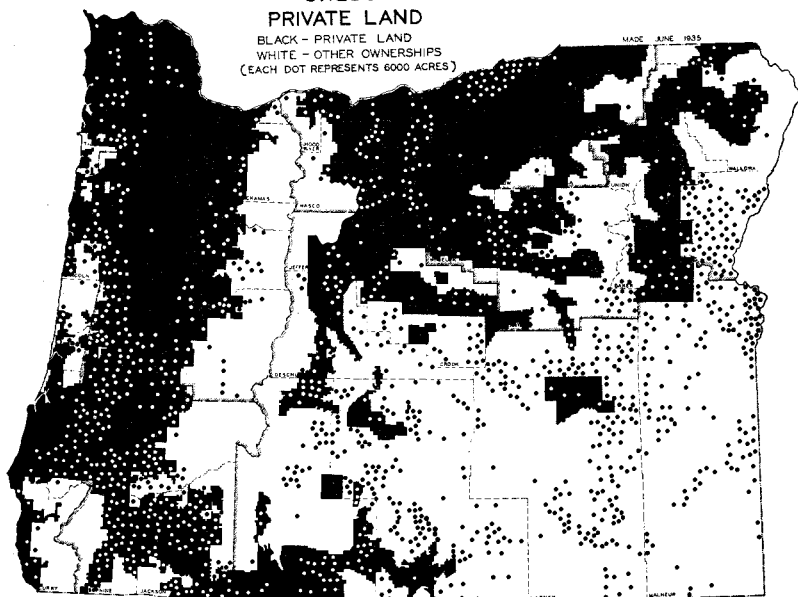


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More than 51 per cent of the state's population is found in its cities, Portland alone having 31 per cent. These cities are the chief local markets for farm goods, leaving large surpluses to ship out of the state and abroad.

# OREGON PRIVATE LAND

BLACK - PRIVATE LAND  
WHITE - OTHER OWNERSHIPS  
(EACH DOT REPRESENTS 6000 ACRES)



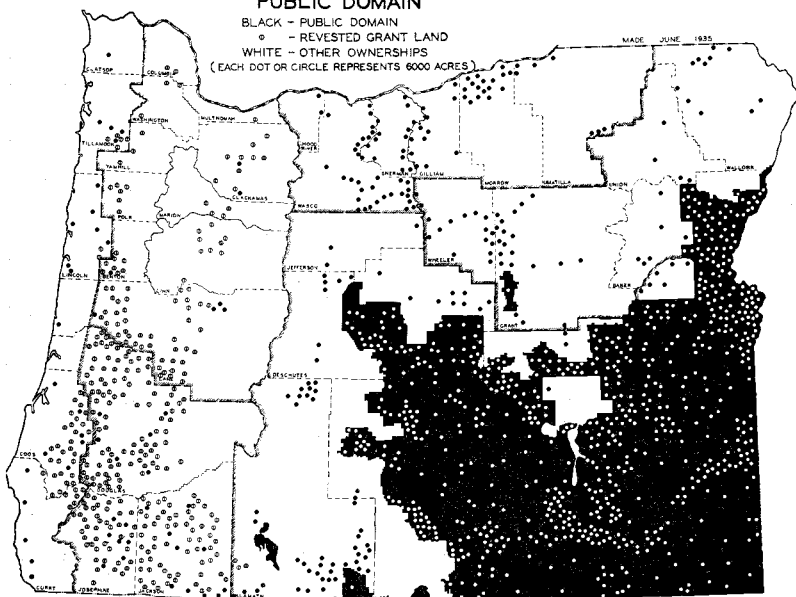
PREPARED BY E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A., AND H.C. SCUDDER, OREGON AGR. EXP. STATION

DATA, M.N. NELSON, ORE. AGR. EXP. STATION

Nearly half (43 per cent) of the land of Oregon is privately owned. Of this private land, 43 per cent is timber land, 38 per cent is grazing land, and 16 per cent is crop land.

# OREGON PUBLIC DOMAIN

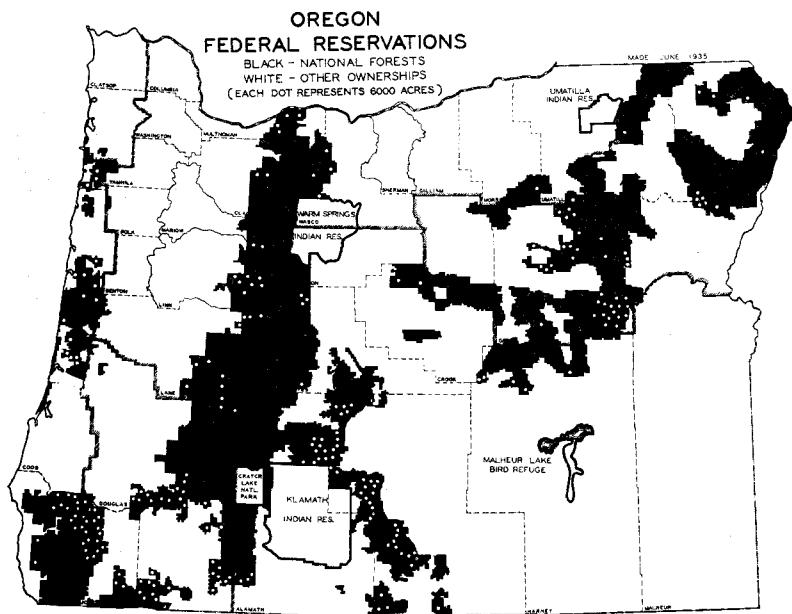
BLACK - PUBLIC DOMAIN  
○ - REVESTED GRANT LAND  
WHITE - OTHER OWNERSHIPS  
(EACH DOT OR CIRCLE REPRESENTS 6000 ACRES)



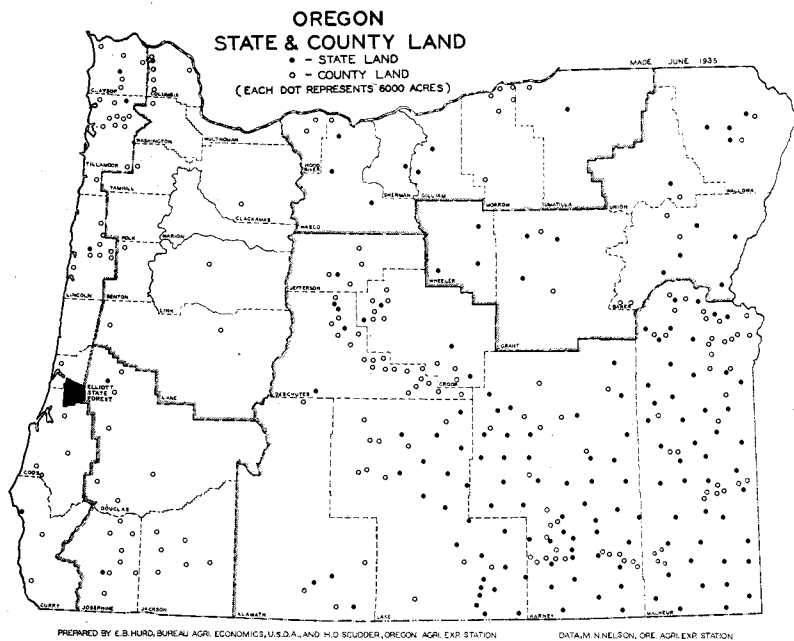
PREPARED BY E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A., AND H.C. SCUDDER, OREGON AGR. EXP. STATION

DATA, M.N. NELSON, ORE. AGR. EXP. STATION

More than one-quarter (25.8 per cent) of the state's area is public domain and revested grant lands. Most of this is range grazing land in Central Oregon.



Nearly one quarter (22 per cent) of Oregon land is in National Forests and 3 per cent more is in other federal reservations.

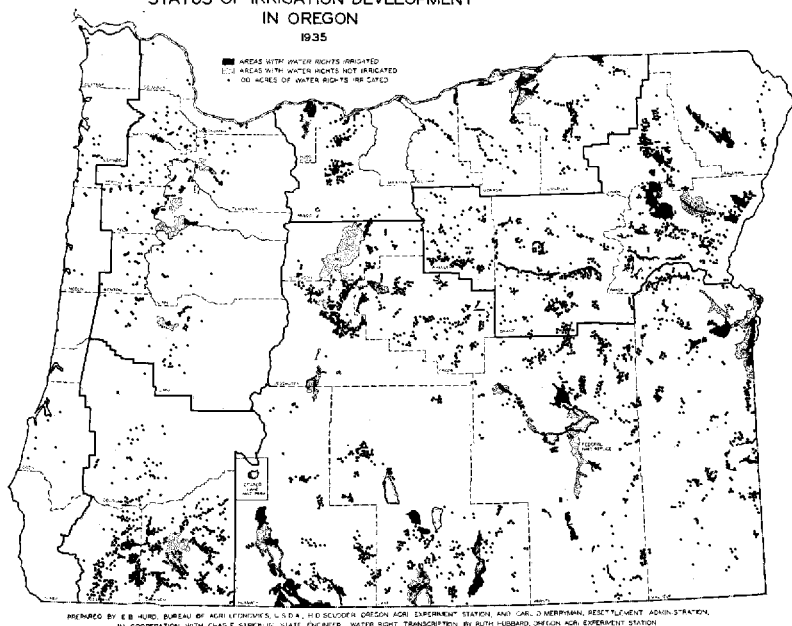


About 4 per cent of the state's area is owned by the state, and counties. These taxing bodies also have a prior lien for delinquent taxes on many thousands of acres of additional land.

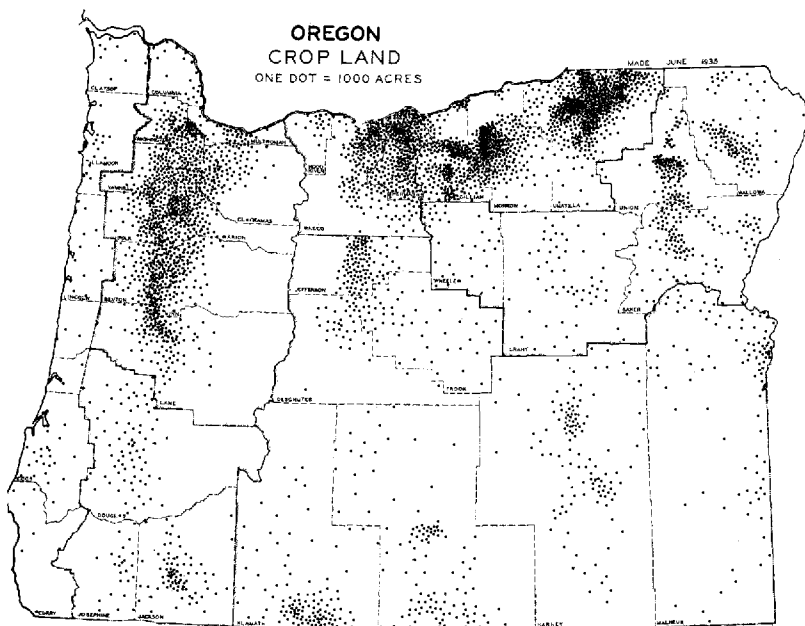


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# STATUS OF IRRIGATION DEVELOPMENT IN OREGON 1935



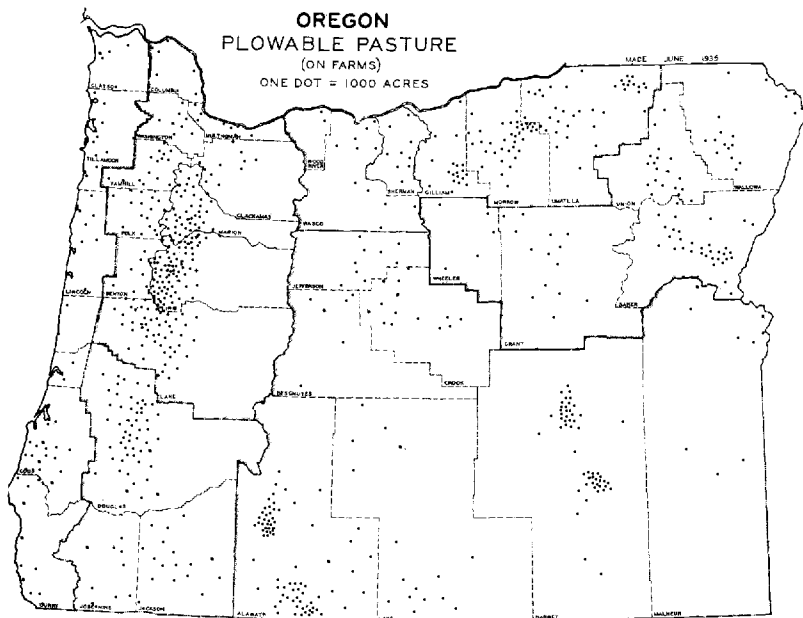
16



PREPARED BY H. D. SLOOGER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E. B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA U.S. CENSUS, 1929

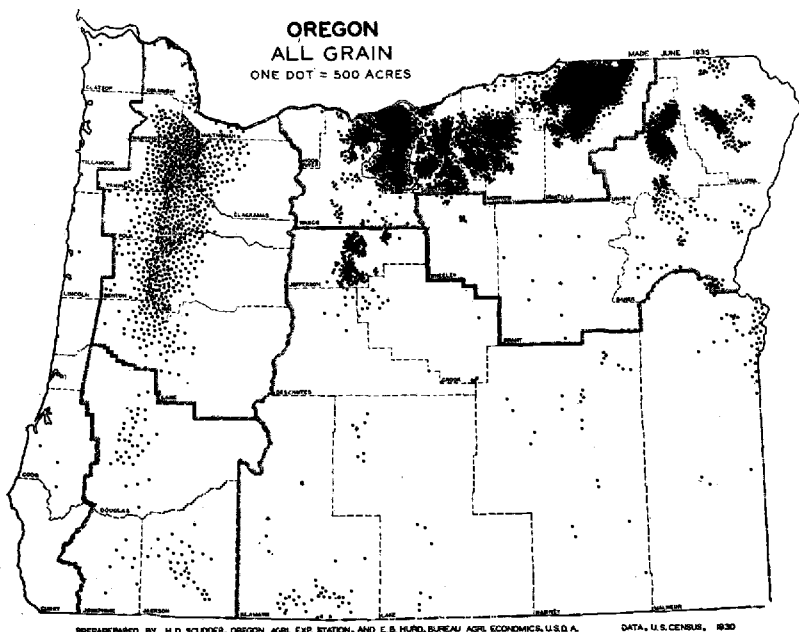
The Columbia Basin (25.8 per cent) and the Willamette Valley (12.7 per cent) have the highest percentage of their total land areas in crops as compared with all other regions of the state. Of all Oregon crop land 51 per cent is in grain and 38 per cent in hay.



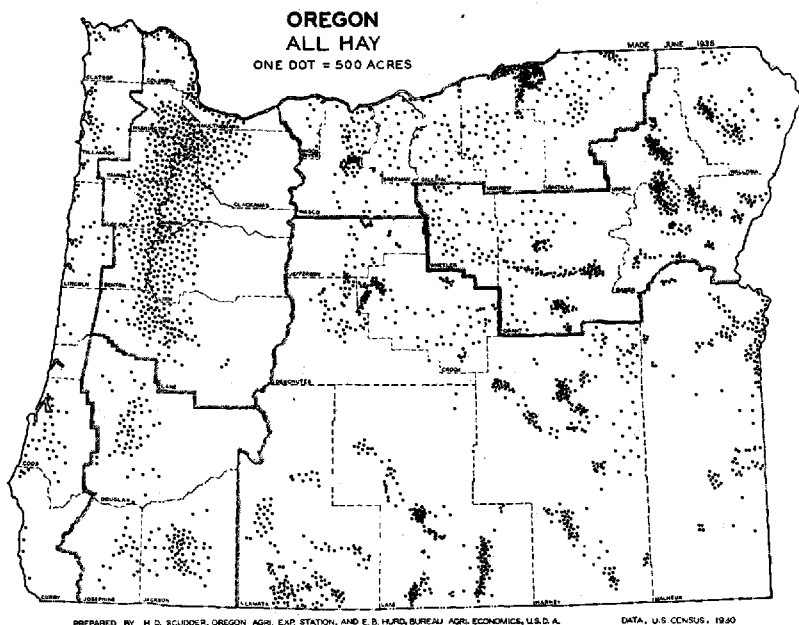
PREPARED BY H. D. SLOOGER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E. B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA U.S. CENSUS, 1920

Nearly one million acres of potential crop land lies in plowable pastures, the Willamette Valley having the highest percentage of any region.



The grain belt of Oregon is clearly concentrated on the dry farms of the Columbia Basin. Grain is still the major gross income producer for Oregon farms, and uses 51 per cent of the state's crop land.



Next to grain, hay of all kinds uses the largest acreage (38 per cent) of Oregon crop lands. In Eastern Oregon hay is grown chiefly in the irrigated and winter flooded lands. The annual hay crop totals about 2,000,000 tons.

# CLASSIFICATION OF EASTERN OREGON WHEAT LANDS BY YIELDS\*

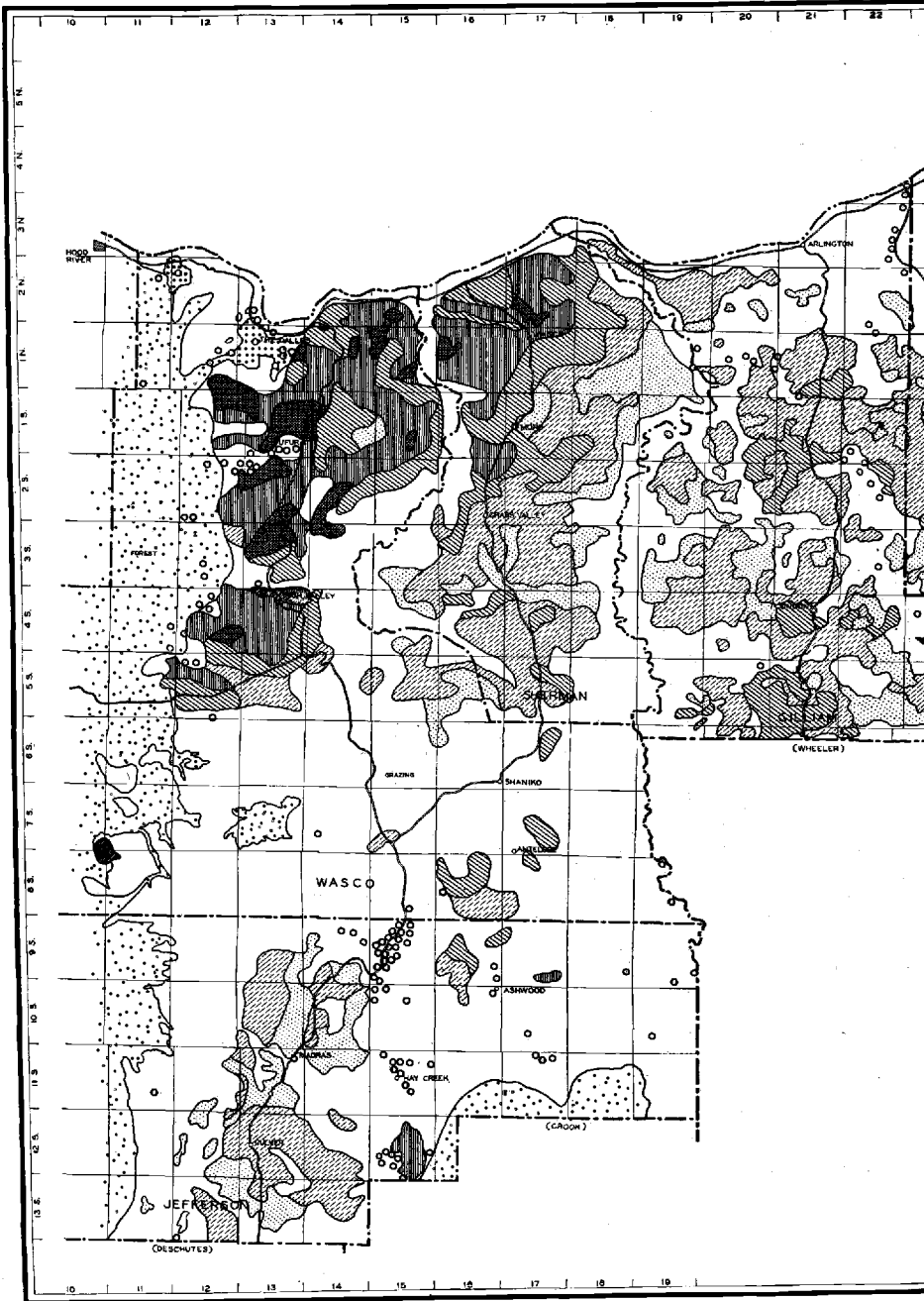
Based on 4-year average yield 1929-1932.†

Four-year average yield per acre	Percentage of Total Wheat Acreage in Each Group in Each County								Weighted Average
	Wasco	Jefferson	Sherman	Gilliam	Morrow	Umatilla	Union	Wallowa	
0-5	5.9	3.9	.5	.8	.3	.1	.8	2.1	.6
5-10	16.1	37.0	13.6	22.0	11.8	2.2	8.2	2.8	10.9
10-15	32.8	49.9	41.5	60.4	49.1	8.6	17.3	15.8	31.3
15-20	30.6	8.1	26.5	15.5	34.1	13.3	27.7	27.7	21.0
20-25	13.8	.7	15.8	1.1	4.4	16.7	25.8	27.2	13.6
25-30	.5	.4	2.1	.2	.3	16.9	16.1	15.1	8.6
30-35	.3	.....	.....	.....	.....	18.8	2.9	4.3	6.7
35-40	.....	.....	.....	.....	.....	13.0	1.1	3.0	4.2
40-45	.....	.....	.....	.....	.....	6.9	.1	1.2	2.1
45-50	.....	.....	.....	.....	.....	2.8	.....	.7	.8
50-55	.....	.....	.....	.....	.....	.7	.....	.....	.2
55-60	.....	.....	.....	.....	.....	.....	.....	.1	.....
Average Yield	19.6	10.6	15.2	12.4	14.1	27.6	24.3	20.9	19.1
Total Acreage Planted	68,317	48,556	132,285	120,875	124,273	240,384	47,975	25,979	808,644
Total Wheat Produced Thousands of Bushels	1,340	516	2,010	1,495	1,751	6,624	1,164	543	15,443

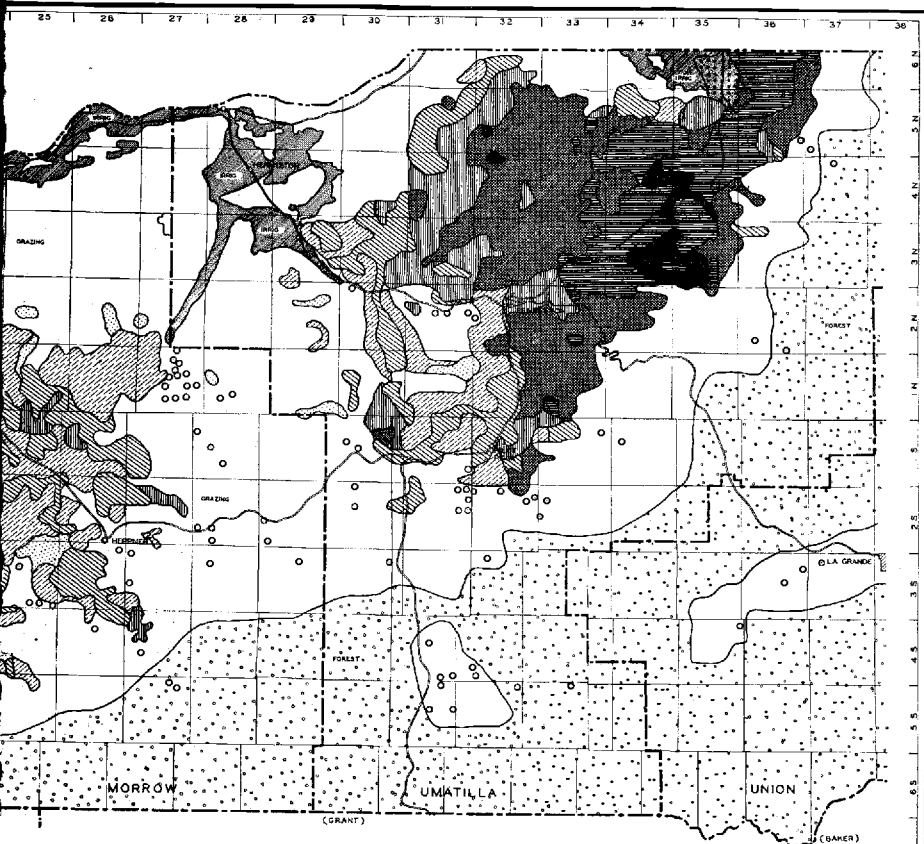
\*Detailed summary for each county is available.

†Data from Agricultural Adjustment Administration Wheat Contracts.

The low yielding and high yielding areas (counties) are clearly indicated in the table. The base period 1929-1932 is generally conceded to be a period of unfavorable conditions and lower than average yields.



The low and high yielding wheat areas are clearly shown, as are also the major land uses for the area. The 4-year period, 1911-1914, is shown for a few farms or fields having yields above or below the average yield of the area. The 4-year period, 1915-1918, is shown for the remainder of the area.



# OREGON COLUMBIA BASIN WHEAT LANDS

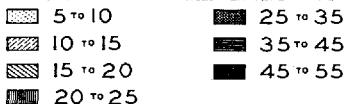
GRADED ACCORDING TO YIELD

FOUR YEAR AVERAGE YIELD PER ACRE 1929-1932

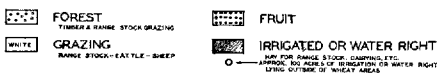
DATA FROM THE A.A. WHEAT CONTRACTS

H. D. SCHLUDER, PREPARED BY E. B. HURD  
OREGON EXPERIMENT STATION BUREAU OF AGRICULTURE

FOUR YEAR AVERAGE YIELD PER ACRE IN BUSHELS



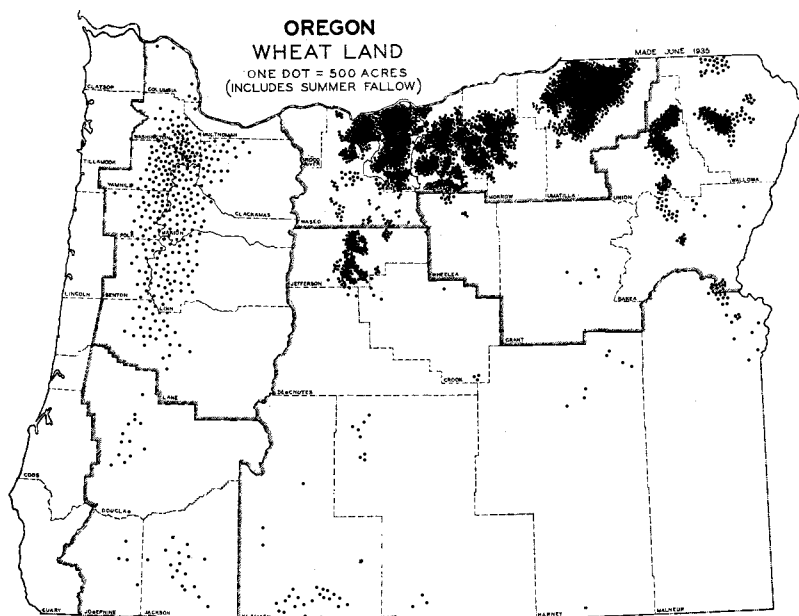
OTHER MAJOR TYPES OF FARMING AND USE



SCALE 1" = 4 MI.

NOTE:  
THE HIGHER WHEAT YIELD AREAS ON THIS MAP INDICATE ONLY THE QUALITY OF FERTILE PORTION OF THE LAND USED FOR GRAIN. OTHER PORTIONS OF THE LAND, SUCH AS SLOPES OR AREAS OF MINOR FERTILITY, ARE NOT INCLUDED IN THE YIELD DATA. THE LAND WITHIN THE AREAS IS USED EXCLUSIVELY FOR WHEAT. THERE IS SOME OF OTHER CROPS IN SOME OF THE AREAS. GRAZING LAND IS MORE ABUNDANT IN THE LOWER YIELD AREAS.  
COUNTY MAPS ARE AVAILABLE SHOWING THE LOCATIONS OF WHEAT LANDS. THE LAND ACTUALLY USED FOR GRAIN IN THESE COUNTIES.  
IT SHOULD BE UNDERSTOOD THAT IN EACH YIELD AREA, THERE MAY BE A FEW FERTILE AREAS OR FIELDS THAT SHOW YIELDS OTHER THAN ABOVE OR BELOW THE AVERAGE YIELD OF THE AREA.  
THE FOUR-YEAR AVERAGE PERIOD 1929-1932, FROM WHICH THESE AVERAGE YIELD AREAS WERE DETERMINED, IS BELIEVED BY MANY TO BE A PERIOD OF LOWER THAN NORMAL YIELDS.

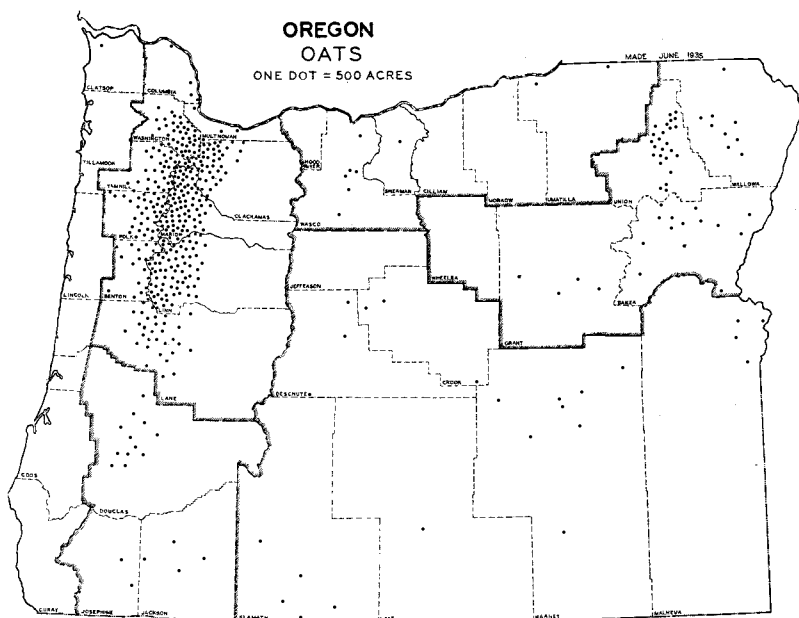
interspersed in the wheat land areas there is more or less grazing land, and in each yield area there are believed to have been a period of less than average wheat yields. See table, page 19.



PREPARED BY H.D. SCUDDER, OREGON AGRI. EXPT. STATION, AND E.B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

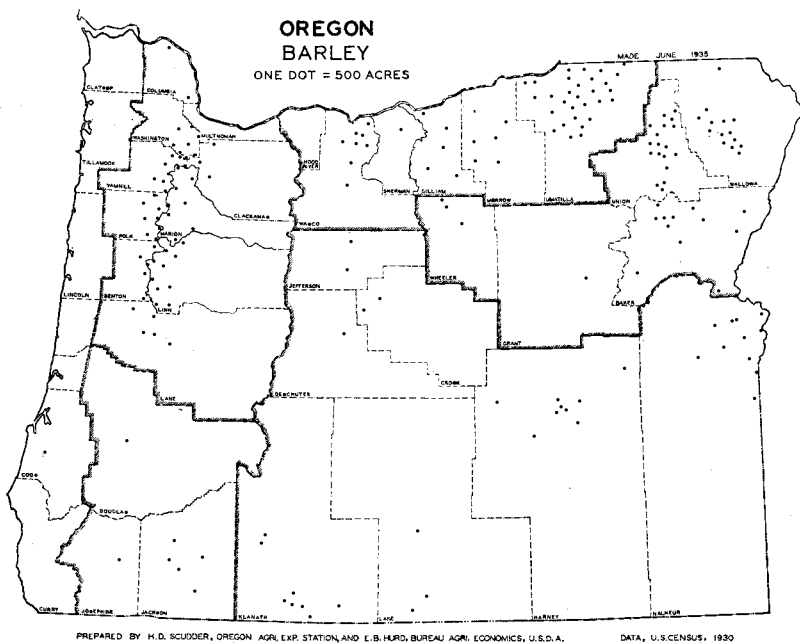
Wheat uses about 2 million acres of our crop land, produces 20 to 25 million bushels annually, brings a gross income of about 20 to 25 million dollars in normal times, or about 13 per cent of the gross annual value of all agricultural products. It ranks second only to dairy products in the state. About 75 per cent of this wheat is shipped out of Oregon.



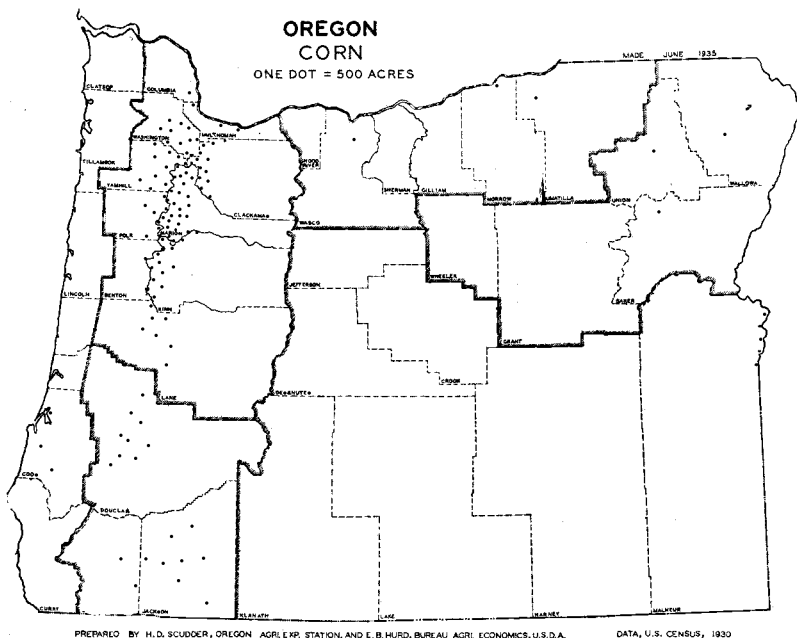
PREPARED BY H.D. SCUDDER, OREGON AGRI. EXPT. STATION, AND E.B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

Oats use about  $\frac{1}{2}$  million acres of crop land; produce 7 to 8 million bushels annually; gross value about \$4,000,000; grown chiefly in the Willamette Valley, largely for feed.

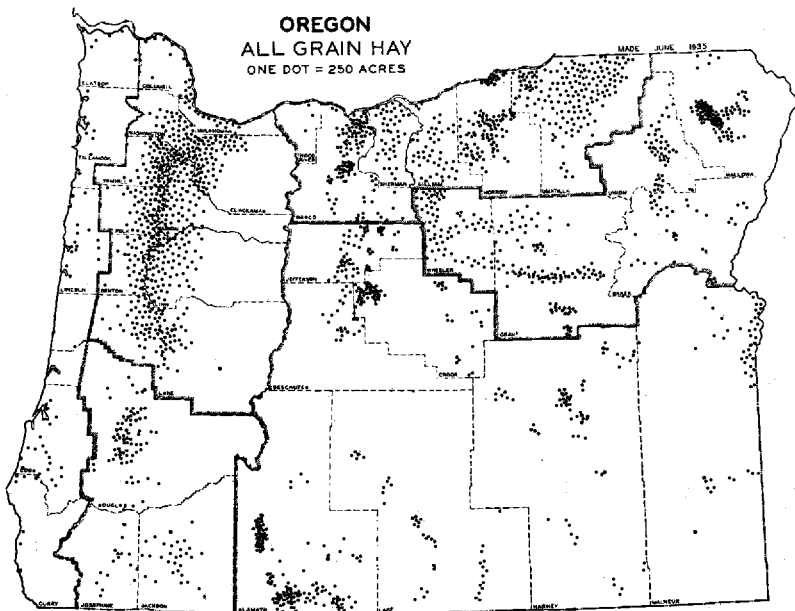


Oregon uses only a small acreage for barley, producing about 2½ million bushels, chiefly for feed, some for the brewing barley market.



Growing of corn has increased markedly in the past 25 years, but it is still a minor crop, grown chiefly (about  $\frac{2}{3}$  of it) for silage and forage purposes, and the grain for feed.

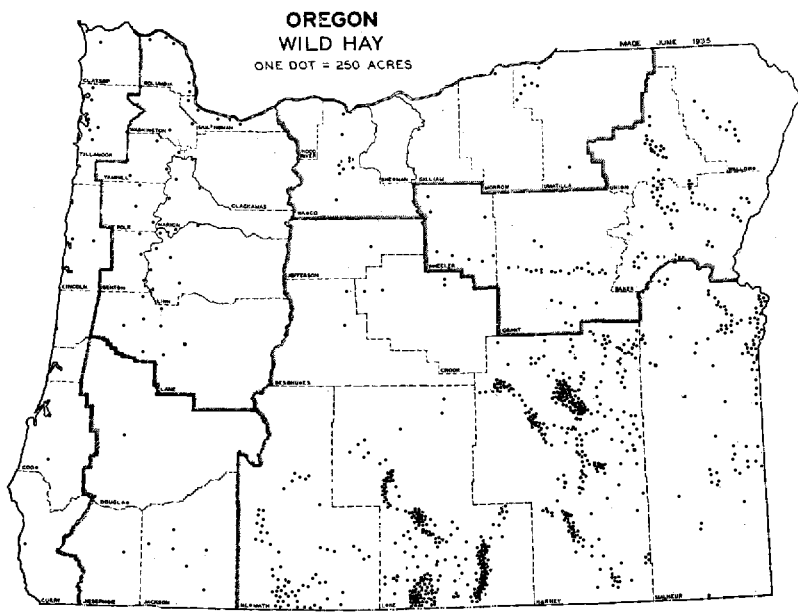




PREPARED BY H.D. SCUDDER, OREGON AGRIC. EXP. STATION, AND E.B. HURD, BUREAU AGRIC. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

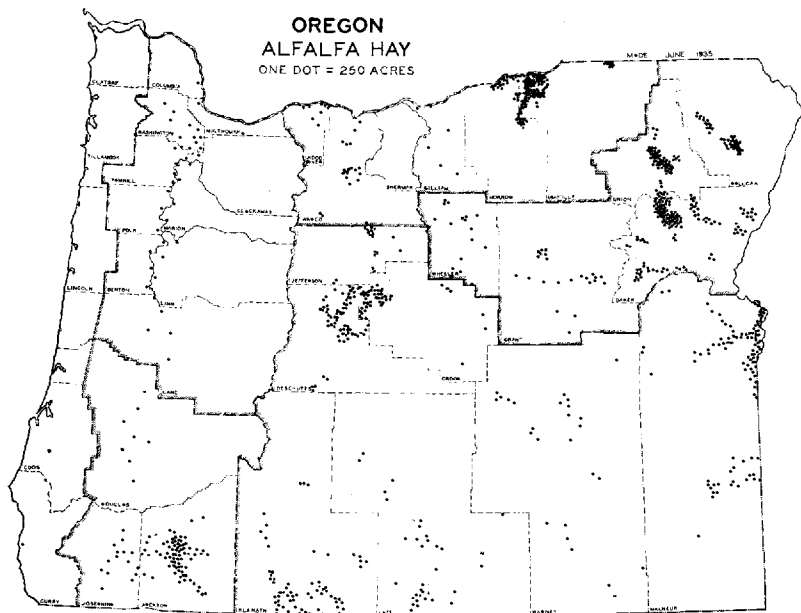
Grain hay is still the largest hay acreage in the state, producing (1929) 481,000 tons. Grown more or less of necessity on the dryer lands of Eastern Oregon, a considerable amount is still grown in Western Oregon, in place of needed legumes.



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DATA, U.S. CENSUS, 1930

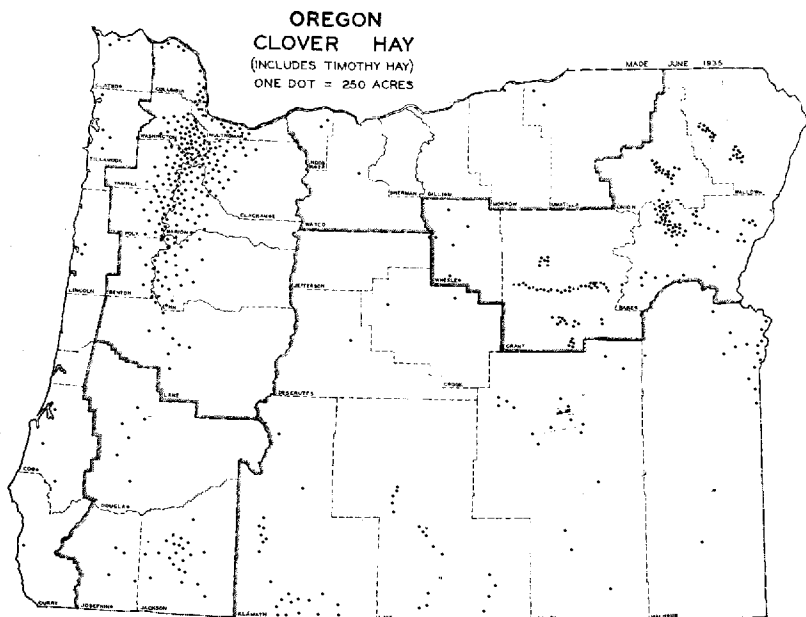
Wild hay uses a surprisingly large acreage of the total hay land, producing (1929) 236,000 tons. Grown chiefly in the Central Oregon region on winter floodwater lands, it is fed to range stock.



PREPARED BY H.B. SLUDDER, OREGON AGRIC. EXPER. STATION, AND F.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA: U.S. CENSUS, 1930

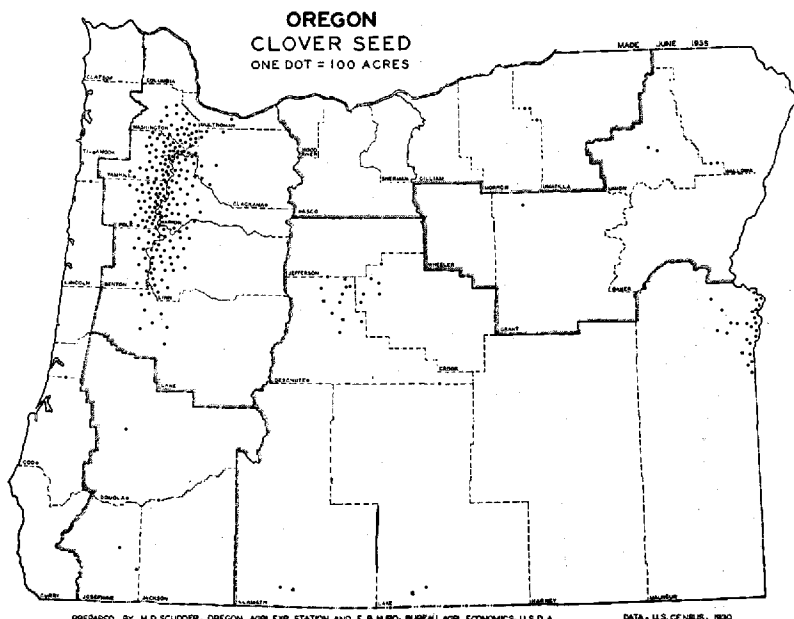
Alfalfa is easily the most valuable hay produced in the state, and yields the largest tonnage (1929) 636,000 tons. Its beneficial effect on the soil and fine feeding value commend it.



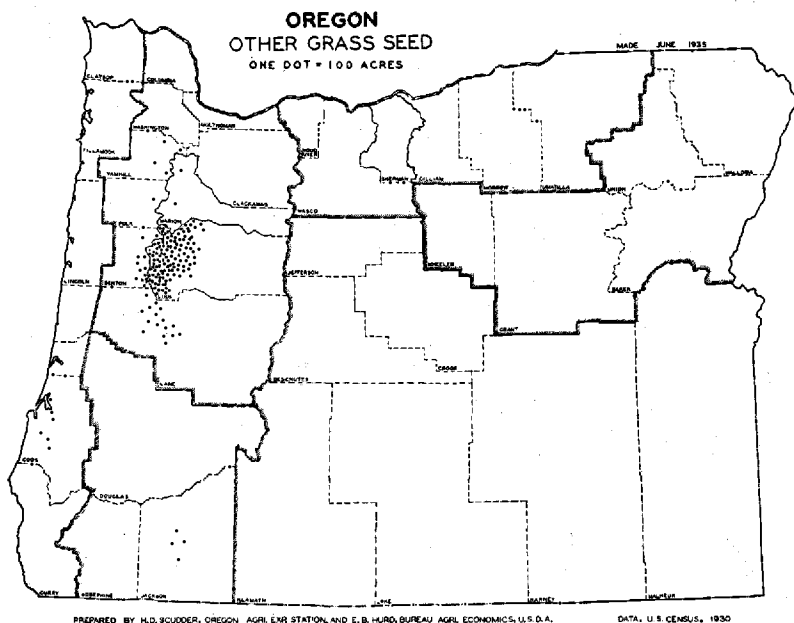
PREPARED BY H.B. SLUDDER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA: U.S. CENSUS, 1930

Clover hay ranks third in tonnage, 218,000 tons (1929) but first in soil building value. In the Willamette Valley and on Eastern Oregon irrigated lands it produces also a valuable cash crop of seed.



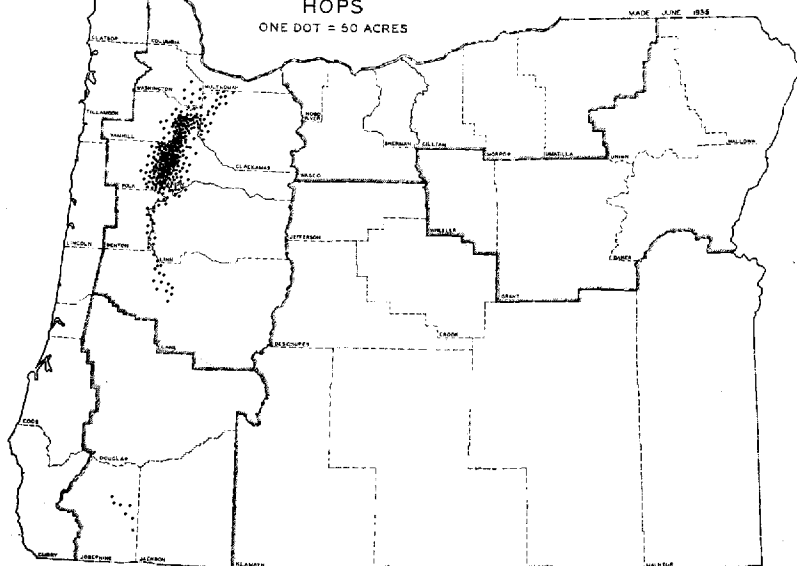
The clover seed cash crop is important in the Willamette Valley, and in Deschutes and Malheur counties. This source of income might well be increased with resultant soil benefits.



Grass seed growing is in its infancy in Oregon. Linn county uses the largest acreage, chiefly of domestic rye grass. Half a dozen varieties of grass seed offer good cash crop possibilities.

## OREGON HOPS

ONE DOT = 50 ACRES



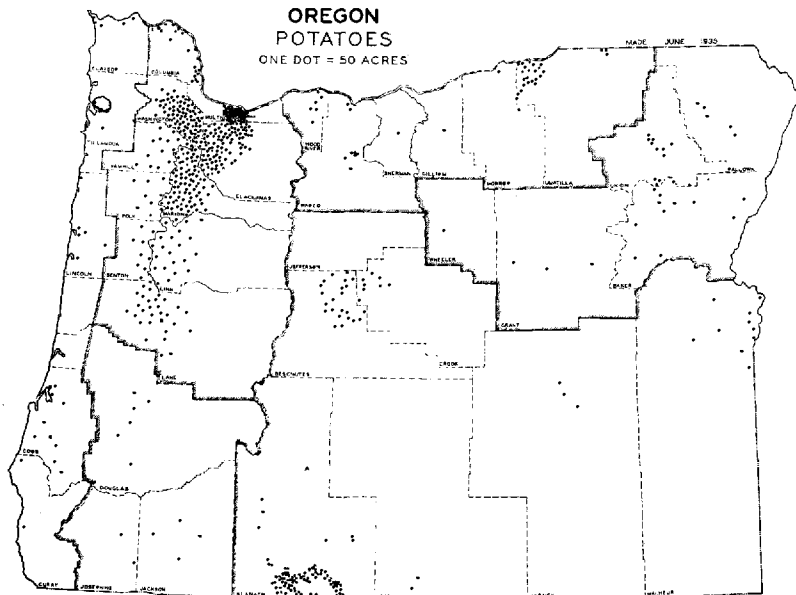
PREPARED BY H.D. SCODDER, OREGON AGR. EXP. STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

Oregon has 18 per cent of the world's hop acreage, a larger acreage (22,000 acres) than all other states combined. Most of the hop land is in the Willamette Valley and a considerable surplus is produced.

## OREGON POTATOES

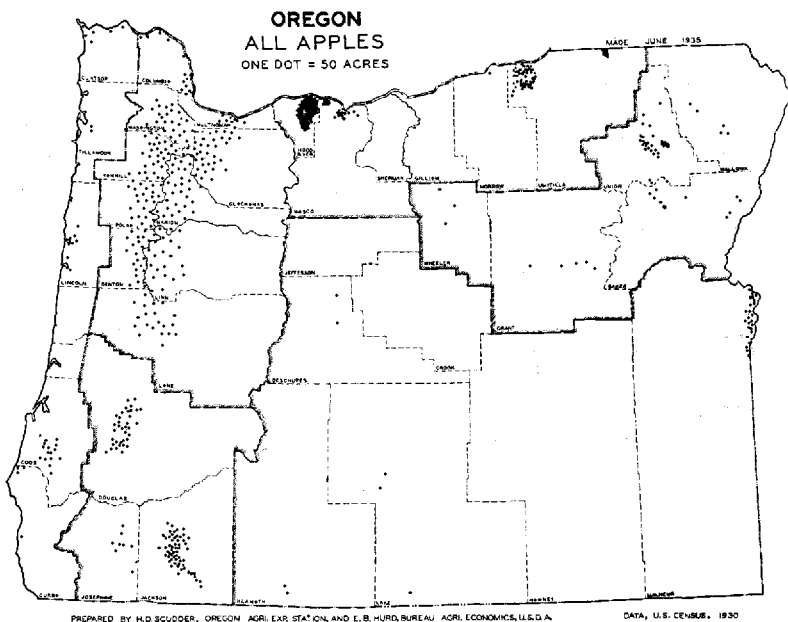
ONE DOT = 50 ACRES



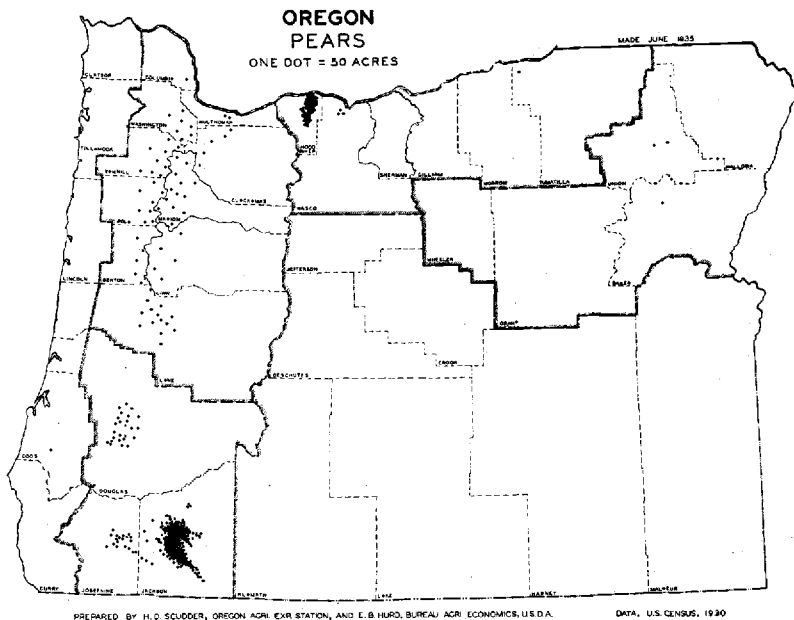
PREPARED BY H.D. SCODDER, OREGON AGR. EXP. STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

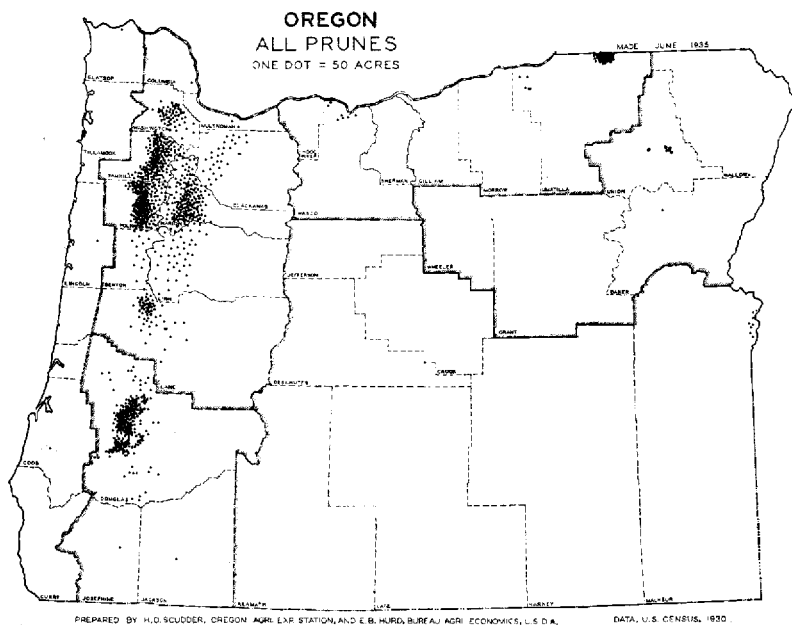
Potatoes use 3,300 acres (1929) of crop land and produce 4 to 5 million bushels. They are an important cash crop on Eastern Oregon irrigated land and a good rotation crop in the Willamette Valley.



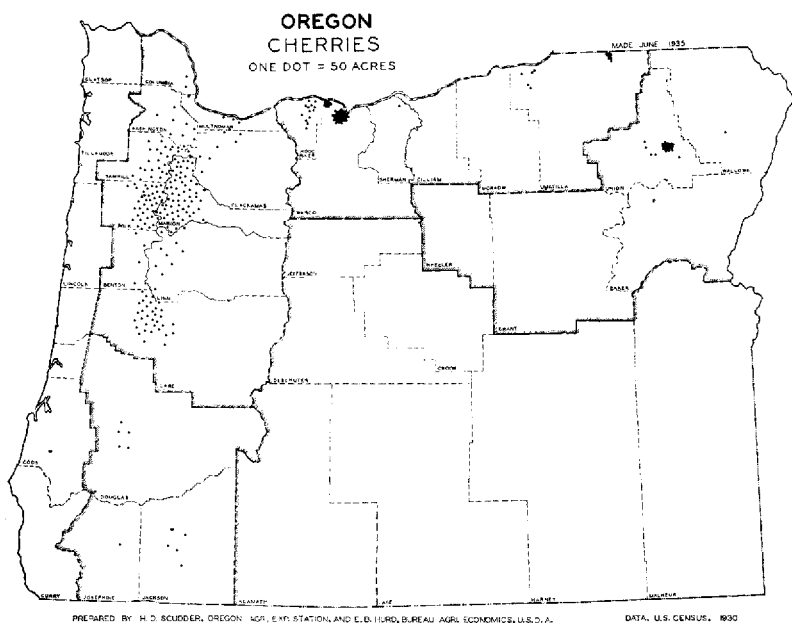
Greatest density for commercial apple production is found in the famous Hood River Valley. Much of the acreage in the Willamette Valley is not commercial. The enterprise is complex and requires great skill for profitable production. Over 70 per cent of the commercial crop is shipped out of the state.



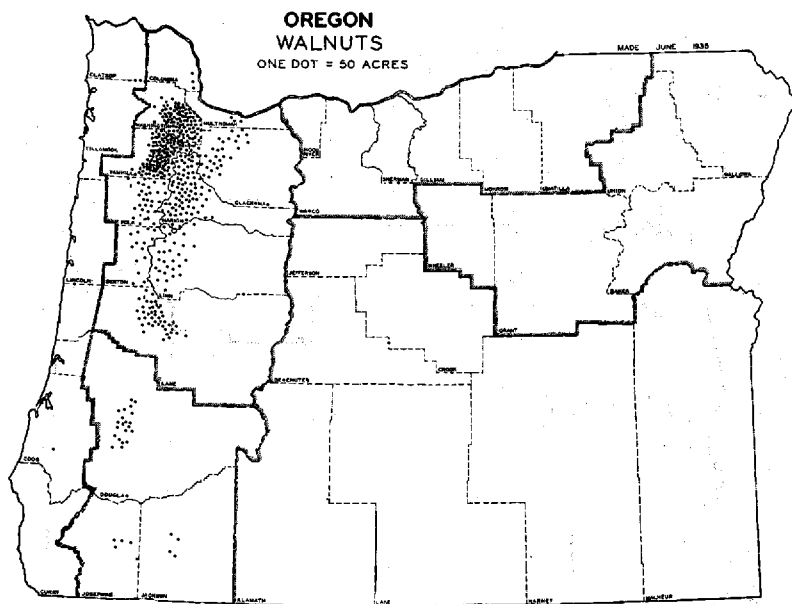
The world's finest commercial pears are produced in the Rogue River and Hood River valleys. The pear enterprise requires a high degree of skill and heavy investment, but with good management has proved profitable.



The great dried prune growing areas are the Willamette and Umpqua valleys. Fresh prunes are produced largely in Eastern Oregon. The prune crop has been in normal times the heaviest income producer of any of the fruit crops. It is a stable long-time enterprise, where 1500 pounds (dried) per acre or more can be produced.



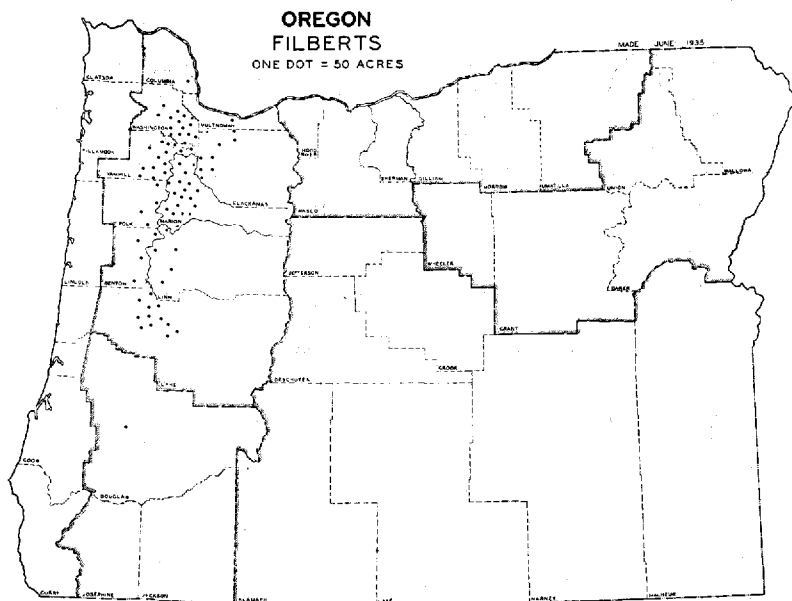
Greatest density for cherry production is in The Dalles area but greatest acreage (10,000 acres) in the Willamette Valley. This enterprise under normal conditions is profitable.



PREPARED BY H.D. SCUDDER, OREGON AGRI. EXP. STATION, AND E.B. HURO, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

English or Persian walnuts are a successful enterprise on properly selected lands in Western Oregon, particularly in the Willamette Valley. Over-production and competition are dangerous to the inferior groves. The Oregon walnut has superior quality.

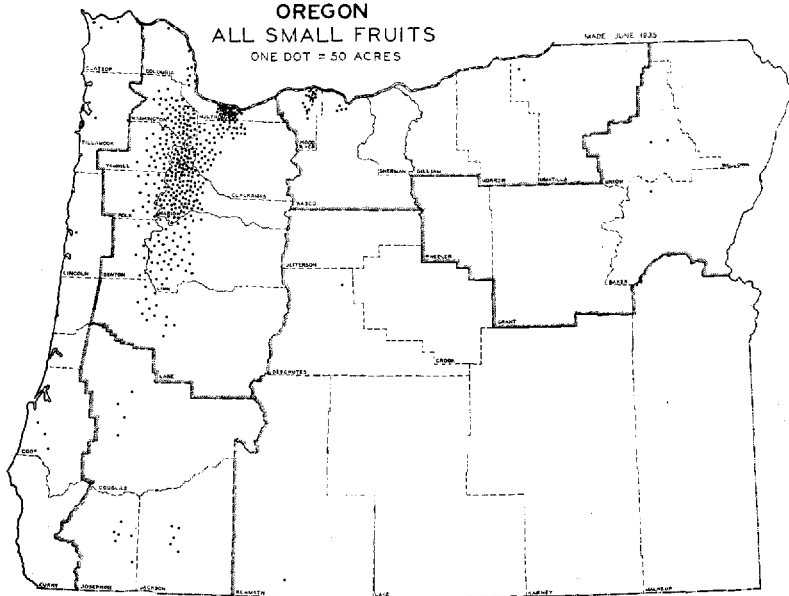


PREPARED BY H.D. SCUDDER, OREGON AGRI. EXP. STATION, AND E.B. HURO, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA, U.S. CENSUS, 1930

The Willamette Valley has something of a monopoly in filbert production and the enterprise is growing rapidly. Good yields and finest quality are possible.

MADE JUNE 1935

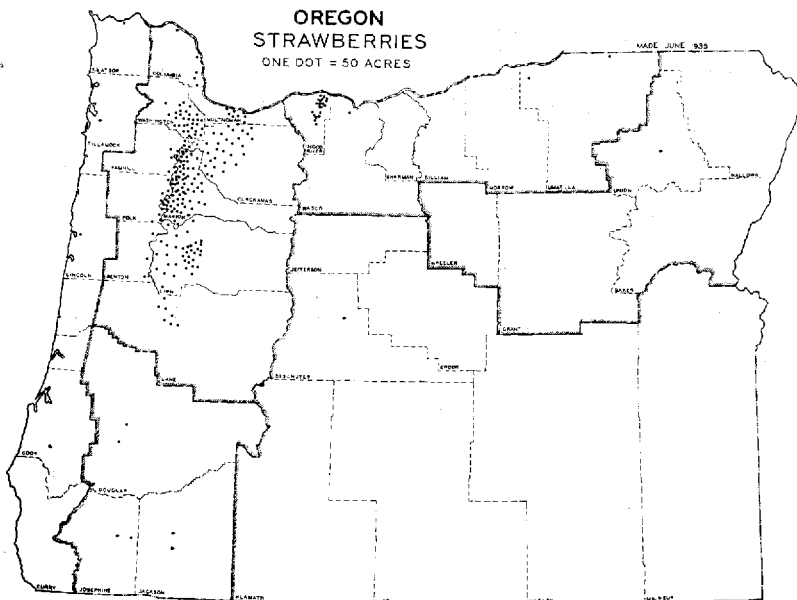


PREPARED BY H.D. SCUDDER, OREGON AGR. EXP. STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DAYA, U. S. CENSUS, 1935

of intensive enterprises, with 22,000 acres in production.

## MADE JUNE 1935

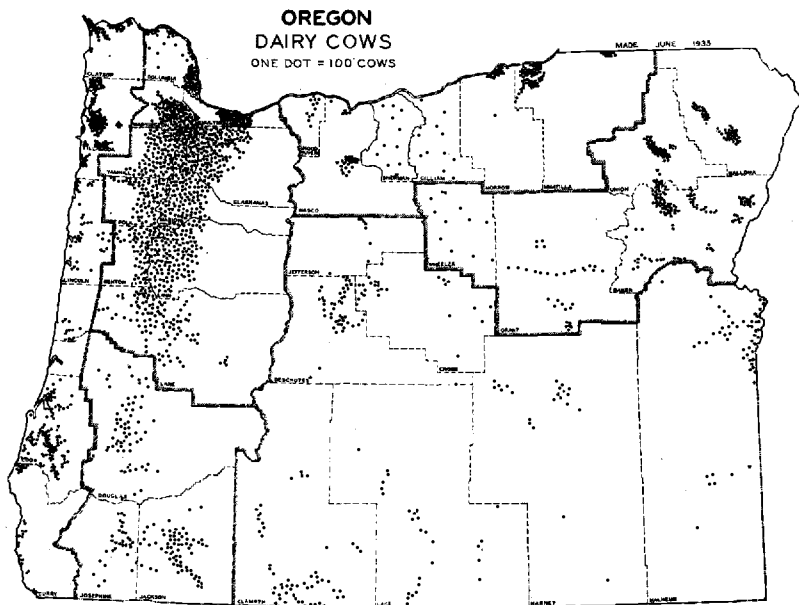


PREPARED BY H.D. SCUDDER, OREGON AGRI. EXP. STATION, AND E.B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA: U.S. CENSUS, 1930

Oregon, with 12,000 acres, chiefly in the Willamette valley, leads all states in strawberry production. Heavy yields, good quality and the frozen pack have made this enterprise a valuable source of income.

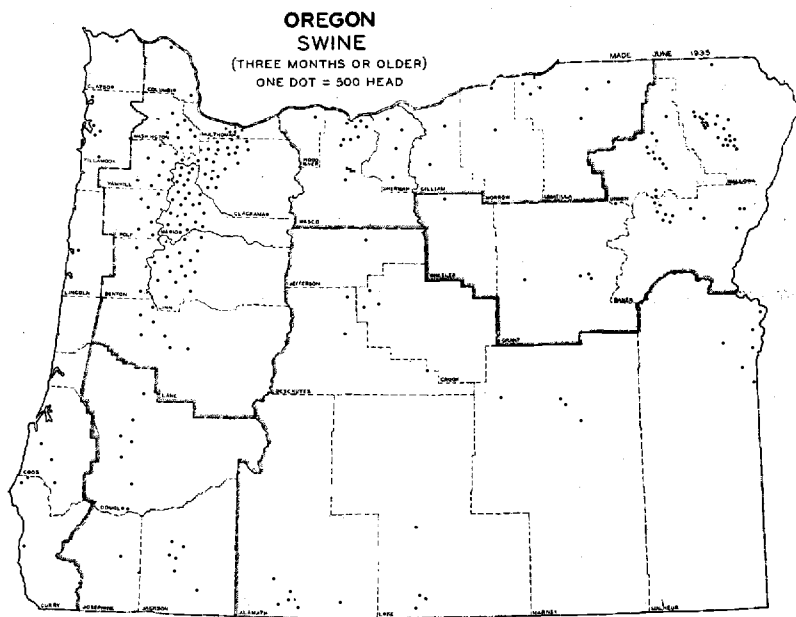




PREPARED BY H. D. SCUDDER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E. B. HURD, BUREAU AGRI. ECONOMICS, U.S.D.A.

DATA U.S. CENSUS, 1930

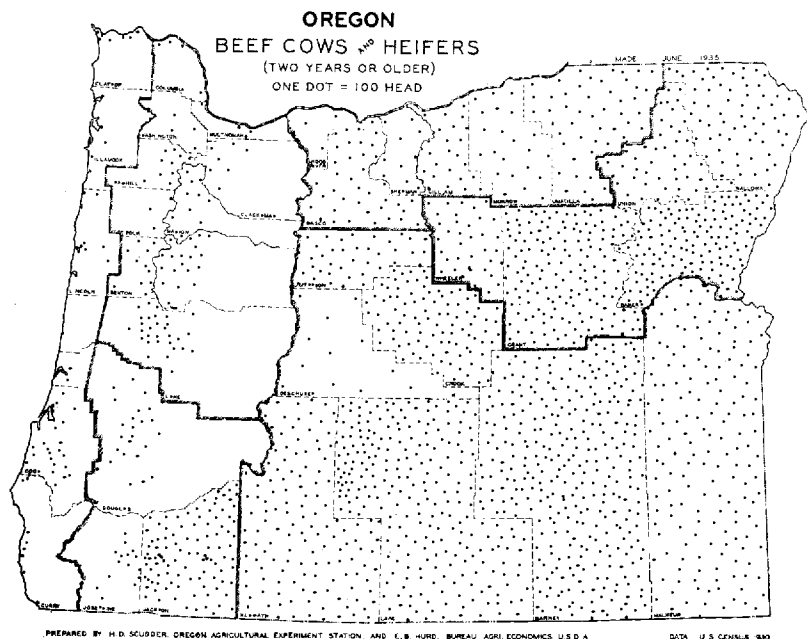
Dairying with 225,000 milk cows (1929) is Oregon's biggest income-producer. About 30 million dollars gross, or 16 per cent, of the state's gross agricultural income comes from milk products alone. Probably the most valuable all-around enterprise in the state.



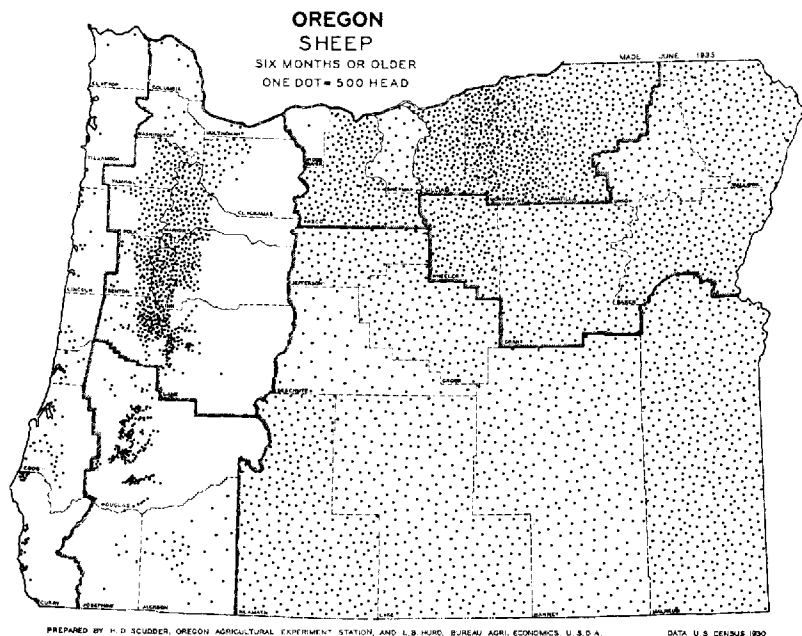
PREPARED BY H. D. SCUDDER, OREGON AGRICULTURAL EXPERIMENT STATION, AND E. B. HURD, BUREAU AGRI. ECONOMICS

DATA U.S. CENSUS, 1930

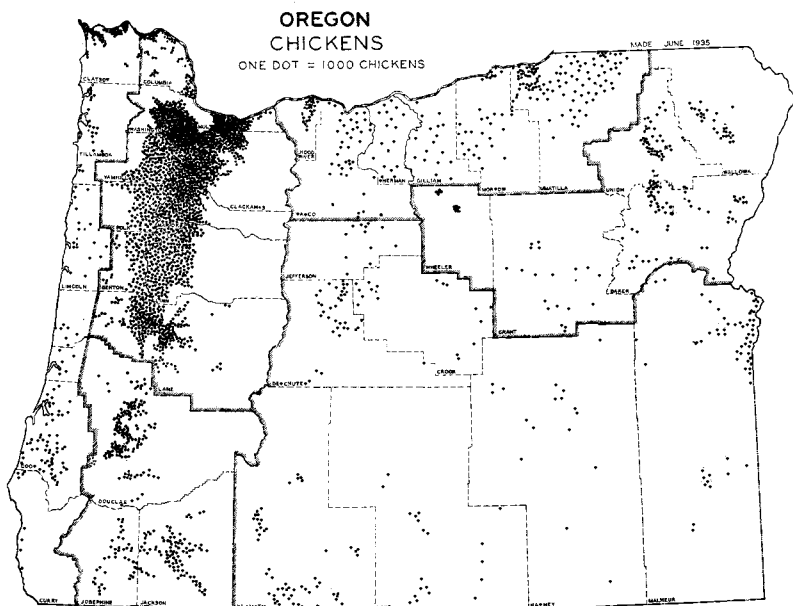
Oregon does not meet its own needs in hog production, chiefly because of the lack of cheap feeds. Swine are closely associated with dairying. Wallowa, Marion, and Clackamas counties are the largest producers.



Beef cattle production is a range grazing enterprise in Oregon. General location of the range is indicated by the cattle distribution. Central Oregon and the Blue Mountain regions are the heaviest producers. See maps, pages 35 and 36.



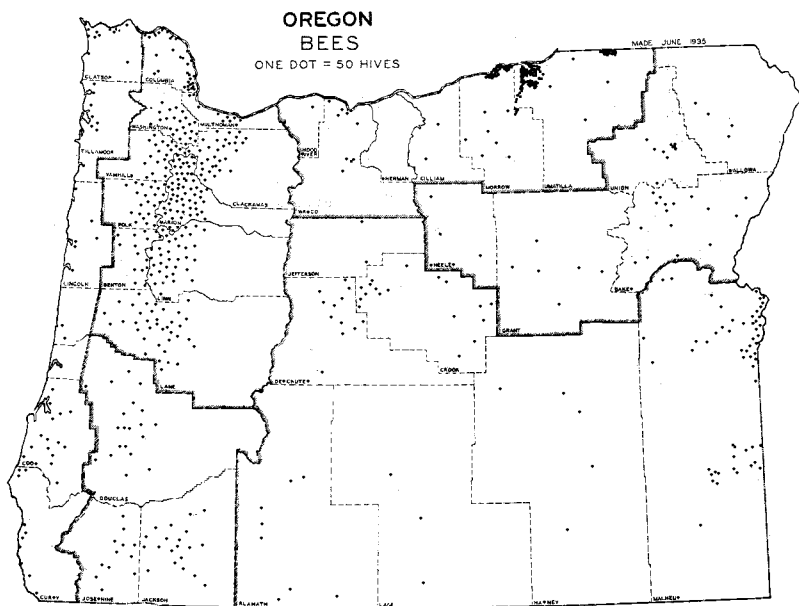
In Western Oregon farm sheep, in Eastern Oregon range sheep, a total of more than 2 million, produce 8 per cent of the gross agricultural income of the state. One of the most profitable livestock enterprises on farm and range. See maps, pages 35 and 37.



PREPARED BY H.D. SCUDDER, OREGON AGR. EXP. STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA: U.S. CENSUS, 1930

Commercial egg production in Oregon is highly successful. Constitutes about 8 per cent of the state's gross agricultural income. One of the best intensive enterprises, especially in Western Oregon. Surplus marketed profitably on the Atlantic seaboard.

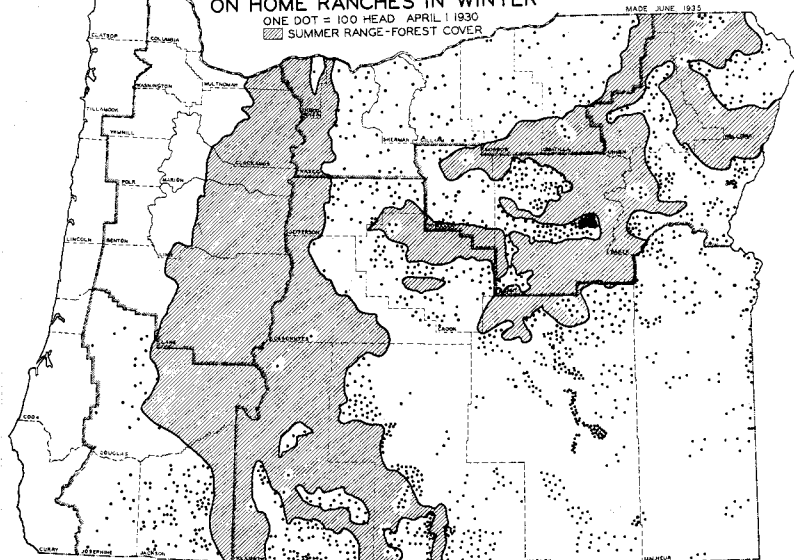


PREPARED BY H.D. SCUDDER, OREGON AGR. EXP. STATION, AND E.B. HURD, BUREAU AGR. ECONOMICS, U.S.D.A.

DATA: U.S. CENSUS, 1930

Bee keeping is widely dispersed over the state wherever bee pasture is available. About 65,000 colonies, producing \$200,000 gross, marketed at home.

# OREGON BEEF COWS IN RANGE REGIONS ON HOME RANCHES IN WINTER

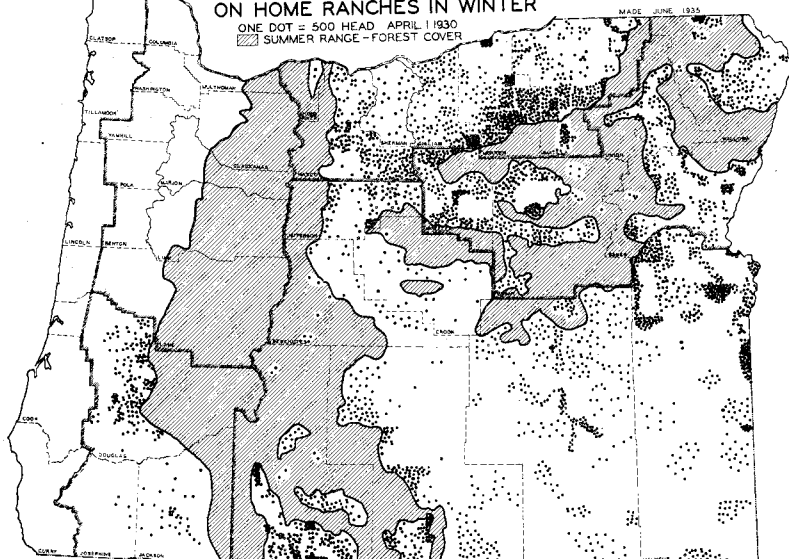


PREPARED BY E. B. HURD, BUREAU AGRICULTURAL ECONOMICS, U.S.D.A., AND H. D. SCUDDER, OREGON AGRICULTURAL EXPERIMENT STATION

DATA, U.S. CENSUS, 1930

Range cattle are concentrated in winter on the irrigated areas with a scattering of herds in the Columbia Basin. (See Page 16). The range land is limited to Eastern and Southern Oregon.

# OREGON SHEEP OTHER THAN LAMBS IN RANGE REGIONS ON HOME RANCHES IN WINTER

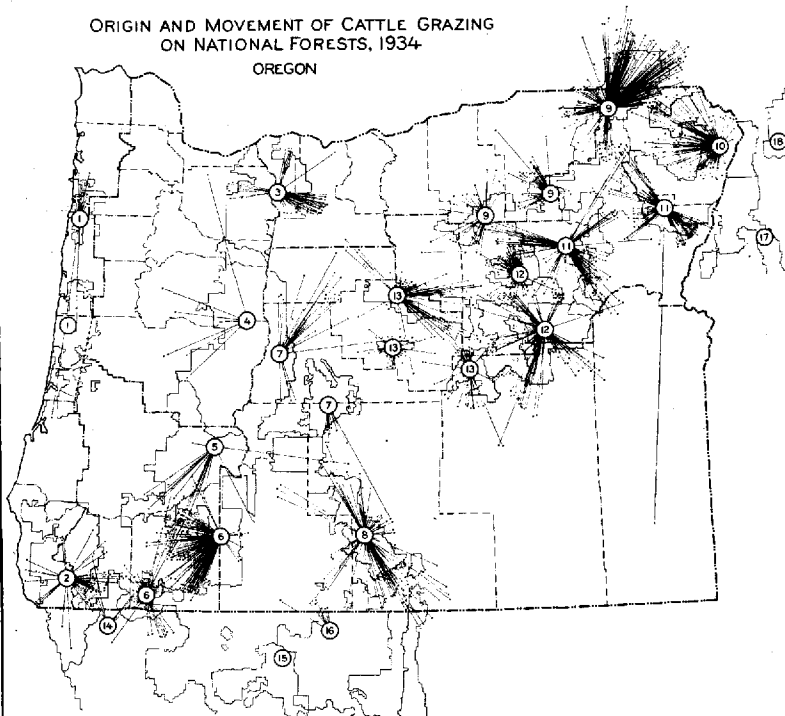


PREPARED BY H. D. SCUDDER, OREGON EXPERIMENT STATION, AND E. B. HURD, BUREAU AGRICULTURAL ECONOMICS

DATA, U.S. CENSUS, 1930

Range sheep in winter are associated with irrigated meadows or with dry farm land too low yielding for cash grain. Greatest concentration of sheep in the state is in the Columbia Basin between the 10-bushel wheat belt and the forest line. (See Page 20).

ORIGIN AND MOVEMENT OF CATTLE GRAZING  
ON NATIONAL FORESTS, 1934  
OREGON



NATIONAL FORESTS

NATIONAL FOREST BOUNDARY LINES SLIGHTLY GENERALIZED

COAST REGION

1. Siuslaw
2. Siskiyou

CASCADE REGION

3. Hood
4. Willamette
5. Umpqua
6. Rogue River
7. Deschutes
8. Fremont
9. Klamath
10. Shasta
11. Modoc

BLUE MOUNTAIN REGION

12. Malheur
13. Ochoco
14. Walla Walla
15. Whitman
16. Weiser
17. Nezperce

LOCATION OF HOME RANCH OF EACH PERMITTEE  
CATTLE

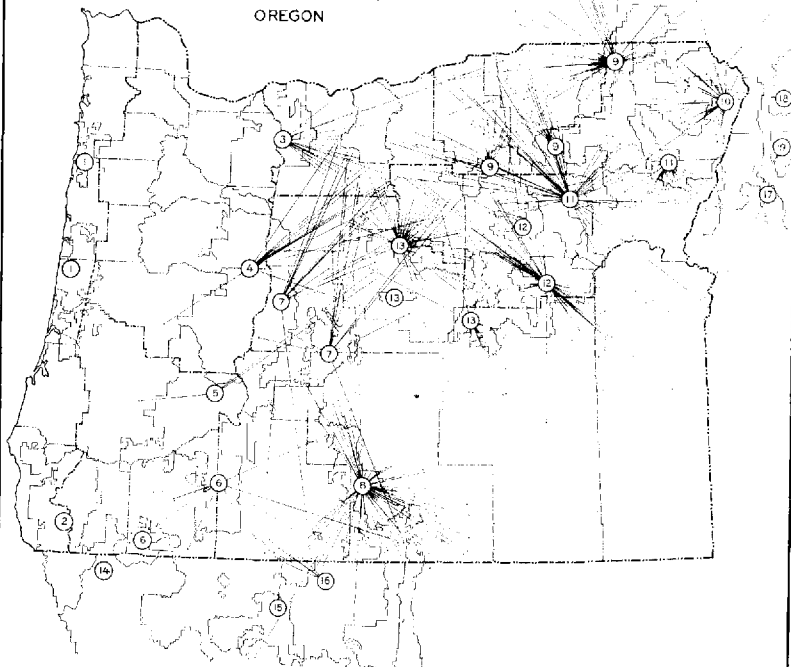
NOTE: DATA FROM GRAZING PERMITS ISSUED BY FOREST SUPERVISORS ASSEMBLED AND PREPARED BY E. B. HURD,  
BUREAU OF AGRICULTURAL ECONOMICS AND H. D. SCUDDER, OREGON EXPERIMENT STATION

U.S. DEPARTMENT OF AGRICULTURE

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Twenty-one per cent of the beef cattle of the range regions are moved to the national forests for summer range. This movement is mostly limited to a distance of 50 miles. Over half of the cattle ranches using the national forests have less than 100 head. Cattle that do not move to the national forest are mostly of the feeder type.

ORIGIN AND MOVEMENT OF SHEEP GRAZING  
ON NATIONAL FORESTS, 1934  
OREGON



NATIONAL FORESTS		
NATIONAL FOREST BOUNDARY LINES SLIGHTLY GENERALIZED		
COAST REGION	CASCADE REGION	BLUE MOUNTAIN REGION
1. <i>Siustaw</i>	3. <i>Hood</i>	9. <i>Umatilla</i>
2. <i>Siskiyou</i>	4. <i>Willamette</i>	10. <i>Wallowa</i>
	5. <i>Umpqua</i>	11. <i>Whitman</i>
	6. <i>Rogue River</i>	12. <i>Malheur</i>
	7. <i>Deschutes</i>	13. <i>Ochoco</i>
	8. <i>Fremont</i>	14. <i>Klamath</i>
		15. <i>Shasta</i>
		16. <i>Modoc</i>
		17. <i>Weiser</i>
		18. <i>Nezperce</i>
		19. <i>Idaho</i>

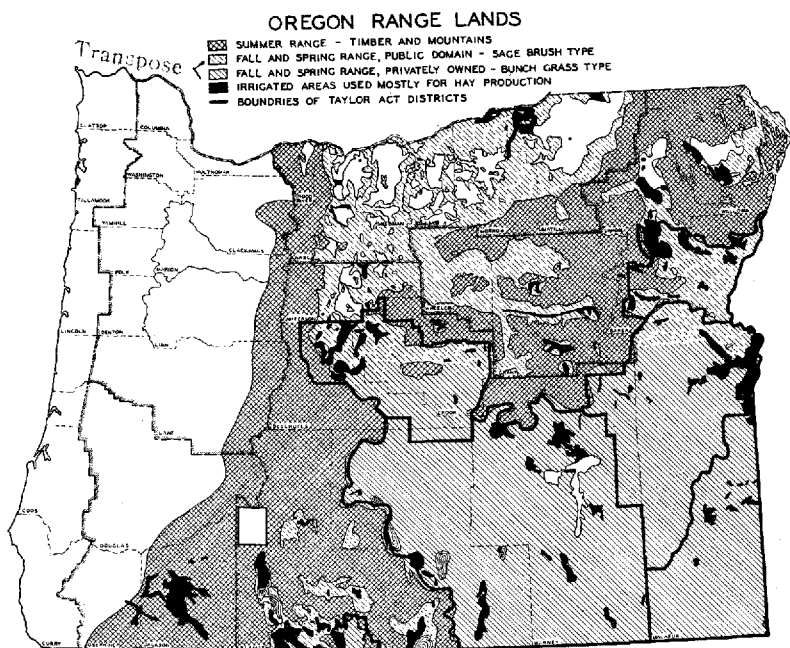
LOCATION OF HOME RANCH OF EACH PERMITTEE  
SHEEP

NOTE: DATA FROM GRAZING PERMITS ISSUED BY FOREST SUPERVISORS ASSEMBLED AND PREPARED BY E. B. HURD,  
BUREAU OF AGRICULTURAL ECONOMICS AND H. D. SCUDDER, OREGON EXPERIMENT STATION

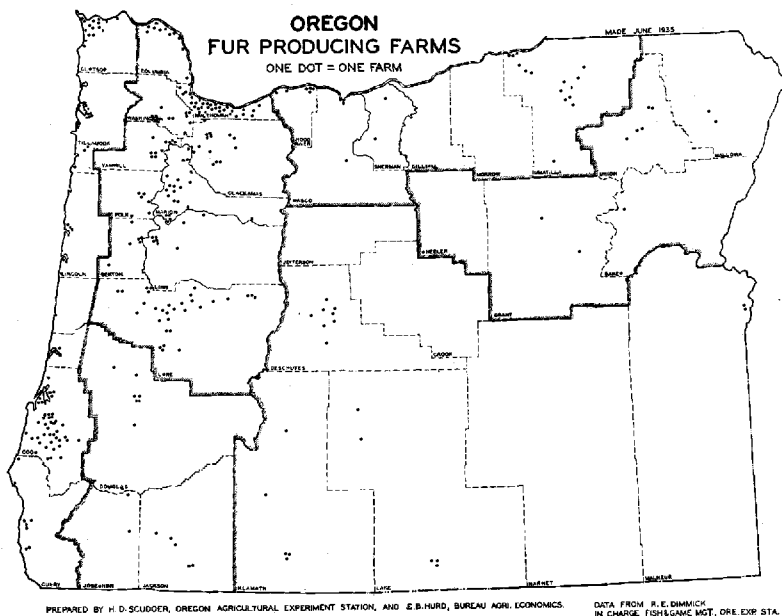
U.S. DEPARTMENT OF AGRICULTURE

RES. 23549 BUREAU OF AGRICULTURAL ECONOMICS

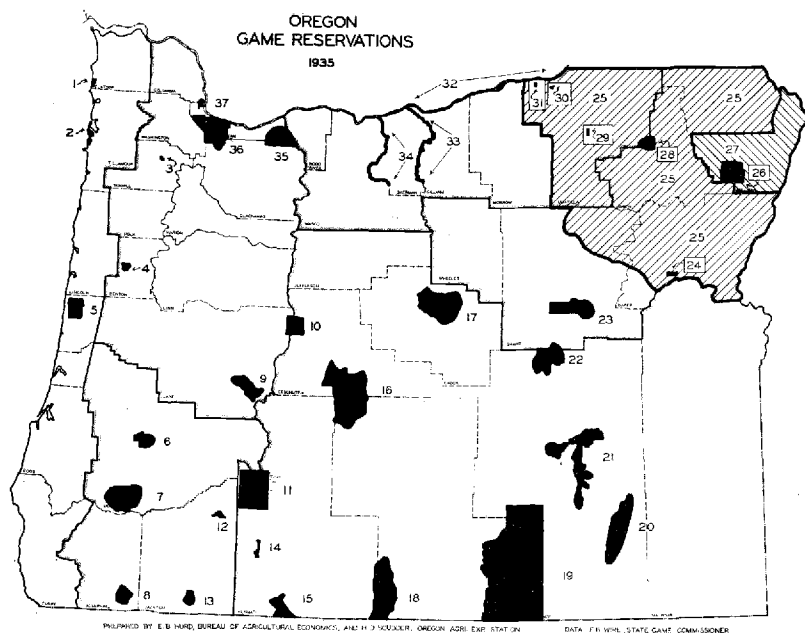
Thirty-five per cent of the sheep in the range regions are moved to the national forests. The average distance traveled by range sheep is several times that of cattle. Sheep ranches are several times larger than cattle ranches. Ranchers moving sheep to summer range or national forest are producing market lambs while sheepmen not having choice summer range are producing more of the breeding stock type.



PREPARED BY - OREGON AGRICULTURAL EXPERIMENT STATION



The domestic production of fur is a new enterprise for Oregon farms. Approximate location of many farms having some sort of fur enterprise is shown on this map.



### OREGON GAME REFUGES

December, 1935

No. on map	Name	Area (acres)	No. on map	Name	Area (acres)
1	Lake Lytle Refuge .....	.....	20	Steen's Mountain .....	130,560
2	Three Arch Rocks* .....	2	21	Lake Malheur Bird Reservation* .....	88,960
3	Carlton Lake .....	2,800	22	Myrtle Park .....	83,200
4	Corvallis Watershed .....	9,120	23	Canyon Creek .....	48,320
5	Grass Mountain .....	31,040	24	Burnt River .....	1,560
6	Whitetail Deer .....	21,440	25	Only area open to Elk hunting .....	.....
7	Cow Creek .....	114,240	26	Wallowa Mountain Sheep .....	65,760
8	Oregon Caves .....	30,000	27	Closed to Elk Hunting only .....	.....
9	Salt Creek .....	41,600	28	Mt. Emily .....	20,400
10	Three Sisters .....	46,080	29	McKay Creek Bird Reservation* .....	1,813
11	Crater Lake National Park* .....	159,359	30	Cold Spring Bird Reservation* .....	2,520
12	Prospect .....	8,960	31	Umatilla County .....	760
13	Ashland Watershed .....	12,985	32	Columbia River .....	28,200
14	Upper Klamath Wild Life* .....	8,140	33	John Day River .....	23,360
15	Klamath Lake Bird Reserve* .....	81,619	34	Deschutes River .....	320
16	Deschutes .....	279,680	35	Bull Run Watershed .....	69,120
17	Ochoco .....	147,840	36	Clackamas County .....	13,120
18	Mule Deer .....	172,160	37	Sturgeon Lake .....	2,200
19	Warner .....	946,560			

\* Federal. Stock grazing regulated.



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R. S. Besse, M.S.....	Vice Director
Marie Dew.....	Secretary
Esther McKinney.....	Accountant

#### Division of Agricultural Economics

E. L. Potter, M.S.....Agricultural Economist ; in Charge, Division of Agri. Economics  
*Agricultural Economics*

W. H. Dreesen, Ph.D.....Agricultural Economist

#### Farm Management

H. D. Scudder, B.S.....	Economist (Farm Management)
H. E. Selby, M.S.....	Associate Economist (Farm Management)
G. W. Kuhlman, M.S.....	Associate Economist (Farm Management)
A. S. Burrier, M.S.....	Associate Economist (Farm Management)
E. B. Hurd, M.S.....	Assoc. Economist, Div. of Farm Mgt., Bur. of Agric. Economics

#### Division of Animal Industries

P. M. Brandt, A.M.....Dairy Husbandman ; In Charge, Division of Animal Industries

#### Animal Husbandry

O. M. Nelson, M.S.....	Animal Husbandman
A. W. Oliver, M.S.....	Assistant Animal Husbandman

#### Dairy Husbandry

Gustav Wilster, Ph.D.....	Dairy Husbandman (Dairy Manufacturing)
I. R. Jones, Ph.D.....	Associate Dairy Husbandman

#### Fish, Game, and Fur Animal Management

R. E. Dimick, M.S.....Assistant in Charge

#### Poultry Husbandry

A. G. Lunn, B.S.....	Poultry Husbandman
F. L. Knowlton, M.S.....	Poultry Husbandman
F. E. Fox, M.S.....	Associate Poultry Husbandman

#### Veterinary Medicine

B. T. Simms, D.V.M.....	Veterinarian
W. T. Johnson, B.S., D.V.M.....	Poultry Pathologist
J. N. Shaw, B.S., D.V.M.....	Associate Veterinarian
R. Jay, D.V.M.....	Associate Veterinarian, Bureau of Animal Industry*
E. M. Dickinson, D.V.M., M.S.....	Assistant Poultry Pathologist
F. M. Bolin, D.V.M.....	Assistant Veterinarian*
O. H. Muth, D.V.M., M.S.....	Assistant Veterinarian
O. L. Searcy, B.S.....	Technician

#### Division of Plant Industries

G. R. Hyslop, B.S.....Agronomist ; In Charge, Division of Plant Industries  
*Farm Crops*

H. A. Schoth, M.S.....	Associate Agronomist ; Forage Crops and Disease Investigation*
D. D. Hill, M.S.....	Associate Agronomist
D. C. Smith, Ph.D.....	Assistant Agronomist*
B. B. Robinson, Ph.D.....	Assistant Plant Breeder, Fiber Flax Investigations*
Grace Cole Fleischman, A.B.....	Assistant Botanist, Division of Seed Investigations*
A. E. Gross, M.S.....	Research Fellow in Farm Crops

#### Horticulture

W. S. Brown, M.S., D.Sc.....	Horticulturist
A. G. B. Bouquet, M.S.....	Horticulturist (Vegetable Crops)
E. H. Wiegand, B.S.A.....	Horticulturist (Horticultural Products)
H. Hartman, M.S.....	Horticulturist (Pomology)
C. E. Schuster, M.S.....	Horticulturist (Fruits and Vegetable Crops and Diseases)
W. P. Duruz, Ph.D.....	Horticulturist (Plant Propagation)
G. F. Waldo, M.S.....	Asst. Pomologist (Fruits and Vegetable Crops and Diseases)
T. Onsdorff, M.S.....	Assistant Horticulturist (Horticultural Products)

## STATION STAFF—(Continued)

### *Soil Science*

W. L. Powers, Ph.D. .... Soil Scientist  
 C. V. Ruzek, M.S. .... Soil Scientist (Fertility)  
 M. R. Lewis, C.E. .... Irrigation and Drainage Engineer, Bur. of Agric. Engineering\*  
 R. E. Stephenson, Ph.D. .... Associate Soil Scientist  
 E. F. Torgerson, B.S. .... Assistant Soil Scientist (Soil Survey)

### Other Departments

#### *Agricultural Chemistry*

J. S. Jones, M.S.A. .... Chemist in Charge  
 R. H. Robinson, M.S. .... Chemist (Insecticides and Fungicides)  
 J. R. Haag, Ph.D. .... Chemist (Animal Nutrition)  
 D. E. Bullis, M.S. .... Associate Chemist (Horticultural Products)  
 M. B. Hatch, M.S. .... Assistant Chemist

#### *Agricultural Engineering*

F. E. Price, B.S. .... Agricultural Engineer  
 C. Ivan Branton, B.S. .... Assistant Agricultural Engineer

#### *Bacteriology*

G. V. Copson, M.S. .... Bacteriologist in Charge  
 J. E. Simmons, M.S. .... Associate Bacteriologist  
 W. B. Bollen, Ph.D. .... Associate Bacteriologist

#### *Entomology*

D. C. Mote, Ph.D. .... Entomologist in Charge  
 A. O. Larson, M.S. .... Entomologist (Stored Products Insects)\*  
 H. A. Scullen, Ph.D. .... Associate Entomologist  
 B. G. Thompson, M.S. .... Assistant Entomologist  
 S. C. Jones, M.S. .... Assistant Entomologist  
 K. W. Gray, M.S. .... Field Assistant (Entomology)  
 W. D. Edwards, B.S. .... Field Assistant (Entomology)

#### *Home Economics*

Maud M. Wilson, A.M. .... Home Economist

#### *Plant Pathology*

C. E. Owens, Ph.D. .... Plant Pathologist  
 S. M. Zeller, Ph.D. .... Plant Pathologist  
 B. F. Dana, M.S. .... Plant Pathologist, Division Fruits and Vegetable Crops Diseases\*  
 F. D. Bailey, M.S. .... Associate Plant Pathologist (Insecticide Control Division)\*  
 F. P. McWhorter, Ph.D. .... Plant Pathologist\*  
 P. W. Miller, Ph.D. .... Assoc. Pathologist (Div. Fruits and Veg. Crops and Dis.)\*  
 G. R. Hoerner, M.S. .... Agent (Hop Disease Investigations)\*  
 T. Dykstra, M.S. .... Asst. Plant Pathologist (Div. Fruits and Veg. Crops and Dis.)\*  
 Roderick Sprague, Jr., Ph.D. .... Assistant Pathologist (Cereal Diseases)\*  
 H. H. Millsap .... Agent (Division of Fruits and Vegetable Crops and Diseases)\*

#### *Publications and News Service*

C. D. Byrne, M.S. .... Director of Information  
 E. T. Reed, B.S., A.B. .... Editor of Publications  
 D. M. Goode, B.A. .... Editor of Publications  
 J. C. Burtner, B.S. .... Associate in News Service

### Branch Stations

D. E. Stephens, B.S. .... Supt., Sherman Br. Expt. Sta., Moro; Sr. Agronomist\*  
 L. Childs, A.B. .... Superintendent, Hood River Br. Expt. Station, Hood River  
 F. C. Reimer, M.S. .... Superintendent, Southern Oregon Br. Expt. Station, Talent  
 D. E. Richards, B.S. .... Supt. Eastern Oregon Livestock Br. Expt. Sta., Union  
 H. K. Dean, B.S. .... Superintendent, Umatilla Br. Expt. Station, Hermiston\*  
 O. Shattuck, M.S. .... Superintendent, Harney Valley Br. Expt. Station, Burns  
 H. B. Howell, B.S. .... Superintendent, John Jacob Astor Br. Expt. Sta., Astoria  
 G. A. Mitchell, B.S. .... Act. Supt. Pendleton Br. Expt. Sta., Pendleton; Asst. Agron.\*  
 G. G. Brown, A.B., B.S. .... Horticulturist, Hood River Br. Expt. Station, Hood River  
 Arch Work, B.S. .... Associate Irrigation Engineer, Medford\*  
 W. W. Aldrich, Ph.D. .... Assistant Horticulturist, Bureau of Plant Industry, Medford\*  
 L. G. Gentner, M.S. .... Associate Entomologist, Sou. Or. Br. Expt. Sta., Talent  
 J. F. Martin, M.S. .... Junior Agronomist, Div. Cereal Crops and Diseases, Pendleton\*  
 M. M. Oveson, M.S. .... Assistant to Supt., Sherman Br. Experiment Station, Moro\*  
 R. B. Webb, M.S. .... Jr. Agronomist, Sherman Branch Experiment Station, Moro  
 R. E. Hutchison, B.S. .... Asst. to Supt., Harney Branch Expt. Station, Burns