Report of the

Coos County

Agricultural Conference

Conducted In

COQUILLE, OREGON

MARCH 10 AND 11, 1936
COOS COUNTY AVERAGE CASH FARM INCOME
1926 .... 1930

CROP PRODUCTS 24.3
DAIRY PRODUCTS 51.4%
ANIMAL PRODUCTS 75.2

SMA abl FRUIT
& GREENHOUSE 6.9%
NURSERY
FIELD CROPS 6.9%
 TREE FRUIT
& NUTS 5.2%
 TRUCK CROPS 1.2%
 LIVESTOCK
& Prod. 15.2%
 POULTRY
& EGGS 7.8%
 OTHER ANIMAL
PROD. 8%

AVERAGE CASH FARM INCOME $2,117,000.00

OCC EXTENSION SERVICE

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FOREWORD

This bulletin contains the report prepared by seven committees of producers in Coos county which were organized to gather information on various phases of agriculture to be considered at the agricultural conference which was held in Coquille on March 10 and 11. All reports included were read and adopted by the entire conference and a resolution passed at that time directed the committee in charge to devise ways and means of publishing the report.

The conference was planned and conducted by the Coos County Agricultural Council cooperating with the Extension Service of the Oregon State Agricultural College. The purposes of the conference were first, to gather accurate and detailed information on all phases of agriculture; second, to present this information in definite and concise form; third, to make recommendations based on conclusions drawn from the assembled facts.

Recommendations included in this report represent the best opinions of committees made up almost entirely of representative and practical producers and constitute a program for the guidance of Coos county's agriculture. The seven committees included 78, and approximately 300 farmers participated in the event.

Credit is given for this publication to the Coos County Chamber of Commerce which organization, feeling that this type of information is valuable not only to the people of this county but to those in all parts of the country who request information on Coos County's agriculture, appointed a committee that has actively solicited financial support necessary to make this publication possible. The names of those who have contributed appear on the back cover of the bulletin.

It is hoped that all persons interested in agriculture in the county will individually and through their organizations study this report and use it as a guide for the best development of the agricultural resources of Coos County.

J. A. LARSON, President
GEORGE H. JENKINS, Secretary, and County Agricultural Agent.
The agricultural situation in Coos county has been considered through a discussion of the following four topics:

1. Land utilization.
2. Farm credit.
3. New settlers.
4. General market and agricultural outlook.

Coos county includes 1,030,813 acres, 698,114 acres or approximately two-thirds of the county privately owned. Farm lands include 261,648 acres and other privately owned land, principally timber or logged-off, comprise an additional 436,466 acres. Public lands include 332,699 acres or one-third of the county, ownership being as follows: Coos county, 1.7 per cent; State of Oregon, 4.4 per cent; national forest, 6.5 per cent; and other federal lands, 19.7 per cent.

Approximately 17,000 acres of tax title lands now are owned by Coos county, and it is likely the amount of land that will divert to the county will increase. Before tax title land is sold to individual buyers it should be classified by some agency to determine its value for agricultural development, and this classification should take into consideration the influence that settlement will have on costs for schools, roads, relief, and other public services.

These facts emphasize the importance for a program of wise land usage that will result in maximum economic returns to the county.

Classification of lands according to the production for which they can best be used to serve the social and economic needs of the county is essential. This classification supported by statutes that would permit zoning of various lands classified could be beneficial.

Facts show that farms have been developed in the county on lands unsuited to agricultural purposes. Brush and timber has grown up on land that should have been used for grazing, and other lands that should have been put exclusively into reforestation are poorly managed from this standpoint, resulting in economic loss.

The Oregon state planning board should be requested to prepare an agricultural zoning law that will permit the county court to zone the county into designated areas suitable to the use for which these areas are best fitted. Such procedure will prohibit the wasteful use of land which is contrary to the best interest of the individual and of the public. The zoning law should be optional with the counties and under the jurisdiction of the county court.

A study could be made of the zoning plan so citizens of the county may understand the social and economic advantages of a system that would prevent unsound development and the consequent construction of roads, schools, and other public services at excessive costs to tax payers.

Subdivision of farms into units too small to produce a satisfactory standard of living has not yet become a problem of major importance. Under ordinary circumstances the subdivision of up-land farms into small units should be discouraged.

Where dairying is to be the major enterprise 30 acres of good bottom land is recommended except in cases where hill-land of good quality is available, and in such cases, a minimum of 20 acres bottom-land is desirable. A farm unit of this size would permit a family to maintain a good standard of living.

The lumber industry and agriculture have a close economic relationship for persons engaged in industries in the county that offers seasonal employment. Small farms situated on good land will permit the person who understands agriculture to raise the standard of living for his family and to use his time to advantage in periods of un-
employment. This is accomplished through cheaper rents, opportunity to grow part of the family's food requirements, and in many cases lower fuel costs. Workers who wish to live in the country should establish rural residences on small tracts of good land adjacent to roads and schools and produce only the family food requirements.

The efforts being made in the county at this time to bring about better drainage conditions and reclamation of some of the lower lands that now are under water part of the time should be continued. It is believed that the reclamation of this type of land with the development of broader markets and a careful study of labor supply should make it possible in the future to derive more income from various truck crops.

It is evident that many thousands of acres of logged-off and brush land adjacent to developed farms and constructed roads properly slashed, seeded, and burned might be devoted profitably to grazing. Better methods of burning and seeding of these lands to increase the permanency of the grass are needed. The Oregon Experiment Station, state forester, and fire control officials could cooperate in developing these improved methods. The development of grazing areas under a zoning law would permit burning to keep down brush without jeopardizing reforestation.

The practice of renting or working for an established operator for at least one year is worthy of consideration for any new-comer into the county. Different soil conditions and other factors make this plan advisable.

Prospective buyers, especially any new-comer into the county, should consult established farmers, farm organization leaders, the county agent, or agricultural teachers, concerning the productive capacity and suitability of the soil for the type of farming contemplated. The average farm purchaser should pay down, or possess in cash the equivalent of 50 per cent of the purchase price of a farm properly stocked and equipped.

It is recognized that in some cases circumstances may justify purchase with a smaller down payment, but generally the operator might better rent until he has accumulated at least 50 per cent of the value of the farm, so that he may relieve the interest and debt load and protect himself from danger of loss during periods of low prices, illness, crop loss, or other misfortunes.

Lumbering and agriculture are Coos county's principal industries. It is essential that forestry be understood and considered together with agriculture in charting the future course of agricultural development. The placing of forest under sustained yield management is of primary importance. Tax adjustment, long time financing at low rates of interest, blocking out sustained yield units by purchase of agreement, and better fire protection of cut-over land and immature timber should be considered.

The present rising price level for the first time in many years will enable farmers generally to begin substantial liquidation of their short and long term debt if they so desire. It is believed and recommended that farmers should liquidate all short term production credits as rapidly as possible, liquidate as much of their long time mortgage debt as feasible with the sums they have available and develop a plan for the systematic application of a part of the future farm income toward further reduction of the long term debt.

During the past depression years many farmers found themselves in financial difficulty because they borrowed more money than their farms could earn except at high prices.

Lending agencies and farmers should consider carefully the debt-paying ability of the farm or farm enterprise before arranging a loan. If long term loans are being considered, the earning capacity of the farm should be estimated carefully for the future as well as the present. This involves forecasting both production trends and price ranges. The credit outlook for the next
few years indicates ample supplies of both long and short term credit for Coos county farmers. Local banks and the Medford Production Credit Association both have ample facilities for supplying short term credit while the Federal Land Bank has funds for long time lending.

Services of the Production Credit Association in Coos county now is inadequate because of the long distance to the association's offices at Medford and because of the time and expense involved in completing a loan. A branch office should be set up in Coos county with the local loan committee to make loans available and to provide a service necessary to facilitate handling the loans.

It is expected that the trend toward higher farm prices which began in 1932, will continue during 1936. Average farm prices in Oregon were at 72 per cent of the 1926-30 average on January 15, 1936, the price of butter fat being 81 per cent of the 1926-30 average. Because of the relatively more favorable position of the price of butter fat compared with other farm products, reports from nearly all parts of the country show that farmers are planning to increase their dairy herds. While this will not have an appreciable effect on supply within the next two years, it emphasizes the importance of using these favorable price years to increase the production per cow through better breeding, improved pastures, increased production of legume hay, and disease control, in fact to use all means available to reduce production costs.

There is a definite relationship between farm income and the factory payroll. Factory payrolls are expected to increase approximately 10 per cent during the year and farm income a similar degree.

Counteracting this rising trend in prices in farm products, however, will be increased costs of commodities that farmers buy in addition to increased taxation. It is evident that the outlook does not justify extensive agricultural expansion either with cash or borrowed funds.

Search for evidence of progress in improved marketing of dairy products showed little progress made during the past 10 years. With the costs of commodities farmers buy out of proportion with the prices of farm products and high taxes, it is evident that producers need to receive a higher percentage of the consumer's price than they are now receiving. Improved market machinery under the purchasers' control is one means that has been used successfully by dairymen in many Oregon communities.

The present high rate of taxation on the good agricultural land is one of the important problems facing Coos county farmers. The present tax load carried by farm land is too burdensome and a great need exists of a more equitable distribution among various potential tax payers. It is recognized that the development of an equitable taxation system is complex and requires careful consideration of trained persons, but some plan must be studied to improve the present condition.

Adam Donaldson, Jr.,
Chairman
W. L. Teutsch
Secretary
Jesse Clinton
John Donaldson
Lyman W. Patton
E. J. Tilley
John Mullen
R. H. Lawhorne
Alton Kay
E. D. Webb
J. E. Norton
About 51 per cent of the agricultural income for Coos county is derived from the sale of dairy products. There has been a gradual increase in the number of dairy cows in the county. In 1910 there were 8,544 cows two years old or ever in the county, whereas on January 1, 1935, it was estimated there were 13,000.

The increase in dairy cows in Coos county has been somewhat more rapid than the increase in the United States, although the condition is not alarming in view of the fact that the population in the western states has increased more rapidly than has the population of the entire country.

The following table gives information of value on this point.

### NUMBER OF MILK COWS ON HAND

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>11 West. States</th>
<th>Oregon</th>
<th>Coos County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>20,625,000 (2)</td>
<td>1,341,000 (2)</td>
<td>152,000 (2)</td>
<td>8,544</td>
</tr>
<tr>
<td>1920</td>
<td>19,675,000 (3)</td>
<td>1,541,000 (3)</td>
<td>200,000 (3)</td>
<td>10,746</td>
</tr>
<tr>
<td>1925</td>
<td>17,645,000 (3)</td>
<td>1,623,000 (3)</td>
<td>217,000 (3)</td>
<td>10,747</td>
</tr>
<tr>
<td>1930</td>
<td>22,910,000 (2)</td>
<td>1,814,000 (2)</td>
<td>229,000 (3)</td>
<td>12,254</td>
</tr>
<tr>
<td>1935</td>
<td>25,100,000 (3)</td>
<td>2,177,000 (3)</td>
<td>270,000 (3)</td>
<td>13,000 (est)</td>
</tr>
</tbody>
</table>

(1) June 1  
(2) April 15  
(3) January 1  
(4) Estimates by B.A.E.

Source: U. S., U. S. Census Reports.  

Demands of the population of the United States kept ahead of the supply of dairy products until 1933 when increased numbers of cows increased production, and with a lowered consumer demand, a definite and clear cut surplus of dairy products was accumulated. Because of the rapid increase in the number of cows in the United States from the period beginning 1929, it is probable that even if normal consumer demand had prevailed, there would have been a definite drop in the prices of dairy products.

The 11 Western states market their dairy products at home and thereby have maintained a higher price level in those states. On the Pacific coast markets where the products are consumed, this usually has amounted to the freight differential between Chicago and west coast prices.

The following table shows the price relationship for 92 score butter between Chicago, Portland and San Francisco.

### AVERAGE WHOLESALE PRICE OF BUTTER—92 SCORE

<table>
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<tr>
<th>Year</th>
<th>Portland</th>
<th>San Fran.</th>
<th>Chicago</th>
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<tbody>
<tr>
<td>1935</td>
<td>29.2**</td>
<td>30.12</td>
<td>28.78</td>
</tr>
<tr>
<td>1934</td>
<td>24.3**</td>
<td>25.05</td>
<td>24.78</td>
</tr>
<tr>
<td>1933</td>
<td>20.4**</td>
<td>21.11</td>
<td>20.79</td>
</tr>
<tr>
<td>1932</td>
<td>23.5***</td>
<td>21.98</td>
<td>20.07</td>
</tr>
<tr>
<td>1931</td>
<td>29.4**</td>
<td>28.13</td>
<td>27.05</td>
</tr>
<tr>
<td>1930</td>
<td>35.5***</td>
<td>36.31</td>
<td>35.28</td>
</tr>
</tbody>
</table>

* 10-month average (no prices for July and August).  
** Jobbing quotation, 92-93 score prints (Source: Northwest Daily Produce News).


These quotations are all at wholesale except the Portland prices for 1930, 1931, and 1932, which are jobbing for 92-93 score prints.

In the case of Oregon, however, a definite surplus is produced, and Oregon producers must bear the cost of freight to California and Seattle markets. If the 11 Western
states should increase their production above the demand within the states, then they must ship the surplus east. The price level then would drop to absorb the freight to the point of delivery, and producers would have to reduce production costs to compensate for the lower prices received.

POPULATION FOR THE U. S., 11 WESTERN STATES AND OREGON

<table>
<thead>
<tr>
<th>Year</th>
<th>U. S.</th>
<th>11 West. States Ore.</th>
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<tr>
<td>1890</td>
<td>62,947,714</td>
<td>3,102,269 317,704</td>
</tr>
<tr>
<td>1900</td>
<td>75,994,575</td>
<td>4,091,349 413,536</td>
</tr>
<tr>
<td>1910</td>
<td>91,972,266</td>
<td>6,825,821 672,765</td>
</tr>
<tr>
<td>1920</td>
<td>105,710,620</td>
<td>8,902,972 783,389</td>
</tr>
<tr>
<td>1925*</td>
<td>113,493,720</td>
<td>10,182,261 846,061</td>
</tr>
<tr>
<td>1930</td>
<td>122,775,046</td>
<td>11,896,222 953,786</td>
</tr>
<tr>
<td>1934</td>
<td>125,693,000</td>
<td>12,530,606 983,000</td>
</tr>
</tbody>
</table>

* Estimated.

1890-20-34—Statistical Abstract.
1925—World Almanac for 1926
(Tabulated by the Oregon State Agricultural College Extension Service.)

According to the agricultural outlook for 1936 there is no prospect for a rapid increase in dairy cattle during the next two years. There are indications, however, that throughout the country there may be a definite increase after the end of the two year period. At the present time prices for dairy products still are relatively low as compared with the prices of veal, beef, pork, and feed grains. If there should be an unusually large supply of feed grains available at reduced prices, dairymen probably would feed their cows more heavily and increase production from the same number of cows now being milked. This condition might be offset by increased consumer demand brought about through an increase in industrial pay rolls due to a direct correlation between pay rolls and the price of butter. Butter usually controls the price of dairy products.

The present number of cows in the United States is but little different from the number that existed in 1933 when there was an accumulation of 100,000,000 pounds of butter in storage above normal amounts. It would appear that the dairy industry throughout the country and in the 11 western states seems to be fairly well balanced at the present time. Any too rapid increase in the number of cows, in liberal feeding, or slackening of consumer demand might possibly disturb this balance by creating more products than the market could handle.

STEADY GROWTH SHOWN IN COOS COUNTY

There has been a gradual growth of the dairy industry in Coos county. This growth as reflected by the number of cows of milking age has been in direct relationship to the ability of the farms to produce the feed requirements of the cows. Until the last year there had been gradual improvement in the quality of the cows as indicated by the records of the county herd improvement association. The county made reasonably rapid progress in the eradication of tuberculosis until it, along with all other counties in Oregon, became an accredited, free county. There has not been as rapid progress in the elimination of Bang's disease.

Improvements have been made in feeding practices and in general management of the dairy herds. There always has been an interest in the improvement of dairy cattle through the use of improved sires, although there has been a slackening in this activity during the last two or three years.

There are sufficient manufacturing facilities in the county to take care of all the raw products that can be produced under present conditions. Other regions with similar climatic and soil conditions are receiving higher prices for their dairy products than Coos county. In Humboldt county, California, the butterfat price was 36.87 cents; Tillamook county, 41.83 cents; Marion county, 39.09 cents. The average price was 34.67 cents in Coos county. These figures are for 1935 and represent an average of the prices paid each month, not the average price paid for butter fat.

Dairying has been a sound and profitable farm enterprise for Coos county and any increase in produc-
tion of butter fat or milk must come largely through increased production of feed and through the improvement of the quality of cows. It is not likely that much increased acreage suitable to the production of dairy products can be developed in the county. It is obvious, however, that every effort must be made by owners of land to increase the income per acre.

**High Producing Cows Advantageous**

Under ordinary circumstances high production per cow goes hand in hand with a lowered cost of production and to be successful, a dairyman must maintain herds of high producing ability. It is much more desirable to milk a relatively small herd of high producing cows than a large herd of low production. The dairyman who desires to develop a herd of high producing cows must constantly cull the low producers on the basis of production records. This either may be done through herd improvement associations or individual effort.

Some dairymen may give undue emphasis to high production per cow without sufficient emphasis being given to economical production. While it is a general rule that low cost of production goes with high production per cow, higher production among cows with low inheritance may be attained at excessive cost. Close attention should be given the cost of producing a pound of butter fat or 100 pounds of milk. Each farm presents a different problem, and the successful dairyman must study carefully his own dairy herd operation to get maximum production at lowest cost.

Proved sires should be developed in herd improvement associations. A program that will result in proving at least five sires each year should be adopted by the associations.

Many small operators find it difficult to own a good sire because of relative high cost per cow and it is suggested that partnership ownership or individual ownership are two methods by which the owners of small herds may secure the service of good sires. The second suggestion also permits the "proving" of sires.

**Feed Resources Important**

The further development of the industry must be based largely upon the production of an adequate supply of cheaply grown foods, the source of feed being an important factor in dairy management. Hay and improved pastures will be the base for the development of an adequate feed supply. Careful attention should be given the problem of producing a liberal supply of hay, curing the hay being essential to gain maximum production per acre.

In this connection attention should be given to the rotation of pastures, use of commercial fertilizer, and liquid manure in improving productivity of the pasture.

The use of more succulence as a means of lowering production costs is suggested, using root crops that can be grown successfully, many root crops having a greater potential use. Production may be increased through the feeding of green feeds, particularly during the dry, late summer and early fall.

**Sale of Stock Not Too Promising**

There is a growing tendency for a great many dairymen to raise surplus animals for sale to out of state buyers although there is no reason to believe there will be an overwhelming demand for surplus stock during the next few years. There may be a weaker demand in the future. The raising of too many animals for replacement, unless there is a ready market, may result in too rapid an expansion of the industry.

The cost of raising heifers as revealed by the study of the Oregon Agricultural Experiment Station indicates that at no time during the four years of the study, did the average price received meet the average cost of raising the heifers. At the present time, with present prices, it costs an average of $65.00 to bring a heifer into milk production.

Much of the valuable soil fertilizer in manure is lost in leaching or through improper handling; loafing sheds where bedding is available in sufficient quantities to make their use satisfactory, proving of
value in conserving strength of manure. Liquid manure tanks are useful. Liquid manure is especially valuable on pastures.

Disease Control Vital

With Coos county on the modified tuberculosis accredited free list the district now is engaged in a program under the supervision of the federal government that should lead to the eradication of Bang's disease. While a fair degree of progress has been made, the Bang's disease program should be vigorously supported. Dairymen should be informed of the advantages of participating in this disease control program that provides an indemnity for the animals found to be reactors.

Eventually there will be restrictions on the sale of livestock and of dairy products that are not produced in areas known to be free from Bang's disease. From the standpoint of the sale of any surplus dairy cattle and dairy products, it is important that Coos county eliminate Bang's disease from its dairy herds.

The Coos county dairymen's association should appoint a committee charged with the special duty of speeding up the Bang's disease eradication program. Coos county should take advantage of the state law providing for the control of the disease at the close of the federal Bang's disease control program.

Prices Believed Too Low

Although there are adequate manufacturing facilities for handling all of the present and potential production in Coos county a higher price should be available for the producers of the county. This is apparent when the prices received in other localities are considered in comparison with the price received by Coos county dairymen, particularly with reference to the price of cheese.

This problem deserves the attention of the best minds interested in the agricultural development of the county. The probable increase in future costs that will have to be borne by the farm lands of the county make the problem of marketing of general public interest.

Any program for the further development of the dairy industry must include plans maintaining high quality of products produced. The surplus of products in Coos county must be sold in competition with those of the United States and there can be no sound development of the industry unless it is based upon the production of high quality products.

The producer is perfectly willing to take his full share of responsibility in such a program for he recognizes it is his obligation to furnish the manufacturing plant with a good, clean product. He also is aware of the fact that some manufacturing plants do not discriminate in the purchase of raw materials, paying the same price for low grade milk and cream as for high grade milk and cream.

To develop the dairy industry on the proper basis there should be close cooperation between the manufacturers and the producers. Manufacturers should recognize quality in the raw product by buying it strictly on grade, and by paying a definite differential between the different grades. This must be done so the producer of low grade raw products will not receive the same price as the producer of the higher grade.

Efforts of the Coos County Dairymen's Association to develop a definite program for quality improvement in the county are recommended. The program of the association that recognizes the purchase of cream and milk on the grade basis with the price differential being paid for the different grades has received special endorsement by dairymen.

A new industry has been developed in Coos county that has resulted in the production of a by-product known as Pilchard meal. This is being used in limited quantities in the feeding of dairy cattle.

It already has come to the attention of dairymen that the flavor of fish has been carried over into milk as a result of this feeding of meal. There are possibilities of using this meal as a protein supplement in the cattle feeding although it may be misused to such an extent that
the quality of the manufactured products might be seriously affected. Caution should be exercised in the use of the meal as a feed for dairy cattle until such time as the limitations in its use can be fully determined.

The Director of the Oregon Agricultural Experiment Station should have a careful study made of the use of this meal as a feed for dairy cattle so safe methods for its use may be determined.

J. N. Jacobson, Chairman.
P. M. Brandt, Secretary.

REPORT OF THE SOILS COMMITTEE

No permanent agricultural program for Coos county can be put in practice without careful consideration of the conservation and utilization of the soil. Since 1880, the average area of improved land per farm has been reduced from 44 to 23 acres. This indicates that if the average farmer is to maintain a satisfactory standard of living and pay the increased overhead costs of farming in the form of interest and taxes, he must obtain a greater return per acre than was necessary 55 years ago.

The conservation of the soil resources in this area is more than an individual problem. There is an area of approximately 40,000 acres of improved farm land in Coos county representing only 4 per cent of the total area. It is from this limited area that the greatest portion of the agricultural income must be derived. Should any farm in Coos county be handled so the soil would be depleted to a point where it could never again be farmed profitably, it would mean an increased burden of taxation would be forced upon the remaining area of farm land within the district.

The major portion of the agricultural income in Coos county is derived from dairying. At the present time a considerable portion of the farmer’s income in this area is spent outside the county for feed for dairy cattle. Much of this money could be kept in Coos county if proper soil management practices were followed, enabling the Coos county farmer to produce a greater portion of his feed at home.

Before a general soil fertility program for Coos county can be worked out satisfactorily, a soil survey of the county is needed to determine the soil resources of the county. An appeal for a soil survey of Coos county should be sent to the Oregon Agricultural Experiment Station, the United States bureau of chemistry and soils in Washington, D. C., and the Oregon congressional delgation in Washington, D. C.

Lime Needed On Coos Land

Most of the agricultural land in Coos county is acid in nature and because of this fact, lime generally is needed to obtain the best yields from the soil. On many of the soils, it is absolutely necessary to apply lime before legume crops may be grown. Legume crops are extremely important in this section because they assist in maintaining the nitrogen supply in the soil and furnish a source of protein feed necessary for the satisfactory feeding of dairy cattle.
COOS COUNTY AGRICULTURAL CONFERENCE

Apply One to Two Tons of Lime Per Acre

Lime should be applied at the rate of at least one ton per acre and on many soils an application of two tons or more is needed. Because of the present high prices of limestone it is not generally used. General use of lime would be a distinct benefit to Coos county agriculture and every effort should be expended to secure a source of lime that would allow the farmer to purchase it at a more reasonable cost.

Lime shipped into this section at present from the state lime plant at Salem will cost $6.63 per ton at Marshfield, and $6.70 at Coquille, a price out of reach of the average Coos county farmer.

During the past two years the county agent's office has done commendable investigation on the possibility of utilizing the shell deposits at Coos Bay and at the mouth of the Coquille river as a substitute for ground lime. This investigation has shown that when properly cleaned and ground, this material is as effective as ground limestone in correcting soil acidity. During the past year, approximately 250 tons of this material was ground and used on Coos county farms with good results. This experience has shown that the utilization of these shell deposits is practical and that if sufficient volume of sales were assured, the ground shell could be produced at a cost of approximately $3.00 per ton. Development of this industry would represent a material saving over purchasing ground limestone from any other source.

Cooperative Group Formed

A cooperative association has been organized to make this shell available to the farmers at a reasonable cost. At the present time this cooperative is unable to function because of lack of capital to purchase necessary equipment, although there appears to be a possibility of securing financial assistance for this enterprise from the Rural Resettlement Administration for sufficient financial assistance either in the form of a grant or a loan necessary to set-up a satisfactory plant for the processing of this shell.

If funds are not available from the Rural Resettlement Administration the cooperative association is urged to attempt to raise sufficient money locally to enable the cooperative to borrow remaining capital from the Federal Bank for Cooperatives.

County Agent Tours Suggested

It is recommended that the county agent carry on an intensive educational campaign to acquaint the farmers in the county with the necessity of using lime. It is suggested that a number of tours and field meetings be held during the summer, providing the farmers of the county with the opportunity to see the actual benefits from use of lime.

Manure Aids Maintenance of Soil Fertility

Dairying is the major industry in Coos county, thus providing a distinct advantage from the standpoint of maintaining soil fertility. Where crops are fed livestock, 80 to 90 per cent of the plant food in those crops is available by being returned by the animal in the form of manure. If this manure is properly handled the greater portion of this plant food will be returned to the soil. It is much easier to maintain the supply of fertility in the soil under these conditions than where the farm income is derived from crops that are sold from the farm.

There are 13,000 milk cows in Coos county. A value determined from the present price of commercial fertilizers would give the manure produced by one dairy cow an annual cash value of $30. This means that if all of the manure produced within the county were properly conserved it would represent an income to the farmers of $390,000.

Manure Damaged By Leeching

Plant food is lost from barnyard manure by leaching and fermentation. It should be handled in such a manner that these losses would be reduced to a minimum.

A more general use should be made of the liquid tank method of handling barnyard manure. A liquid
tank was installed by R. Christensen on the North Bank Road three years ago that has proven very satisfactory both from the standpoint of conserving plant food and a saving of labor in handling the manure.

Where this method is used all of the manure except that containing coarse bedding is placed in a water tight tank where it is stored until the proper time for applying to the land. A storage capacity of 125 to 150 cubic feet should be allowed for each cow. When the manure is spread on the land the liquid is either pumped or drained into a home made tank wagon, hauled out to the fields, and sprinkled on the land.

If much coarse bedding is used, not all of the manure can be handled through the liquid tank. That containing the coarse bedding should be piled on a water tight platform situated so that any leaching from the manure would drain into the liquid tank.

Where plenty of bedding is available the loafing shed offers another good method of conserving the plant food in manure. During the winter months the cows are allowed to spend most of their time in this shed, the manure being hauled out during the spring months. Plenty of bedding is used to keep the cows clean and to preserve the plant food in the manure.

Super phosphate should be used in the dairy barn as a deodorant and disinfectant instead of lime. Whenever lime is used in combination with manure, it causes an increased loss of nitrogen through fermentation. Super phosphate prevents this loss and its use increases the fertilizing value of the manure.

**Time of Manure Application Important**

To secure best use of manure it should be applied to the land at a time when a growing crop will utilize the available plant food. For annual crops the manure should be disked into the soil previous to seeding. For pasture and meadow crops the manure should be applied as a top dressing in February or March. Early fall application also are satisfactory on pasture and meadows.

Greater returns per ton of manure will be secured if generally lighter applications are made, suggested applications being limited in most cases to 8 to 10 ton per acre.

No permanent agricultural program can be adopted without providing a means of replacing plant food through the use of commercial fertilizers. At the present time the use of commercial fertilizers has not been generally profitable in this section but as the soil is farmed a greater length of time, growers must expect to use commercial fertilizers if satisfactory yields are to be maintained.

On most soils in Coos county indications point to the fact that the use of super phosphates will cause increases in yield especially for root and legume crops. Whether super phosphate should be used may be determined by a simple soil test that will be made free of charge by the county agent at his office.

**Sulphur Helps Alfalfa**

The application of some form of sulphur has proven beneficial on legume crops, especially alfalfa. It may be applied in the form of sulphur, land plaster, or super phosphates, the latter two preferred because of a tendency for sulphur to increase acidity in the soil.

It is recommended that the county agent's office conduct further fertilizer trials to determine what commercial fertilizer may be beneficial in Coos county.

**Crop Rotation Recommended**

The supply of plant food in the soil may be better maintained if a good crop rotation is followed. A good crop rotation plan should include a legume crop that assists in restoring the nitrogen supply of the soil. A crop rotation should be followed on all improved farm land and land devoted to pasture also should be included in this rotation.

Because of the heavy rainfall in this section, serious soil losses may occur unless steps are taken to control erosion. Farming practices should be followed that maintain a protective covering over the soil during the winter months. Plowing in the fall or early winter prior to
COOS COUNTY AGRICULTURAL CONFERENCE

Spring seeding should be discouraged because of the danger of losing soil and plant food by erosion. Special attention also could be given management of pastures and ranges to prevent over-grazing, a program that destroys the protection covering of this soil.

Drainage Will Save Soil

Since the total annual rainfall in Coos county is more than 63 inches, there are very few farms in the county that do not have some drainage problems. This wet land must be drained if the best use is to be made of the soil resources of the county.

On many farms there are drainage problems that may be solved effectively through individual effort. This is particularly true where the wet areas are caused by seepage from adjacent hillsides, areas that may be drained through the use of intercepting drains.

On wet bottom land the use of tile drainage is recommended wherever a satisfactory outlet is available. Because of the high price of drain tile in this county undergrounds constructed of lumber may be used as a substitute for tile. If a satisfactory outlet is not available the wet land frequently may be improved through the use of open ditches. Regardless of the type of drainage needed the individual farmer should secure the services of some experienced persons to design the drainage system, thus preventing wasted money and effort.

In many of the drainage districts in Coos county the tide gates are not kept in satisfactory repair. These tide gates should be kept in good condition to provide satisfactory drainage within the district.

The annual floods in the Coquille river valley cause great amount of damage to the agriculture of that area. The United States Army Engineers should be requested to survey the region to determine the most practical means of controlling these floods. Considerable damage has been done to the banks of the North Fork of the Coos river by scows carrying rock from the quarry to the jetty. The United States Army Engineers might also investigate to see if this damage could be repaired.

Although the total annual rainfall in this section averages more than 63 inches, the average rainfall for the months of June, July, and August averages 2.03 inches. This precipitation is not enough to supply the needs of growing crops during these summer months. This lack of moisture during the period is especially serious because other growing conditions are more satisfactory than at any other time of the year.

Irrigation has been tried on a number of farms in Coos county and has proven practical and profitable especially on pastures. The irrigation of Ladino clover for pasture should provide a carrying capacity of two to four cows per acre for seven months out of the year. Where it is possible to secure such a return, the average dairyman could afford reasonable expense for irrigation.

The type of irrigation to use will be determined entirely by conditions encountered on the individual farm. On some farms it may be possible to secure water by gravity which would eliminate the cost of power for the pumping. The majority of the farms, however, will have to depend upon pumping from streams for their source of water wherever the topography of the land will permit.

Flood irrigation generally will prove the most satisfactory type of irrigation although sprinkler irrigation has proven profitable on land that cannot be flooded satisfactorily.

It is recommended that anyone contemplating the installation of an irrigation project consult the county agent's office concerning the best method of irrigation to use. The Oregon Agricultural Extension Service at the Oregon State College is asked to maintain adequate technical assistance to assist individuals in studying their irrigation problems.

Ray Deadmond,  
Chairman  
A. S. King,  
Secretary  
Ralph Christensen  
Ernest Clausen
The income from field crops in Coos county—represents approximately 8 per cent of the total cash return for the county is produced from about 22,642 acres. The principal production consists of forage plants, including pasture and hay, with a fairly substantial acreage devoted to seed crops. Because of the large dairy industry as well as livestock enterprises special study has been given to forage improvement.

The census indicates a pronounced increase in the number of farms in Coos county during the past few years, and this increase has taken place on smaller to medium sized acreages. This condition suggests the desirability of special crops with a high return per acre to provide adequate cash income for the operators of the smaller farms.

**Forage Crops Important in Coos County**

Coos county has imported from other counties 1,150 to 2,340 tons of hay per year during the past four years, with nearly 1,500 tons being shipped in 1935. The hay acreage should be increased in the county and special attention should be given to a production of more legumes. Better methods of curing hay should be used to improve quality.

The alfalfa acreage has increased from 87 acres in 1924 to 962 acres in 1934, and it is recommended that this acreage could be at least doubled. Since many of the soils in the county are too poor for the present condition for alfalfa production, it is suggested that they be limed and the seed inoculated to assure successful production. To accomplish this, the speedy development of the ground shell project at Coos bay is recommended.

**Gratitude** for alfalfa—variety trials to determine the best kinds for Coos county are recommended.

There are three varieties of vetch listed as follows:

(a) Hungarian vetch has advantages as a hay crop where the soil is too poor for common vetch and where aphids are a problem. The Hungarian vetch makes rather leafy hay that probably is not quite as palatable as common vetch.

(b) Common vetch is a valuable hay crop and production can be expanded on some of the soils not well suited to alfalfa.

(c) hairy vetch does well on some of the hill soils too poor for other vetches. The smooth type of hairy vetch for hay purposes, early cutting to assure good quality, is believed desirable.

The quality of Coos county hay may be improved by cutting at a younger stage and by prompt curing. In the case of the crops-like beard, canary grass, that reaches the hay stage too nearly for curing, loose pasturing until about June 1 and then cutting the new growth in about six or eight weeks is recommended. This will find the grass leafy and tender and sometimes not headed out. Any of the forage plants cut at an early stage have a higher protein content and a substantially lower fiber-content, thus being more palatable and nutritious.

Sixty Per Cent of Farms

**In Pasture**

The pasture acreage in Coos county occupies nearly 60 per cent of all the land in farms, much of which can be improved with greater carrying capacity. In addition to this pasture there is much logged-off land that should be burned over and seeded to pasture.

Crimson clover has been grown successfully in the county, offering...
promise as a summer and early spring pasture. Crimson clover is sowed in late April or early May, at 15 or 20 pounds of seed per acre on foothill or bottom land that is not flooded. It provides a good deal of summer pasture and may be harvested the next summer for seed or may be used in the spring for very early spring pasture.

There are several strains of white clover, including some native types like the Ladino or Giant white clover produced in Oregon. It is suggested that the county agent make comparative tests of these strains of white clover for both upland and wet land conditions, thus establishing best types for pasture mixtures. With irrigation, Ladino clover is the outstanding type.

Burr clover, an annual clover, has proved its ability to reseed itself and provide much palatable feed on well drained land. It seems to do especially well on heavier soils. Plantings near Bridge and on the Fat Elk and volunteer growth near Myrtle Point show the general suitability of this clover to Coos county upland pastures. It also is especially well suited for cattle pasture.

There is a need for legume that will survive the same wet conditions under which Reed canary grass and Seaside bent are produced. The county agent could establish trial plantings of Lotus and Strawberry clover on such lands.

At the Astoria Branch Experiment Station, on diked land with little overflow, Meadow Foxtail and Ladino clover withstood the freeze of 1932-1933 better than other pasture. They appear to be more palatable than any other pasture on that station. It is recommended that the county agent establish some Meadow Foxtail trials on the low lands in Coos county.

Probably more work needs to be done on the logged-off lands than on the bottom lands. After land is logged off and burned, unless it is seeded to a good, permanent pasture grass mixture, it soon is infested with the Australian fireweed, vine-maple, greasewood, and other useless brush or ferns. It has been demonstrated that where permanent sod-forming grasses are established and pastured that this weed and brush growth is held in check and soil erosion is prevented.

Most of the burned over pasture land has been seeded to annual rye grass or to cheap, temporary pasture mixtures. These provide good feed for only one or two years, the seed bed is lost, and the land has but limited future carrying capacity. The key to permanent pasture is a good mixture of permanent grasses, including a sod former and some good legumes.

Among the sod forming grasses, attention is called to Astoria bent grass for the more moist locations on the hills and Highland bent grass on the thinner, dryer soils. Demonstration plantings by the county agricultural agent have proved that chewing fescue, orchard grass, and English rye grass make excellent pasture. Special attention is called to Oregon grown white clover, Alsike clover, burr clover, and yellow treefoil as legumes for burned over up-land. A recommended mixture is as follows:

Domestic rye grass, 3 pounds; Chewing fescue, 3 pounds; English rye grass, 3 pounds; Orchard grass, 3 pounds; Timothy, 2 pounds; White clover, 1 pound; Astoria or Highland bent, ½ pound; Burr clover, 3 pounds; Alsike clover, 1 pound; Yellow treefoil, 2 pounds.

This mixture should be sowed in the early fall after a good burn or in the early spring during freezing and thawing weather. If possible from six to 12 pounds of good seed per acre, but preferably 10 to 12 pounds. Closer cooperation between the forest service and livestock operators is urged in order to facilitate the burning and seeding of this potential range land. County lands should be seeded wherever possible, this providing more forage. It is believed that if more seeding is done on public land it not only will provide more pasture for livestock but may be the means of developing an important wild life resource.

Ladino clover is an excellent bottom land pasture but because of bloat danger always should be sowed with a mixture of grasses. A
very successful mixture consists of:
Ladino clover 3 to 4 pounds.
Domestic rye grass 3 pounds.
English rye grass 3 pounds.
Orchard grass 3 pounds.
Meadow fescue 3 pounds.

This mixture at 12 to 15 pounds an acre, sowed in April or early May, is very productive and is unlikely to be destroyed by slugs. Fall sowing is not recommended.

Pastures should be divided up into three to five different areas so rotation grazing can be practiced.

Excellent results have been secured in Coos county with Sutton's prizewinner mangels, Chantenay, and improved white Belgium carrots and Bortfield turnips, these roots making good fall and winter feed.

Corn, corn and sunflowers, vetch and oats, or peas and oats make excellent silage which may be stored successfully in the regular circular staved silos or even in trench and stack silos excavated from convenient hillsides. These silos must be put in a well drained location and may be used for the successful storage of surplus grass and other crops that are ready for storing too early in the season to be used for hay.

Small Seed Production a Leading Enterprise

Coos county probably is the largest Reed canary grass seed producing county in the United States and is one of the largest bent grass producing counties. The county presents excellent possibilities for the production of some special seed crops.

Approximately 120 tons of Reed canary grass were harvested in 1935. Nearly 25 per cent of this meeting the Blue Tag requirements and one third Red tag. The remainder is in the Yellow tag or no tag grades. The attached table from the Oregon Experiment Station seed testing laboratories shows a percentage of purity and germination by years since this crop has become important in Coos county.

Average percentage of purity of Reed canary grass for 1930-31 1934-45, and July 1-December 13, 1935.

<table>
<thead>
<tr>
<th>Year</th>
<th>Samples Number</th>
<th>Pure Seed Per cent</th>
<th>Crop Seed Per cent</th>
<th>Inert Matter Per cent</th>
<th>Weed Seed Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930-31</td>
<td>9</td>
<td>95.81</td>
<td>0.104</td>
<td>4.077</td>
<td>0.011</td>
</tr>
<tr>
<td>1931-32</td>
<td>32</td>
<td>97.85</td>
<td>0.174</td>
<td>1.923</td>
<td>0.056</td>
</tr>
<tr>
<td>1932-33</td>
<td>34</td>
<td>98.06</td>
<td>0.0809</td>
<td>1.817</td>
<td>0.039</td>
</tr>
<tr>
<td>1933-34</td>
<td>41</td>
<td>97.50</td>
<td>0.056</td>
<td>2.465</td>
<td>0.048</td>
</tr>
<tr>
<td>1934-35</td>
<td>143</td>
<td>95.64</td>
<td>0.315</td>
<td>4.002</td>
<td>0.087</td>
</tr>
<tr>
<td>1935-</td>
<td>103</td>
<td>98.03</td>
<td>0.0774</td>
<td>1.8544</td>
<td>0.03495</td>
</tr>
<tr>
<td>Weighted Total</td>
<td>362</td>
<td>96.982</td>
<td>0.176</td>
<td>2.8297</td>
<td>0.0312</td>
</tr>
</tbody>
</table>

Average Calculated 12-28-35.

Average percentage of germination of Reed canary grass for 1930-31 - 1934-35, and July 1-December 13, 1935.

<table>
<thead>
<tr>
<th>Year</th>
<th>Samples Number</th>
<th>Germination Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930-31</td>
<td>9</td>
<td>73.555</td>
</tr>
<tr>
<td>1931-32</td>
<td>145</td>
<td>54.74</td>
</tr>
<tr>
<td>1932-33</td>
<td>72</td>
<td>82.507</td>
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<td>1933-34</td>
<td>69</td>
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<tr>
<td>1934-35</td>
<td>156</td>
<td>79.48</td>
</tr>
<tr>
<td>1935-</td>
<td>108</td>
<td>74.944</td>
</tr>
<tr>
<td>Weighted</td>
<td>559</td>
<td>71.212</td>
</tr>
</tbody>
</table>

Average Calculated 12-28-35.

More canary grass seed would make the Blue tag or top grade through better handling of the heads to prevent heating while curing. More vigorous cleaning to remove the light, white seed, also would substantially improve germination. The 1935 crop is larger than can be sold advantageously on the present market and the amount harvested for seed in 1936 and succeeding years should be determined after full consideration of the prospective crop elsewhere and the amount on hand. It appears that a substantial part of the 1936 acreage should be used for forage rather than seed.
More orderly marketing of Reed canary grass is necessary if the present disastrous price cutting is to be avoided and growers are to secure a profitable price. The development of an association to bring about a more stable market, to establish new markets, and to carry on an advertising campaign in the interest of Coos county Reed canary grass is urgently suggested.

Bent Grass Production 600,000 Lbs.

The bent grass production of Oregon amounted to approximately 600,000 pounds in 1935 and although the crop appears to be moving, no increase is recommended for the bent grass acreage for seed. Fields producing a low quality of seed and low yields should be plowed up and devoted to other crops. The Coos District Bent Seed Growers' Association should be revived and cooperation extended other bent growing organizations of the state and the northwest in establishing prices and in possible development of a larger market through advertising means.

There is only a local market for Hungarian, common hairy vetch, and winter peas. Seed production should be conducted only to the extent of local uses unless larger markets are developed. Purple vetch and Tangier peas should be dropped as seed crops. Further trials are recommended on the production of various vegetable varieties for seed, including cabbage, turnips, garden beets, lentils, broad beans, garden peas, and early varieties of beans. It is believed that the numerous small valleys with land free of disease and isolated to prevent crossing may be the basis for building a large vegetable seed industry.

The general practice of innoculating legume seeds for range, pasture and other plantings, especially if the land has not been in a similar crop recently is considered advisable.

Both Reed canary grass and bent seed growers believe there is need for more adequate production and market news information in connection with a production and marketing program for these and other seed crops.

Seed Tariffs May Tumble

Recent reports of reciprocal trade agreements with Canada and the Netherlands indicate reductions in the tariffs on Alsike clover, timothy, and other surplus seed crops produced in the United States, amounting to one-half of the tariffs established in 1930. They also indicate reductions of 25 to 50 per cent in the tariffs on a number of vegetable seeds that no doubt will become important in Coos county.

Restoration of tariffs that have been cut out by the adoption of these trade agreements is urged. An increase also is asked in tariff on vegetable seeds and on forage seeds like English rye grass and chewing fescue, which are coming into production in Oregon.

These suggestions should be conveyed to the Reciprocal Trade Commission and to the Oregon delegation in Congress.

Weed Situation Serious

The weed problem in Coos county is becoming serious and more attention must be given to weed-control. A revision is urged in the Oregon Seed Law to provide better protection for farmers in the matter of various seeds purchased.

The Australian fire weed, a perennial, occupies practically all newly burned over land in Coos county. It has no value for forage purposes and in an average year stays so green as to interfere with the securing of a new seed bed. Newly burned lands should be seeded to a good permanent grass mixture and grazed. This practice prevents to a certain degree the establishment of stands of the Australian fire weed.

Stagger weed, or Tansy Ragwort, is established in the county and is another perennial weed producing seed that is carried long distances by wind. This weed, while rarely eaten in pastures, is quite poisonous in hay. The county agent should make some eradication tests, and if successful, county assistance or the allocation of federal assistance for a complete eradication program should be secured.

Canada thistles also produce seed that becomes readily established on burned over land, and they should
be eradicated to prevent encroach-
ment on farm and range land.
Crop rotation also is recognized
as the cheapest method of weed
control.
Cultivated crops like corn, roots
or vegetable crops in the cropping
system are a means of cleaning up
weeds.

Little Room For Grain
Many of the lands of Coos county
may be more profitably used in for-
age than grain crops, since grain
may be shipped in from the outside
at less cost than hay. For farmers
who grow oats, gray winter is rec-
commended for fall planting and
Schoolma'am for spring planting.
There is a local demand for School-
ma'am oats for seed. O. A. C. No.
7 barley is one of the most satis-
factory varieties, but its culture is
questionable in many locations, es-
pecially on higher lands where
Harchen is recommended.

Oil Seeds and Special Crops
It is believed that seed flax and
fiber flax may be grown in Coos
county and it is recommended that
the county agent develop some dem-
onstrations to determine the place
of these crops for feed and other
uses. Trials of Pyrethrum, some of
the oil seeds like winter and an-
nual rape, and possibly some of the
drug plants may be tried.

Opportunity For Potato Production
Many potatoes are shipped into
Coos county annually, and frequent-
ly local growers take extremely
low prices because of competition
of low grade potatoes, purchased at
low prices, and trucked into this
area. This condition can be impro-
ved gradually if local producers will
improve the quality of potatoes
grown.
This can be accomplished by the
use of certified or high grade seed,
properly treated for disease con-
trol. The crop grown should be
graded carefully before being mar-
keted and only a good grade of
potato, marketed in attractive con-
tainers, should be made available.

Better storage facilities could be
used in Coos county. These facilities
would make it possible to hold po-
tatoes for a longer period of time
with very little loss and provide for
a more orderly marketing of the
crop. North and East slope side-
hill storage is recommended as the
most suitable type of an out-door
pit for Coos county.

All farmers in Coos county who
produce potatoes commercially
should be equipped with a duster
sprayer to be used in blight con-
trol.

Some years this disease is not
a serious factor while in other
years, crops are entirely lost.

The improvement of seed by the
use of a tuber unit seed plot on
farms where potatoes are grown
commercially is recommended.
Through this system, diseased
plants can be rogued and an excel-
lent type of seed developed. Con-
sult the county agent concerning
operations of the tuber unit method.

The production of certified seed
in the county to provide seed stock
for those desiring better seed should
be confined as much as possible to
a few fairly large plantings. This
will make the cost of handling the
certification program lower and
more careful supervision can be
given to larger plantings of potatoes.
Certified seed frequently can be
planted more thickly, and will pro-
duce more seed potatoes of smaller
size. This same principle will ap-
ply on land where potatoes damag-
ed by hollow heart are produced.

Exercise Care In Harvesting
Extreme care should be used in
harvesting potatoes whether done
by hand or with mechanical diggers.
Injuries to potatoes in the process
of harvesting often is responsible
for lowering the grade. With the
greater competition that is develop-
ing not only in the selling of po-
tatoes but of practically all other
farm products, grading is becoming
a more important factor. Every ef-
fort should be made by producers
to prevent practices that tend to
lower grades of a good grade prod-
uct.

A good market exists for certified
Bliss Triumph and White Rose po-
tatoes for seed, and it is recom-
manded by this committee that
trials be made in growing this var-
ety to determine their value in this
section. It is thought that a special
market may be developed for cer-
ified lots of each of these varieties.

The recommended standard varieties for potatoes grown commercially in Coos county are Burbank and Netted Gem for the main crop. Earliest of All probably is the most important early potato. Further consideration should be given to the Bliss Triumph.

The program outlined by the Potato Growers' Association should be continued and expanded, and regulations in regard to grading and marketing being rigidly enforced.

A standard practice regarding the treating of seed potatoes for disease should be adopted by all potato producers so a better grade and higher yields of potatoes can be produced. Increased production and improved quality are possible along with increased yields if more attention is given the growing of standard varieties of disease free seed stock.

Fifty pound sacks have been found through a survey conducted by the Potato Growers' Association to be the most desirable sack on the market. Practically all stores in towns of the county reported that the trade preferred a 50 pound sack.

George Hampton,
Chairman.
G. R. Hyslop,
Secretary.
J. L. Smith
J. E. Ford
Rolf Hongell
Chas. Saling
Chas. Holverstott
Olaf Aasen
J. D. Carl
Henry Brownson
Ervin Peterson
Preston Monson
Abe Grossen
R. W. Shaad

REPORT OF THE LIVESTOCK COMMITTEE

Discussion of the livestock situation in Coos county discloses two kinds of livestock prominent in the county, cattle, sheep and hogs. In spite of the reduction of 8,000,000 head of cattle during the 1934 drouth the figures indicate an expansion during the past five years. The drouth affected only certain states in the far west and middle west, but in the south feed conditions were satisfactory and cattle held their own, increasing in certain districts.

Due to the crop reduction program under the Agricultural Adjustment Act a large number of acres were taken out of production which will be, or have been, seeded to pasture. This land will be used for livestock production in the future, thereby creating added competition to the western livestock man.

In Oregon cattle increased more than 200,000 head during the last five year period. In Coos county beef cattle have increased slightly since 1920.

Sheep Show Heavy \ Increase In Coos Region

Present figures for the United States indicate a total of 48,357,000 head of sheep on hand, a slight reduction since 1930.

The present per capita consumption of lamb and mutton is between six and seven pounds. It is believed, therefore, that there are ample sheep now on hand nationally to supply the population, as well as completely utilize the available feed for this class of livestock.

In Oregon sheep have decreased by about 100,000 head during the last five year period. In Coos county however, there has been an increase during the past 10 year period from around 5,000 to 16,000 head.

Hog Control Reduces Coos Supply

It is reported there are fewer hogs on farms in the United States at present than at any time during the last 50 years. With the abandonment of the Production Control Program, it is thought likely that there will be a rapid increase during the next few years.
Oregon still is on the import basis as far as pork is concerned. In Coos county hogs decreased slightly during the last five year period, probably due to the Production Control Program.

In Coos county there is an opportunity for some increase in production, chiefly cattle and sheep, provided feed conditions on logged-off lands can be improved.

Sheep

No justification for great increase in sheep numbers is thought justified by the committee, except as the logged-off land pasture conditions are improved through seeding to grass.

One of the problems confronting the livestock owners at this time is the prevalence of predatory animals. It is believed important that an organized and concerted effort should be made on the part of livestock men of the county to cooperate with Biological Survey in the employment of government hunters.

The necessity of maintaining the hunter on a permanent basis, with adequate traps and other equipment cannot be questioned. The establishment of bait stations at strategic points throughout the livestock areas in the county is considered a means of assisting in control of coyotes.

Organization of the livestock association should be completed as soon as possible. The group should use whatever means necessary to obtain cooperation in the employment of government hunters for Coos county.

Dogs are a serious menace to production of sheep in Coos county: It is believed desirable that Coos county continue to use a more strict enforcement of the law in the collection of dog taxes, as well as the destruction of stray dogs.

Every effort should be made on the part of sheep raisers, where permanent or native pastures are not available, to supply supplemental pastures as a means of putting lambs in normal condition.

Range For Beef Utilized

The present range in Coos county suitable to beef cattle is completely utilized. In view of the fact that some dairymen have taken advantage of the Bangs' disease control program, and as this affects the beef cattlemen as well as dairymen; and further, in view of the fact that it is possible at present to secure indemnity on diseased animals, dairymen and cattlemen are urged to take advantage of this program. This cooperation would aid in a clean-up of this disease while the federal government program is lending aid.

Goats Not Too Profitable

While the mohair market is improving and there is a greater demand for this product, goat production is not recommended as a highly profitable business.

Goats must be considered more from their value for clearing the land and keeping down brush than from commercial mohair production. Considering the two purposes, it is believed that goats are worthy of consideration, especially where they can be confined to reasonably small areas. Goats may be used to advantage to improve the pastures and ranges for other classes of livestock.

Few Young Horses Could Be Used

The average age of horses in Coos county is approximately 15 to 18 years. There is a shortage at this time of good work stock, a condition that undoubtedly will increase during the next few years.

Colts should be raised under Coos county conditions almost entirely on grass and an effort made to stimulate the production of horses in the county, at least to the extent of supplying the needs on the local farms.

While it is realized that a large production of horses is not justified in the county, it is believed advisable to raise at least enough to take care of the farm work, and as soon as possible, to take care of the local demand.

Little Room For Commercial Hogs

It is recommended that hogs be considered in Coos county as a means of utilizing farm waste such as skim milk and whey. Hogs should be increased to that extent that all such feeds are utilized on the farms of the county.
Logged-Off Land Present Problem

Owners of timber, logged-off, or brush lands carrying considerable fire hazard are obliged to pay the five cent per acre patrol tax. This seems legitimate and proper, but there are two types of land involved.

One type now is in timber or large second-growth and affords no grazing. The other type includes those lands that have been logged recently, and should be grazed in the interim between logging and development of second-growth of substantial size; and that area that for various reasons is not reforested or because of location, soil and topography should be in grass permanently.

The present policy of absolute fire protection is desirable for the first type but quite unworkable for the second. If the lands of the second type were well burned and well seeded to grass, it would reduce the fire hazard, lessen tax delinquency, and aid in the support of the people of the community. It generally is admitted that lands that have been logged recently and lands not reforested are a much more serious fire hazard than those lands that are well timbered. Illegal burning is believed common in the recently logged and brushy areas. As a matter of public interest, therefore, it is as important to develop grazing on the latter type of land as it is to develop timber on the first type.

Owners of the second type are paying their share of the tax for fire patrol and should get the kind of protection and assistance needed. Protection for this land is different from that needed for lands growing up to second growth timber. The land must be thoroughly burned and seeded to grass and well grazed.

There are those who believe the land should be burned over from year to year and not seeded, but the Coos County Outlook Conference is not in sympathy with that point of view.

Plan Proposed The Care For Lands

A plan suggested to meet the logged-off land issue is as follows:

Authorize the county court to zone timber and brush lands, putting into one zone the lands that are in forest or in sizable second growth and in which complete fire protection is required; and in another zone the land on which the brush should be kept down, developing the land for grazing, either permanently or in the interim between logging and final reforestation.

Authorize the county court to issue burning permits on lands in the second zone.

Hire fire wardens to assist in burning where permits have been issued by the county court so the fires can be cleaned as thoroughly as possible; creating a good seed bed for grass and reducing the ultimate fire hazard. It is believed the reduction of fire hazards on lands zoned as pasture lands is equally as important to the timber owner as it is to the agricultural interests. Cost of burning the brush lands, therefore, should be shared alike by the timber and agricultural interests.

Conditional upon which the county court would issue burning permits and the fire wardens supervise the burning, the owner would be required to enter into a contract to seed and manage the land in a manner approved by the county court and specified in the contract. Enforcement of this contract would rest on a provision that if the owner did not seed in the manner agreed upon the county court could do the seeding and assess the cost against the property.

The plan suggested, although simple, is fundamental and should bring about the following results:

1. Reduce the fire hazard by cleaning up the brush and debris on areas that are fire traps.

2. Prevent the recurrence of fire hazard on such areas by substituting well-grazed grass for the present rank growth of ungrazed brush and weeds.

3. Provide official and adequate control over burning where permits were issued.

4. Substitute controlled burning for the illegal burning that not
frequently occurs when the owner feels burning necessary but cannot obtain a permit or the necessary assistance for the control of fire.

5. Make it unprofitable for the land owner to do any further burning since land once seeded would be injured by burning.

6. Increase the income of the people of the county by permitting the production of livestock on areas now idle.

7. Reduce tax delinquency by converting unprofitable brush areas to income producing property upon which the owners could and would pay a reasonable tax.

8. Increase game by providing areas of open grass land.

9. Increase the reproduction of timber by making it easier to eliminate fire during crucial periods.

10. Aid in the protection of standing timber by reducing fires on the brushy areas.

11. Decrease the growth of fern.

12. Lessen soil erosion by establishing a quick cover of sod.

13. Increase the scenic value of the area by the substitution of sod for brush and weeds.


**General Recommendations**

In view of the fact that success in livestock production depends on quality, it is recommended that pure bred sires of good type and confirmation always should be used to head the herds.

Liver fluke is a problem among cattle and sheep in many sections of the county. Attention has been called to the fact that there is a possibility of obtaining aid in controlling liver fluke under WPA projects. These projects would cover the drainage of some of the local lands where fluke is a problem, and also the purchase and distribution of bluestone to destroy the snails that harbor the fluke.

Spring months are the most favorable periods for this type of work. It is recommended that the Coos county court foster a WPA project for this type of work. Immediate action on such a project is important.

Ellis Dement,
Chairman,
H. A. Lindgren,
Secretary.

Albert Powers
Robert Carmen
Roy Garrett
Frank Van Leuven
Henry Hess
D. F. Thompson
Jas. C. Wilson
Ben Moomaw
J. W. Ruble
W. V. Glaisyer
J. H. Bennett

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**REPORT OF THE HORTICULTURAL COMMODITY COMMITTEE**

Truck crops, tree fruits, small fruits, nursery, and greenhouse crops furnished 15.3 per cent of the average cash farm income for Coos county from 1926 to 1930. This amounted to $323,901 annually for the four year period.

The acreage of tree fruits was placed at 612 acres in 1935, 500 of which were planted to apples. The records show three acres of filberts, and four acres of walnuts. There were 158 acres of small fruits, 75 acres being in strawberries and about 70 acres in cranberries.

The total acreage in tree fruits, small fruits, and nuts were 767 acres.

The 1935 records show 280 acres planted to vegetables. Coos county has abundant acreage suitable to the production of horticultural crops. The limiting factors that prevent acreage expansion of these crops is lack of markets and marketing facilities.

Coos products must meet the competition of low priced fruit and vegetable products shipped in from other districts and many of the local growers are not able to meet this competition.
Planting of apples is recommended only for home use or for local markets, commercial apple production in Coos county declining since improved roads have made it possible to truck low grade and other low priced apples into the county. These products find ready sale to the detriment of local grown fruit. The imported fruit has discouraged local commercial apple producers who formerly took very good care of their orchards. The commercial apple orcharding was established in Coos county in the seventies.

Varieties adapted to Coos county are Yellow Transparent, Gravenstein, King, Delicious, Grimes Golden and Spy. Varieties unsuited to local use should be removed or top-worked to standard varieties.

Generally Coos county apple orchards have been neglected in recent years. Growers cite that low priced apples from outside points force sale of local produced apples too low for profit. Diseased and insect infested apple orchards are a menace to the orchard receiving care. Neglected trees should be removed or be given at least the minimum spray requirements and other care to hold the disease and pests in check.

The following suggestions are made for the grower planning to give his orchard at least the minimum care:

Early fall spray of 4-4-50 mixture Bordeaux to be applied before any fall rains, to control anthracnose disease.

Late winter spray of lime sulphur solution 12 gallons to 100 gallons of water, for control of certain insect pests.

Annual pruning out of surplus wood should be done. These are minimum requirements and do not include scab or codling moth sprays which are necessary for the production of high grade fruit. Get full directions from the county agent.

Pear production in Coos county is not encouraged. Where pear orchards exists in favorable localities they should be given the minimum care as recommended for apples.

Italian, Silver Prunes, and Green Gage Plums are grown in sheltered locations and on deep well-drained soils in Coos county. Their production is recommended only for home use and for local fresh fruit markets. Rainy or stormy weather at blossom time interferes with the set of prunes and plums.

There should be no further plantings of sour cherries except for the home use.

There is a local market for sweet cherries and production is not sufficient to supply these markets and limited plantings of Royal Annes are recommended in sheltered locations. Rain during the blooming period interferes with fruit set similar to the condition existing with prunes.

The Royal Anne, Bing, and Lambert cherries require pollenizers. Proven pollenizer should be used every third tree in every third row or a pollenizer should be grafted onto each tree.

Cherries should receive an annual late winter lime sulphur spray as a general clean-up measure.

Brown rot, a fungus disease prevalent in Western Oregon, attacks all stone fruits, but the disease can be prevented. Secure brown rot control recommendations from the local county agent.

Little Success With Nut Orchards

Walnut production has not proven successful in Coos county. There may be possibilities in sheltered upland locations but thorough trial of these locations have not yet been made in Coos county. Filbert production offers possibilities in sheltered locations and on deep soil in the inland valleys but attention to pollenizers must be given. The Barcelona variety with pollenizers of Davianna and Creswell, at the rate of a third tree in every third row are recommended for trial.

Soils for tree fruits should be eight to ten feet deep. Fruit trees often yield a profit on soils of less depth but on shallow soils, especially those underlaid with rock, hard pan, and with high water tables, production difficulties are faced early in the life of the orchard. These troubles are more pronounced in dry seasons. The orchard soil should be deep, well drained, and of about the same texture for a
depth of eight or more feet for best results. The slope is best if less than 10 per cent on account of erosion and ease of cultivation.

**Orchard Soil Maintenance**

Orchard soils require annual additions to the humus supply to assist with the maintenance of soil fertility, and as an important aid to preventing soil erosion. Orchards grow older and soils poorer year by year and cover crop is not a luxury but a necessity in a well managed orchard.

Winter barley and vetch lead as an orchard cover crop. Thirty to 60 pounds of vetch, and 60 to 100 pounds of barley is the recommended rate for seeding, done early in fall. Plow under early in spring.

Other cover crops are:

- Vetch alone, 60 to 80 pounds per acre.
- Winter grain alone, 100 to 150 pounds per acre.
- Turnips, three pounds per acre.
- Rye for thin soils, 75 to 100 pounds per acre.
- Winter barley, 60 to 80 pounds per acre.
- Crimson clover, 10 to 15 pounds per acre shows promise as a cover crop on some upland soils.
- Mixed grains and vetches may be used, but avoid noxious weeds.

When available, the following may be added for maintenance and erosion prevention, these suggestions being used in addition to the cover crop and not as a substitute for the cover crop:

- Stable manure, 10 to 12 tons spread over the orchard annually.
- Clover straw, two and a half to three tons per acre annually or alfalfa hay refuse.
- Straw, two and a half to three tons annually supplemented by addition of 100 nitrogen fertilizers.
- Commercial fertilizers applied in late winter frequently give large increases to the cover crop yield. Use 100 to 150 pounds per acre.

**REPORT OF THE SMALL FRUITS**

The growing of small fruits has been a practice in Coos county since the settlement of southwest Oregon, although there are not enough small fruits grown in Coos county to supply the home demand in its present proportions.

This does not mean that there is a profitable field here for the unlimited expansion of the industry. It does mean, however, that people who live on the land are missing some of the best things in life by failure to raise the small fruits needed for home use and possibly some for the local market.

Raspberries, strawberries, loganberries, youngberries, gooseberries, currants and possibly the new Boysenberry, all will do well when planted in the right location and given the proper care.

In the middle twenties there were more strawberries and loganberries grown here than the home markets could consume. This was the only time in the last 30 years that more of such fruits were produced than the market could absorb.

To grow and market large quantities of small fruits successfully, it is necessary to have a cannery or some other processing agency to take care of the major part of the crop. The only recommendation due to a scarcity of processing facilities is to raise this fruit for home use and for the home markets.

Consult the county agent and Oregon State Agricultural College concerning the varieties to grow. Few of the raspberries stay dormant in the fall, although this condition should prevail.

The various soils in the county call for different varieties of strawberries if the best results are to be obtained.

Growers interested in producing small fruits for any of the home markets should consult the merchants in that locality to ascertain their needs, then plant accordingly.

**Coos Markets Guage for Berries**

Strawberries should be grown for local fresh fruit markets when these markets are assured.

The Narcissa, a new fresh fruit berry, has given very good results in this locality and in some instances may replace the Gold Dollar as an early berry. It has high production, good appearance, and pleasing flavor.
The Marshall, or Oregon, still is the favorite for the barreling or preserving trade. “Crinkle” a virus disease has destroyed crop possibilities in much of the Marshall planting stock. Secure selected or certified plants of this variety to avoid this difficulty, or select non-affected planting stock.

The Corvallis, a new canning variety for the heavier soils, is gaining favor in the Coast section. Corvallis responds well to irrigation.

Red Heart, a new canning variety, is proving popular in the Coast region and in the Willamette Valley. The grower should use caution to secure strawberry planting stock free from Crinkle disease. See Extension Bulletin No. 481.

Loganberries for local fresh fruit trade may be produced but the grower should be fairly well assured that a market outlet exists before making plantings other than for home use.

The Youngberry has proven popular in Coast fresh fruit markets and their production is worth a trial on deep fertile soil in sheltered locations. Leaf spot is a serious disease on the Youngberry and Loganberry and Bordeaux sprays of a 4-4-50 formula are required before the fall rains in the Coast sections to prevent the spread of this loganberry leaf spot.

The Boysenberry is recommended for trial.

Black cap raspberry produces fairly well in sheltered locations on deep fertile soils and production should be limited to home use and local fresh fruit trade. Disease free planting stock should be used, and Plum Farmer and Cumberland are suggested varieties.

In recent years the Lloyd George, Newbergh, and an unnamed variety grown at Bandon, have given fair returns of fruit in Coos county on fertile soils sheltered from severe winds. They may be worth further trial for home and local fresh fruit use. The Lloyd George is an English introduction and is looked upon favorably for pies, jams, and for fresh fruit. The Cuthbert variety is usually unsatisfactory locally.

**Deep Soils Are Needed**

The soils for small fruits should be deep and drained, easily worked, and fertile.

Building the fertility of small fruit tracts after the crops have been planted is a discouraging and disappointing process. Depleted and worn out soils should have the fertility renewed by application of farm manure, cover crops, and sometimes lime before the small fruits are planted. There is no exception to this rule.

### CRANBERRY REPORT

The following table shows the cranberry acreage in the United States January, 1936:

<table>
<thead>
<tr>
<th>United States Cranberry Acreage, January, 1936</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acres Harvested</strong></td>
</tr>
<tr>
<td><strong>Average</strong> 1928-32</td>
</tr>
<tr>
<td>Wash. 546</td>
</tr>
<tr>
<td>Oreg. 142</td>
</tr>
<tr>
<td>Mass. 13,920</td>
</tr>
<tr>
<td>N. J. 11,000</td>
</tr>
<tr>
<td>Wis. 2,400</td>
</tr>
<tr>
<td>28,008 27,350</td>
</tr>
</tbody>
</table>

* Based on average price for crop marketing season.

The United States cranberry acreage in January 1936 is listed at 27,400 acres; Washington, 546 acres; and Oregon 142 acres, 77 acres being in Coos county. The cranberry acreage in Coos county can be doubled or trebled without seriously affecting the U.
S production.
Growers who undertake cranberry production, however, should understand the business and have capital sufficient to develop their plantings.

The following information relative to the Coos county cranberry industry has been compiled:

Total acreage in bearing in Coos county, 77½ acres.
Total acreage, including plantings under construction, 100 acres.
Rough estimate of available land suitable for planting, 200 to 500 acres.

Total number of growers, 38.
Average yield of a well constructed and managed marsh, under good management over a five year period, 108 barrels per acre.
Average of all marshes under varying conditions, 60 barrels per acre.

Varieties grown in Coos county:
Chief varieties—McFarlin, Stankavich, Searles, Howes: others—Prolific, Bennett, Early Black, Black Vale.

Value of 1936 crop.......... $24,000.
Spraying has been unnecessary due to the fact that there has been no commercial damage from either insect pests or from plant diseases. There is some evidence, however, of tip-worm, fruit worm, and cranberry girdler. Close watch should be maintained in order to prevent any unforeseen trouble from these sources. Leaf spot shows up when vines get too thick.

Fertilizers have not been used to any great extent due possibly to the fact that the bulk of the acreage has been planted within the past 10 years. Fertilizer experiments are being tried by local growers but it is too early to predict definite results. The county agent is urged to conduct fertilizer demonstration and trials on this crop.

Overhead irrigation has been tried by a few growers and during a two year period the plan has given satisfactory results.

Winter flooding is used on nearly all marshes in the county, the flood usually being held until the middle of April. Time of the flooding varies with different growers.
Growers strive to avoid introduction of loose strife or equistum (Horse Tail Rush) in securing their plants.

Recommendations For Industry

Location—
Out of the frost belt with a maximum temperature of 85. Soil must be acid peat or much. Sufficient water for irrigation and winter flood. Available clean sand for sanding and resanding. Good drainage, both air and water. Avoid large plantings in locations unprotected from prevailing winds.

Construction—
Cost of construction and planting as given by the Oregon Experiment Station bulletin and rechecked by 16 growers:

<table>
<thead>
<tr>
<th>Item</th>
<th>Per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing and stumpng</td>
<td>$100 to 150</td>
</tr>
<tr>
<td>Scalping and leveling</td>
<td>$250 to 300</td>
</tr>
<tr>
<td>Sanding</td>
<td>$150 to 200</td>
</tr>
<tr>
<td>Ditching and dyking</td>
<td>$125 to 150</td>
</tr>
<tr>
<td>Plants and planting</td>
<td>$50 to 100</td>
</tr>
<tr>
<td>Weeding</td>
<td>$425 to 500</td>
</tr>
<tr>
<td>Building and tools</td>
<td>$200 to 300</td>
</tr>
</tbody>
</table>

Total $1,300 to $1,700

There are two classes of berries to consider in the choice of plants, hand picked varieties, and scooping varieties. The McFarlin variety is considered the best hand picking variety for the following reasons:

It is well suited to the Coos county climate.

- Produces in two or three years.
- Withstands disease.
- Good keeping qualities.
- Markets readily at top prices.
- Produces small winter buds.
- Disadvantages are:
  - These berries vary in size and must be graded carefully to form a uniform pack.
  - They must be hand picked at a cost of $2.25 per barrel.

Another very fine berry for hand picking is the Stankavich berry. It has been developed in this locality and some of the characteristics are:

Advantages—
- Large in size (very uniform).
- Fine flavor.
- Resists disease.
- Keeps well under good conditions.
- Markets just as readily as the McFarlin.
Disadvantages—

Has tendency to produce large fruit buds that are damaged by weather conditions.

Does not produce uniform crops from year to year for the above reason.

Will produce extra heavy crops under the right condition.

No other hand picked varieties are recommended for future plantings due to climatic conditions and market demands.

Consumers are demanding a dark red berry of uniform size.

There is but one planting of the Howes, scooping variety, in the county. Additional plantings of Howes are recommended as they may be picked later by the scooping method at a cost of 40c to 60c per barrel at a wage of 60c per hour. Two hundred bushels of Howes will pay as much or more than 300 bushels of handpicked berries and will bring just as much on the market. These berries are dark red in color, uniform in size, and have excellent keeping qualities.

The production of cranberries in Coos county has considerable room for expansion. It is recommended, however, that anyone contemplating going into the cranberry business give careful consideration to the following suggestions:

Make a careful study of all available bulletins, most of which may be obtained free from the Government, or Oregon Agricultural Extension Service.

Visit as many other marshes as possible and learn from the experience of others.

Have soil tested for acidity.

Make check on maximum and minimum temperature.

Have enough capital to bring the marsh into production.

Secure plants from sources free from disease and insects. Also avoid introduction of weed pests in the vines.

REPORT OF THE LANDSCAPE AND HOME BEAUTIFICATION

Through the use of native shrubbery the attractiveness of most any home either in the city or rural districts can be improved. There is no occupation where the home is so closely related to the business as that of farming and it is believed that more attention on the part of farm home owners in Coos county in developing a more attractive landscape around the home would be of real value and inspiration to their farm families.

It is not the purpose of this recommendation to encourage farmers to raise their standards beyond those they are able to afford, but it is harmful to lose sight of the welfare of the family due to concentration on other problems.

It is believed that every farmer should endeavor to have his home include as many of the comforts and conveniences as his income will justify and the family should allow time for some pleasure to be mingled into the daily routine of farm duties. In addition to landscaping the farm home, using mainly the native shrubbery and inexpensive trees and shrubs, it is believed that more attention to painting and a general clean up on most farms not only would benefit the individual farm but would benefit the county as a whole.

In planning for farm beautification, the plantings should be viewed with the idea of permanency. The planting should not be too close to buildings, never closer than 2 feet. Evergreen varieties are best and provide year around beauty.

Lawson Cypress or Port Orford White Cedar as it is often called, lends itself most suitably to base plantings, to hedges and ornamental trees. This tree will stand shearing into any shape and should be sheared according to the purpose for which it is used. For hedges the plants should be set 18-20 inches apart and sheared short when the plants are very young. For base plantings it may be sheared into most any desired effects. Shearing should be started on Port Orford Cedar kept for ornamental trees when about four years old and annually thereafter.

Huckleberry is a fine native shrub for base plantings and hedges, and combines well with the Port Orford Cedar. It may be combined
with a front row of Oregon Grape, plantings being made about twenty inches apart.

Tulips planted in front of the foundation make attractive addition to the base planting. Any of the hardy dwarf heathers may be used for a permanent front line for a base planting. To secure color without expense, a little wild current may be used in the background. Other native shrubs that can often be used to advantage in landscaping the farm homes includes any of the three varieties of wild broom found on the coast, rhododendrons, azalies, greasewood, fir, hemlock, and silver spruce.

**REPORT OF THE TRUCK CROP COMMITTEE**

Approximately 50 tons of vegetables are brought into Coos county each week from outside points and local growers either cannot or do not choose to meet the competition from outside points in this vegetable trade.

To meet this competition, local growers must conform to certain requirements such as the following:

- Production of vegetables in reasonable quantities sufficient to supply the trade regularly.
- Vegetables offered must be of high quality, carefully graded, carefully packaged, and of the proper varieties.
- Prices of competing sections would have to be met.

Truck shipments of vegetables into Coos county afford a convenient and timely means of supplying local stores. Growers locally will be forced to give a similar service if they would secure and hold markets for local produce. This may require organized efforts on the part of the local producers.

The asparagus grown locally does not supply the demand, there being room for limited expansion. New plantings should be of the Washington variety.

Cauliflower production should be to supply the home and local markets. Varieties suggested for planting are Henderson, Snowball, and Super Snowball.

Root maggots are limiting factors in production and control methods may be secured from the county agent's office.

Production of carrots to supply local markets can be continued. Chanteney, More Bunching, and Nates Coreless being the recommended varieties.

In common with cauliflower production, broccoli is well suited to Coos county. There is not much prospect in the immediate future for expansion beyond the amount needed for local consumption.

There is limited demand for beets to be produced for local consumption. Detroit dark red and early wonder are popular local varieties.

Coos county still imports cabbage during late winter, spring, and in early summer. There is an opportunity for production in season for local consumption. Varieties suggested are early Jersey Wakefield, a pointed variety; Golden Acre for round head early summer use; and Danish Bald Head selections for the main crop. A succession of plantings may be made during the season.

Production of onions are recommended for farm and city garden use and occasionally for local markets where the production conditions are favorable for maturing and curing the crop.

Very little celery is produced for local markets. Production on raw peat soils is not a success but trials of various varieties should be made to secure celery, if possible, that can be produced to compete with high quality product now shipped into the county in large quantities.

There is opportunity to grow good quality lettuce in Coos county for local consumption. Sometimes it is difficult to produce lettuce of high quality in Coos county. Efforts are being made, however, to produce lettuce for outside markets. Varieties are New York No. 12, or other standard selections.

Production of surplus vegetables in farm and city gardens is unwise. These vegetables frequently are marketed after they have passed their prime and purchasers get the wrong impression of the quality of
locally produced vegetables. This interferes with the sale of locally produced commercial truck crops. Henry George, Chairman. O. T. McWhorter, Secretary.

C. M. Nelson
Levi Bunch
A. T. Morrison
Mrs. Ethel Kranlick
Reuben Lyons
A. M. Cooper
George W. Taylor.

REPORT OF THE POULTRY COMMITTEE

Oregon produces a surplus of eggs above the needs of state consumption, this surplus being exported to distant markets, principally on the Atlantic seaboard and California. The major part of its commercial egg industry lies in the counties west of the Cascades. The surplus of eggs of Oregon must be of high quality in order to meet competition from other districts and to justify transportation costs to distant markets.

Western and Southern Oregon are well adapted to commercial egg farming but the extent to which the industry increases will depend upon the progress Oregon farmers make in shaping their production to meet the requirements of outside markets.

The industry has weathered the storm of depression in a most creditable manner, expanding in Oregon and elsewhere as well. Oregon eggs are meeting keen competition from sections near its eastern market centers, but if Oregon preserves its present market outlets, or develops an industry for which many districts are particularly well adapted, the state must change many small farm flocks into better business units.

Coos Industry Could Be Improved

The poultry industry of Coos county cannot be considered a unit of itself, but must be considered in relation to the status of the entire industry. The county produces a surplus of eggs during part of the year, which as a contribution to a state surplus must be marketed outside of the county and state.

Coos county in 1930 had 1,305 farms. Of this number, 1,060 farms, 81 per cent, kept chickens; 76 per cent or 817 farms maintained home table flocks of less than 50 hens; and 193 farms or 19 per cent had flocks of more than 50 hens but less than 200 hens.

Flocks in this group are too large for home needs and too small to justify the care necessary in producing quality commercial eggs. Only 50 farms, 5 per cent, were keeping flocks greater than 200 hens and making a definite effort toward quality production.

In 1935, the county had 1,698 farms, an increase of 394 farms. The size of farms has grown smaller and the number of acres of improved land per farm likewise has become less. The small farms are confronted with the apparent necessity of some intensive crop and poultry may, with proper understanding of market outlets and demands, meet this emergency on many farms.

The value of chickens and eggs produced in 1930 was $261,661, about 8 per cent of the total agricultural cash income being derived from poultry. The industry in the county is a minor one and not very well planned or organized.

Producers of commercial eggs in Coos county sell to local retailers and independent produce dealers. The small volume of commercial eggs and large number of small flocks does not justify the operation of a local co-operative egg association. Low and fluctuating price levels locally would be improved if sufficient volume of quality eggs were produced to justify a tie-up with some of the firmly established poultry cooperatives. The
closest plant of such a group is located at Roseburg at the present time. The industry is handicapped by high freight costs on feed shipped in and on eggs or fowls shipped out.

The large cooperatives of Oregon, Washington and California maintain, as one unit, their own sales headquarters in Eastern cities and stabilize the industry in the section served. The poultry industry of Coos county has for years fluctuated up and down. Lacking a stabilizing influence, such as a cooperative, it is not a well-organized or stable industry for which the county is well adapted.

In the purchase of feeds and poultry supplies growers must buy from independent feed dealers, there being no competitive, stabilizing influence of cooperative food distribution that prevails in many sections of the state.

The export demand is for white shelled eggs. This naturally results in the leghorn and other white egg breeds dominating the western poultry situation but should not mean that heavy, brown shelled egg breeds such as Rocks or Reds should be excluded from Coos county farms.

The demand for well-managed breeding flocks to supply hatcheries within and without the state can be considered as additional market outlets for many farms. The premium paid for good hatching eggs should be higher than generally prevails throughout the hatchery districts of Oregon.

Production In State Small

Oregon produces only 1 per cent of the nation's poultry products and with this volume has little voice in setting prices. Producers operate on a margin between New York prices minus the overhead of delivering eggs of certain grade to outside markets.

The industry here and throughout the nation will expand in all phases throughout 1936 as a result of favorable prices in 1935 and the increased number of pullets next fall likely will have a depressing price effect that may be partially offset by an increased consumer demand.

Egg consumption has declined since 1932 although higher prevailing meat prices will tend to place eggs in a more favorable position.

As a result of better egg prices in the United States and a favorable foreign rate of exchange, the imports of dried, frozen, and shell eggs increased rapidly during 1935. The tariff on foreign eggs was sufficient during the years of low prices and normal exchange conditions although efforts to remedy the foreign egg import situation by means of securing an excise tax law failed. The imports for 1935 were in excess of 21,000,000 dozen shell egg equivalents.

The poultry business as a planned farm enterprise in Coos county is sound business. A number of the 394 new farms, rehabilitation, resettlement, and subsistence in the county will keep poultry. If local expansion is toward barnyard flocks rather than toward flocks large enough to justify commercial care, it cannot economically long meet competition from outside districts as 95 per cent of the farmers who keep chickens in the county have less than 200 hens. These flocks are too small to justify frequent gathering, proper farm storage facilities, frequent deliveries in case lots and other factors necessary to a profitable industry.

Suggestions For Coos Industry

1. Farms desiring small home table flocks, from which eggs do not enter trade channels, should keep flocks of two dozen hens or less.

2. The farm that plans a sideline cash income from poultry, eggs entering trade channels, should have a flock of not less than 400 to 500 hens.

3. A farm that expects to derive its major source of income from poultry should develop a business unit of approximately 2,000 hens as soon as experience and capital justifies.

4. For a well-rounded specialized poultry farm program, operated under natural conditions of ranging young stock, an acreage of 20 acres is recommended. Where artificial confinement is practiced through-
out, less acreage is needed. Rearing under artificial confinement is successful for the few but it is not given general endorsement.

5. It is recommended that 50 to 60 per cent of the laying flock be replaced each year with pullets.

6. In purchasing day-old chicks, caution should be observed. They should be from pullorum free parent when possible; or from accurately blood tested parents stock with all reactors removed.

7. Chicks under average farm conditions should be hatched early, February, March, and April being the three months in which the greatest number of Coos county chicks are purchased.

8. There are two types of brooder houses in general use by those in the industry, each designed to overcome losses from soil contamination according to farm conditions involved.

The permanent brooder house, equipped with artificial yards such as wire, concrete, or board floor. (See county agent for Extension Bulletin 451.)

The portable brooder house equipped with skids for moving to clean soil. (Extension Bulletin 446.) The permanent brooder house is in general use throughout commercial regions because of less labor overhead.

9. Shelter houses closed on three sides are recommended for young stock on the range. (Extension Bulletin 442.)

10. Green feed should be provided throughout the growing period and fed liberally until the pullets are in production. It may be reduced at that period to avoid too dark yolk color. Kale is the main green feed crop with carrots supplying winter succulence in case of a freeze.

11. The greatest economic loss to the poultry grower is quality of eggs on the farm after they are laid and before they reach the grader's candle. (How to Construct an Insulated Egg Room, is found in Extension Bulletin 445.)

12. Extremes of temperature have shown that laying fowls do better in partially insulated houses. Plans for this type of house and others as well will be shown in Extension Bulletin 480.

13. More capital is required to develop a safe poultry enterprise than the amateur anticipates. Exclusive of land and the home, where the laying house is used for brooding, first-year investment will be required of approximately $2.50 to $3.00 per pullet before she starts production. This expenditure when pro-rated will include cost of brooder, fuel, feed, litter, cost of chicks, mortality losses, houses, and equipment. A well defined plan should be followed because poultry keeping has many hazards.

14. Hens confined to the laying house will do better in Coos county if allowed four square feet of floor space per hen rather than limiting them according to the general practice of three square feet or less per hen.

15. It is recommended that the present law relating to the disposition of the dog tax license money be amended to include indemnity for turkeys and chickens killed by dogs.

16. The Breeder and Hatchery Code was thrown out when NRA was declared unconstitutional. The provisions of the code that related to false, misleading advertising and unfair trade practices were copied from a poultry trade agreement previously made with the federal trade commission. They are still in force. Anyone who has been damaged through false advertising or unfair poultry industry practices is advised to file his complaint with Oregon's forwarding agency, the Oregon Branch of the International Baby Chick Association.

17. The number of commercial poultry may be increased at least to the point of meeting the needs of local consumption.

Everett Messerle,  
Chairman.

H. E. Cosby,  
Secretary.

H. Hansen  
G. A. Hurd  
Fred M. Wheaton  
M. C. Buchanan  
Charles Winters.
Coquille is the county seat of Coos county. It is situated in the heart of the Coquille Valley at the junction of the Oregon Coast highway and the Coos Bay-Roseburg highway. Population about 3200.

Industrial development include the following: two creamery and cheese factories, one creamery and ice cream factory, three saw mills, two companies manufacturing battery separators, two veneer and venetian blind plants, two myrtlewood factories, a plywood factory under construction, shingle mill, machine shop, whey condensery.

Coquille has a good, modern hotel and coffee shop, also smaller cafes, restaurants and hotels and apartment houses and two good tourist camps.

Coquille's only theatre is one of the finest in this section of the state.

Coquille has three parks, including the athletic park and a municipally owned community building.

Coquille has a modern city hall.

Churches of almost every denomination are to be found here. Fraternal organizations are well represented also. There are two modern hospitals privately owned and operated, two weekly newspapers, and one bank.

Coquille has two grade schools and one high school.

Coquille's climate is excellent with no extremes of heat or cold.

For further information write: Secretary, Chamber of Commerce, Coquille, Oregon.

POWERS

Powers, the headquarters of the Coos Bay Lumber Company, is located at the foot hills of the Coast Range, in a narrow fertile valley along the Coquille river.

The agricultural development of this little town ranges from a few small truck farms, that supply the local market with fresh vegetables and luscious fruit, to the extensive diversified ranching carried on by the Twin River and Dement ranches at Eckley.

The Twin River ranch at Eckley has a very large herd of Hereford cattle as well as the only thoroughbred Percheron horses in the county. The prime beef from this ranch is canned in a small canning plant, and can be found on the shelves of the leading groceries of the state.

Several small dairies and the large modern Riverdell Dairy supply the town with fresh milk and cream daily.

Kirby Gardens are well known for choice flowers, especially tulips, the bulbs of which find a ready market.

BANDON

Bandon, a city of approximately 2,000 people, is situated directly on the ocean beach at the mouth of the Coquille river and the gateway to the fertile Coquille Valley. It has diversified industry. In addition to being the summer playground for southwestern Oregon and a favorite stopping place for tourists, it has one large sawmill and several smaller ones, a battery separator factory, veneer plant, box factory, creamery and cheese factory, canner, cold storage plant, and numerous smaller enterprises.

Besides lumbering and dairying its industries include poultry, stock raising, sheep raising, commercial fishing, cranberry culture, bulb culture, grass seed raising, commercial trout hatchery, beach mining for gold and platinum.

Bandon has a deep-sea harbor with regular coastwise steamer transportation. It is located on the Oregon Coast highway (U. S. 101). Its mild climate the year 'round makes it an ideal place to live.

The city owns its own hydroelectric power plant, water system and library. It has high and grade schools, a modern theatre, newspaper, eight churches, hospital, hotel, many beach cottage courts, largest dance hall in the state, a golf course.

For special folder and more detailed information about Bandon write: Secretary, Chamber of Commerce, Bandon, Oregon.
Westward the world has steadily turned in search for new fields to conquer and always, in the West has been found the land of greater opportunity.

Coos Bay, comprising the two major cities of Marshfield and North Bend, lies at the northern end of Coos county. A deep natural harbor invites commerce with foreign nations, and daily, ocean going vessels carry the timber products of Coos Bay mills to the far corners of the world. Commercial fishing, particularly for sardines, salmon, crabs and clams, is another major industry of Coos Bay.

Modern, up-to-date stores and shops serve to make Coos Bay the primary trading center of southwestern Oregon. Financial institutions, professional offices, and every metropolitan advantage are to be found here. Climate in Coos county is extremely equable, the average minimum temperature being 52 degrees, and the average maximum temperature 67 degrees. Summers are cool, and winters are mild. Snow is practically unknown, and the average annual rainfall is approximately 60 inches, the major portion of this falling between October 15th and March 15th. The Southern Pacific operates a direct line from Coos Bay to Eugene, Portland, and thence connects with major lines to all points of the nation.

Coos Bay has an approximate population of 15,000 persons, residing within a twelve mile circle with Marshfield as a radius. Splendid resort beaches may be found within a fifteen minute drive of the city. A modern golf course is located five miles south of Marshfield. The huge new bridge spanning Coos Bay, is located at North Bend, three miles north of Marshfield. Deep-sea fishing, lake fishing, hiking, picnicking, swimming, and other sports are provided for tourists and residents of the region.

An inquiry directed to either the Marshfield, or North Bend Chamber of Commerce will bring you full particulars of industrial opportunities, or recreational information.

MYRTLE POINT

Myrtle Point, a progressive town of 1500 people, is located at the junction of the three forks of the Coquille river. It is the center of the richest dairying and agricultural section in Oregon.

Within a radius of only 8 miles there are seven creameries that annually receive over 472,973 lbs. of butter fat from the surrounding country and produce over 1,457,727 lbs. of cheese which is recognized as among the best quality cheese in the world. For the party desiring a small ranch on which to retire or to make a good livelihood, this section offers an ideal location and an equable climate the year 'round. Ample moisture and the fertility of the soil makes it possible to truck garden, to raise any kind of fruit and berries or to run a small dairy herd. Immediately adjacent or within a short drive a person can find some of the best hunting and fishing in the world. Deer are numerous in the woods, pheasants, quail and ducks are round throughout the surrounding country. In any of the close streams may be found mountain trout, or salmon. Ocean fishing is only one hour's drive.

Myrtle Point proper has an excellent school system, modern store buildings. It has the largest per capita bank deposits, and on the lowest tax assessments in Coos county, all of which combine to make it and the surrounding country an ideal place in which to locate.

For further information, write: Secretary, Chamber of Commerce, Myrtle Point, Ore.
Top: Clover makes an excellent pasture.
Center: A field of Canary grass.
Bottom: Corn is an ideal silage crop.
The Coos County Chamber of Commerce and the Committee of the Agricultural Outlook Conference are deeply indebted to the following individuals and organizations who have made the publishing of this booklet possible through their generous financial support:

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- Coos Pomona Grange
- Consolidated Freight Lines
- First National Bank of Coos Bay
- Farr & Elwood
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- Lundy Cooperative Cheese Company
- Myrtle Gold Creamery
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- Marshfield Chamber of Commerce
- Mountain States Power Company
- North Bend Chamber of Commerce
- Powers Chamber of Commerce
- Sperry Flour Company
- Swift and Company
- Security Bank, Myrtle Point
- West Coast Telephone Company

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FURTHER INFORMATION

Further information about any of the cities or communities in Coos county can be obtained by writing to the secretary of any of the following Chambers of Commerce, all being members of the Coos County Chamber of Commerce: Marshfield, North Bend, Coquille, Bandon, Myrtle Point, Powers.