Report of Agricultural Planning Conference
COOS COUNTY

Containing Reports Of Committees Submitted and Adopted February 19, 1947
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Acknowledgement
Foreword

The land is our most valuable resource. From it comes the new wealth that sustains our economy. From the homes on the land comes the new blood that sustains our cities. Planning the wise use of the land to maintain and improve those homes and communities is the privilege and responsibility of each succeeding generation.

The Coos County Agricultural Planning Conference of 1947 was held to exercise that privilege and responsibility. This conference was a continuation of the planned agricultural development that has characterized the county for many years. Similar sessions had been held in 1925, 1936, and 1938.

The 1947 conference originated from a request by the county agricultural planning committee that the Extension Service of OSC cooperate in a reappraisal of agricultural conditions and outlook following the close of the war. Members of the Extension Service staff of Coos County who assisted with the conference are Helen Abrego, Home Demonstration Agent; J. W. Hansell and Noel Sommer, Assistant County Agents; and George H. Jenkins, County Agent. Cooperation of all other agencies serving agriculture in the county was also sought.

Seven committees were established several months in advance, including 174 people representing every section of the county. Each of these committees collected data and considered all facts obtainable in preparing a report. These committee reports were presented to the one-day county-wide conference which all farm people were invited to attend, and this booklet comprises the reports as discussed and approved by the conference. They represent the considered judgment of active farmers and farm leaders counseling with Extension specialists in the various fields. They are published here with the thought that they may serve as a guide to the trends that are probable and desirable in development of the farming industry and rural home life in the years immediately ahead.

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The total area of Coos County is 1,031,040 acres. Of this amount 289,341 acres, or 28% of the total area of the county, are included in farm ownership. On January 1, 1945, we had 1,752 farms, according to the United States census of agriculture for that year. The average farm includes a total of 165.1 acres, of which 28.5 acres, or 17.3% of the farm lands are tillable and 136.6 acres or 71.5% are nontillable grazing, timber, or waste lands.

By comparing these figures with those for 1940 we find that the total farm area has increased 5,966 acres since that time, and that the total number of farms reduced during this period from 1,953 in 1940 to 1,752 in 1945. This is a reduction of 201 in the number of farms. The amount of tillable land increased by approximately 1,575 acres raising the average per farm from 24.8 to 28.5 acres.

Utilization of Cut-over Land

While the proper utilization of the small amount of tillable land in this county depends to some extent on soil type, topography, and a number of practices such as irrigation, drainage, clearing, etc., the use of this land is quite well defined and presents no serious or major problems.

It is the most profitable use over a long period of time of the 240,000 acres of cut-over or hill land in farm ownership, which presents a number of problems worthy of careful study. This land was mostly covered with timber at one time and much of it, since logging, has not been used for either the production of a new crop of timber or for grazing livestock efficiently. Most of this is due to the lack of a definite program carefully developed and designed to give the best opportunity possible for the production of timber on timber land and for grazing on grazing land.

After giving considerable thought to this problem and at the request of livestock interests working both as individuals and through county associations, our State Legislature passed the Forest Land Classification Act known as Chapter 381—Oregon Laws 1937. This law authorized the establishment of Forest Land Classification committees in Oregon counties. During the year of 1937 Coos was the first county in Oregon to organize a Forest Land Classification Committee. Three members were appointed by the County Court, one by the State Forester, and one by the director of the State Experiment Station.

Fourth of Area Classified

Agricultural

Gradually over a period of years, most of Coos County was classified. In this work the committee had the assistance and cooperation of the Forest Service, the State Forestry Department, the Coos Forest Fire Patrol Ass'n., the O. & C. Revested Grants Lands Administration and all other agencies concerned in the field of forestry and agriculture. All agencies participating were in general agreement that the classification, as carried out in this county, was sound and that it would assist in blocking lands according to use and that it would provide an opportunity for carrying out in each area a management program for encouraging and assisting with the growth of timber in forest areas and growing grass for livestock in grazing and agricultural areas.

Under this plan slightly over one-
fourth of the total area of the county has been classified as being best suited for grazing and agriculture, and the remaining three-quarters as being best suited for the production of timber. For the most part, grazing and agricultural land lies in the southwestern part of the county and is located adjacent to tillable land, at a low elevation and is close to roads and schools. Except for a few narrow valleys where the land is in agricultural production, all of the eastern and northern part of the county is in the timber producing area.

Development of Grazing Land

In order to make the best use of cut-over lands for grazing, a number of forage crop nurseries have been established in cooperation with range land operators during past years to determine the best adapted forage crops for that type of land. The best grasses and legumes to seed on such land has been quite well established through these trials and through careful observation of results obtained on seedings made on larger areas both by airplane and by hand. Generally speaking ranchers have been using these better seeds during recent years. This is encouraged by benefit payments available through the ACA Program.

Many miles of fencing have been constructed which makes possible rotation grazing and better control of livestock. The development of springs and seeps in certain areas to provide for better distribution of livestock on the range has also been an important factor in increasing the carrying capacity on some of this land. Stock trails constructed during this period makes it possible for livestock to reach areas formerly inaccessible and the improvement of pasture land through clearing, has been an important factor in improving some areas.

Grazing District and Firebreaks

While it has not been extensively used to date, the cooperative plan of fire guard construction around grazing areas as announced by the State Forrester and approved by the Coos County Court is considered by the Land Use Committee to have merit. Under this plan, the cost of constructing fire guards around borders of grazing areas is paid on a basis of 50% by the land owner, 40% by the State Forestry Department and 10% by the county. Where it has been used in the Yellow Creek area, the land owners did the work of falling snags and getting ready for heavy equipment to construct the trail. The cost of hiring the bulldozer was paid by the State Forester. Experience to date indicates that a better organization within the district and better coordination between the district and the agencies supervising the use of equipment will be necessary to make the plan workable.

While this plan as developed at present provides means of constructing fire trails around the borders of grazing areas, which make it possible for wardens to be more lenient in granting burning permits, it is believed that further development of the plan will be necessary in order to accomplish the results for which it is intended.

In order to make this plan more workable, we recommend better organization within the area possibly along the lines of a district improvement district through which directors are selected to administer the work with the members and cooperating agencies. It is further recommended that consideration be given to organizing smaller districts, or to changing the plan so that fire guards may
be constructed along ridges or at other strategic points for fire control within the district.

Sustained Yield Program
To assist in establishing the Sustained Yield Plan for the perpetuation of the timber industry in this area and to encourage the return of land to the tax rolls, large blocks of county-owned forest land have been sold to lumber companies during the past year and several other sales are pending at this time.

(a) Except for a few small tracts which are located in grazing areas, most of this land is located in areas classified as being best suited for timber production.

The principle of a sustained yield of timber production is subscribed to by farmers as well as those who are directly interested in the lumber business. Members of the Coos Count court and other public officials should be commended for the assistance they are rendering in the establishment of this plan which is designed to perpetuate lumbering and to maintain payrolls on a permanent basis. The plan also has merit from the standpoint of returning a large acreage of land to the tax rolls.

To protect farmers who own land in a grazing district and who may need additional land to develop an economic unit, and to encourage the use of land for the purpose best suited, it has been agreed that such farmers will have the first opportunity to purchase county-owned land lying within the grazing area at a price equivalent to that which may be offered by others who are interested in obtaining it for use in connection with the Sustained Yield Program. It is believed, too, that lumber companies who may purchase small tracts of cut-over land located in grazing districts for use in establishing a Sustained Yield Program will be willing to sell such land at a fair price to ranchers who may be interested in it for grazing.

In addition to perpetuating the lumber industry and maintaining a permanent payroll, we believe that the Sustained Yield Program will be an important factor in encouraging the establishment of new industries which will provide a desirable market for farm woodlot products. This can be expected to increase the gross income on Coos County farms, many of which include some land which is best suited for the production of these products.

Cooperation Needed
Logging has progressed at a rapid rate during the last five years. Permits to burn slashing and brush for pasture development have been difficult to secure because of wartime regulations and shortage of labor and equipment. It is now time to take stock of the many problems associated with the proper utilization of cut-over land. It is important that we recognize that the welfare of our country is dependent upon solving grazing problems as well as those involved in timber production. It must be recognized, too, that the success of the sustained yield program will depend upon the cooperation of the timber companies in making it work as planned, rather than using it as a method of securing additional government timber to cut during this period of peak prices.

One of the greatest handicaps to the development of grazing land in the cut-over areas has been the high cost of constructing fire trails, fences, and other improvements, the responsibility for which has been placed entirely on the owners of grazing land. It seems reasonable that owners of timber lands located within the grazing
area should pay one-half of the cost of constructing fire guards between timber and grazing land and also for constructing fences on such lines where they are needed. This should also apply to government ownership, including federal, state or county.

The policy that the control of fire within grazing areas, even though used primarily for range development, is entirely the responsibility of the owner of grazing land is unjust and will prevent making the best use of this land. We believe that more help and assistance should be available from the fire control association, especially when burning hazardous areas, and that emergency crews employed during the summer months could be used part of the time on the fire line and for constructing trails to provide for safe burning. Burning of hazardous areas and the necessary work preliminary to burning would appear to be fire control and a legitimate charge against any funds appropriated or made available for that purpose.

Equalizing of Assessment Recommended

Because prices received for labor and goods of all kinds have been high during recent years, taxes have been paid readily and Coos County is practically out of debt at the present time. The policy of selling county-owned lands to private ownership increases the assessment roll of county property and will tend to increase tax revenue in the future.

For the purpose of equalizing the assessment on all types of property within the county, we recommend that revaluation of all lands and other property be completed by county officials as soon as practicable in order to avoid inequality in the payment of taxes.

Adjustment Urged

Some members of the committee have expressed concern over the possibility of loss of revenue from the advalorem tax on timber land which might be shifted and placed under the reforestation program which provides for an annual tax of 5c per acre plus a 12½% yield tax when the timber is harvested. This, it was felt might lower the amount of tax revenue from timber lands for a period of years pending the time the younger stands of timber are harvested. It has been estimated, however, by representatives of the County Forestry Department that the revenue from timber lands under the reforestation program will be nearly as great as it would be from the same lands through advalorem tax. They estimate that some of the timber companies will be harvesting older trees and certain other products to the extent that the revenue based on the 12½ per cent yield tax will equal the amount which would be received in taxation under the advalorem tax. It was also reported by the County Forester that timber companies purchasing county-owned lands for use in connection with the Sustained Yield Program were not placing it under the reforestation program and are paying the advalorem tax on it.

Considering the increased interest in the Sustained Yield Program, which is designed to perpetuate the timber industry on a permanent basis, and the increased demand for adequate fire protection, it appears that a larger percentage of the funds collected through the Fire Patrol Tax will be expended for that purpose. In view of this we recommend that the board of directors of the Coos Forest Fire Patrol Association be requested to make an adjustment between the amount of tax assessed against graz-
ing land which has a valuation of around $10.00 per acre and timber lands on which the timber may be valued at several hundred dollars per acre.

**Land Exchange**

In order to bring about the best utilization of land, the first requirement is classification to determine what it is best suited for. This has been completed for most areas in this county by the Forest Land Classification Committee.

The next requirement according to the results of land use studies, which have been subscribed to by all parties concerned is the exchange of lands between ownerships and blocking it in areas according to what it is to be used for. This is especially important on cut-over lands in Coos County some of which are classified for timber production and a small amount for grazing. The management of lands for timber production is quite different from the management plan which should prevail for grazing, and either enterprise must have the support of a plan which will be most efficient for the purpose to which it is devoted.

Several years ago farm owners in the Fairview and other grazing districts nearby expressed a desire to acquire government-owned land within the district in order that it might be properly developed for grazing and assist in developing better sized farming units from an economic standpoint. Representatives of the O. & C. Revested Grants Lands Administration had likewise expressed an interest in such an exchange in order that they might acquire additional lands in timber areas.

**Washington Approval Awaited**

This exchange was first approached through the county. A listing of lands owned by the county and located in timber districts was prepared and were offered in exchange for the government lands administered by the Bureau of Land Management. Wartime conditions which followed caused timber prices to rise to the point where valuations were thrown out of balance, with the result that the attempted exchange on a county-wide basis failed.

Later several farm operators in grazing areas purchased county-owned land in forest areas which were approved by local representatives of the Bureau of Land Management and offered it in exchange for certain government lands on a private basis.

While some of the applications for the exchange which have been filed have been given the approval of local and regional offices, they have not yet been approved and completed in the Washington office. Because of the importance of the exchange program in bringing about a better and more efficient use of land in grazing districts and in timber districts, we recommend that this conference reaffirm this practice and that communications be directed to the Bureau of Land Management, urging favorable and speedy consideration of the applications filed and others which may be filed in the future. In order that the exchange program may be better understood and that they may be in a position to assist and encourage this project we further recommend that copies of this communication be forwarded to representatives of Oregon’s delegation in Congress.

**Part-Time Farming**

The annual income is less than $600.00 on approximately 700 Coos County farms and the production from 745 of our farms is used mainly for the family. This would indicate that nearly 40 per cent of the 1752
farms in Coos County are part-time units. It is believed, too, that many persons who have been earning good wages during the recent period of high prices are planning to purchase small farms on which they plan to live and produce part of their living when industrial employment is lower.

Because of this tendency toward a large number of part-time farming units in this area, it seems important to call attention to some factors which should receive careful consideration from persons who are now located or who are planning to purchase or acquire part-time farms.

The small acreage located close to cities is a desirable place to live for those who are employed off the farm permanently on a full-time or part-time basis. It is considered hazardous, however, for families to attempt to make a living on farms which are too small to provide the necessary revenue and which will force the operator to leave the farm for part-time employment which may not be permanent.

The watchword in marketing of farm products in the future will be quality. Generally speaking, produce from smaller farms is inferior in quality to that produced on larger farms where the full attention of the operator is given and the entire revenue for the family must come from the sale of farm products. In view of this we recommend that careful consideration be given by persons who are considering locating on part-time farming units to the following factors:

1. Location—close to employment.
2. Location on roads and near schools where additional cost for these essentials will not be required.
3. Select farm, if possible, which could be made a full-time unit in case of necessity.

Land Development

Many new settlers are coming to the Pacific Northwest each year. Most of these have capital to invest for homes, farms, or business enterprises. The population of Oregon has increased 39 per cent since 1940. Approximately 125 farm boys reach maturity each year for each 100 farmers who reach retirement age.

While opportunities in Coos County for new settlers are limited we have room for a reasonable number on lands which are yet undeveloped for dairying and livestock farms and for more specialized products. A recent survey of cranberry production and potential cranberry acreage indicates room for a substantial number to engage in this enterprise. Draining bottoms lands, clearing bottom and hill lands, and subdivision of some of the larger farm units will provide opportunities for new settlers in this county.

Reports of previous conferences have recommended against settlers on marginal farms in timber areas and other places which are not now adequately served with roads, schools, and other public facilities. Generally speaking, farms in such areas are not productive and costs of operation are unusually high. We reaffirm previous recommendations regarding the settlement in these areas and urge those who are considering the purchase of farms or rural homes to carefully consider these factors before locating.

Recreation as a Land Use

The scenic attraction of the coast country is a valuable resource and effort should be made to utilize it properly and to conserve its tourist value. Encouragement should be given to the type of development along the coast and other recreational spots which will permanently appeal and be attractive to tourists who will pro-
vide a market for farm products and other things produced in Coos County.

**Rodent Control**

The control of rodents is an important factor in land use. Ground squirrels have been increasing in many sections of the county. This is due largely to lack of time and labor to control these pests. Bait prepared by the Fish and Wildlife Service, in cooperation with the Extension Service, is very effective in the control of squirrels and we recommend that more attention be given to a distribution of bait for this purpose.

Moles cause serious damage to pasture and hay lands, and to land on which intensive crops are grown. The control of these pests is most difficult. A number of bait materials are sold on the market for mole control. Many of these have not been effective. Good reports are frequently heard from others. Trapping has been recommended as the only practical means for control by the Fish and Wildlife Service. We recommend that bait materials which are thought to have given good results in the field be called to the attention of the Fish and Wildlife Service for experimentation, and that recommendations be made for the use of any new materials which are found to be effective. In the meantime, we recommend that mole trapping demonstrations be conducted through the Extension Service in several communities in the county each spring.

Rat control has been a problem in the cities of Coos County for many years. These rodents do a lot of damage on farms of the county. A rat control program has been financed by some of the cities for the past year and those who have charge of this work have advocated that the service be extended to rural areas. It is suggested that all granges and other rural organizations give careful consideration to the rat control problem and to the benefit through the proposed program, and that appropriate action be taken by each group regarding the extension of the plan to rural areas.

**Farm Labor**

Most of the labor employed on the farms in this county is on a year-around basis for dairy work. Except during the wartime period when labor shortages existed in all fields, an adequate supply has been available.

The expansion of the cranberry enterprise will cause additional demand for seasonal labor. Some of this will be offset by harvesting machinery which is being rapidly developed.

**Poultry Raising**

The production of poultry products in the United States increased approximately 50 per cent during the war. However, per capita production on the Pacific Coast is below pre-war level. During the past 15 years, the Pacific Coast has changed from a large exporting to an importing area. Poultry production in the United States will no doubt have to be curtailed from 25 to 35 per cent from the present high level of production unless large quantities are exported. However, inasmuch as the Pacific Coast has changed from an exporting to an importing area, the poultry industry in Oregon should be able to compete and about maintain the present poultry population.

Poultrymen that stay in business during the postwar period will not only have to produce quality products but also obtain economical production. The proper adjustment of the size of flock is an important factor in obtaining economical production. Poultry units should consist of a commercial flock, side line flock or a small
family flock. A farm that expects to derive its major sources of income from poultry should develop a business unit of not less than 2,000 laying hens. For the farm that plans a side line cash income from poultry, the unit should consist of at least 500 laying hens. For the family that just wants poultry meat and eggs for home consumption 25 laying hens are sufficient. (Extension Bulletins 625-480)

Capital Need Stressed

During the past ten years there has been a substantial shift from White Leghorns to the heavy breeds mainly New Hampshire. The increase in New Hampshires has been the result of a large demand for hatching eggs and some increase in fryer production. There has never been a large commercial broiler or fryer industry in Oregon. This type of meat production has been limited to a few producers close to the centers of population. Fryers should be sold at 3 to 3½ pounds. It requires about 12 pounds of feed to produce a 3-pound fryer. The price of fryers should be at least twice the cost of feed to make a reasonable profit on a large scale operation.

More capital is required to develop a poultry enterprise than the amateur anticipates. Exclusive of land and the home, it will require an investment of about $5 per bird to build and equip a brooder house and laying house under present conditions. About four acres of range land should be provided for every 500 pullets to be raised.

Chicks should come from stock that has been bred to live and lay that is free from pullorum disease. It is a dangerous practice to buy started chicks because of the disease hazard. It is a desirable practice to have the brooding operations entirely isolated from the laying flock. Five hundred chicks should be a maximum brooded in one group and at least 50 square feet of floor space is required for each 100 chicks in addition to the wire porch. If adequate range is not available pullets can be raised in confinement successfully if they are not overcrowded. They should have about two square feet of floor space per bird from two to five months of age if they are confined. Green feed should be provided throughout the growing period and fed liberally whether the pullets are on range or confined. It is essential that all range equipment be portable so it can be moved to control diseases and avoid contamination and killing out of green feed. (Extension Bulletin 659-627)

Replace Laying Flock

From 50 to 100 per cent of the laying flock should be replaced each year with a fresh supply of pullets. Pullets should never be placed in the same pen with older birds. Market eggs and hatching eggs should be gathered three or four times a day, cooled immediately, and held at a temperature from 40 to 60 degrees with a relative humidity above 90 per cent. (Extension Bulletins 659, 590, 633, Station Circular 138)

The poultry enterprise in Coos county consists mainly of farm flocks which produce eggs and poultry for home need. We recommend that every rural family give consideration to maintaining a small poultry flock to supply the home needs. As a guide to those who are inexperienced, we recommend Oregon Extension Bulletin No. 625 entitled, “The Home Unit Poultry House,” also USDA farmers bulletin No. 1508 entitled, “Poultry Keeping in Backyard.”
FARM HOME AND RURAL LIFE COMMITTEE
AGRICULTURAL OUTLOOK CONFERENCE

February 1, 1947

The Farm Home and Rural Life Committee considered the youth program, schools, family and community life, housing, foods and nutrition and health as being vital in the development of an optimum home and community life in Coos County. To facilitate adequate consideration of problems relating to these phases of family life several committees were established and activated. This report is based on their recommendations.

The committee realized that the material improvements recommended are based on income and that there is a very close correlation between incomes in Coos County and the improvement recommended. However, there can also be improvements in home and community life which require little, if any, money.

Rural Youth

Young people in rural areas are entitled to the same opportunities of youth living in any section of the county. They have unlimited energy, a variety of interest, and enthusiasm for activity if properly directed.

Coos County has a total of 5,335 children between the ages of 9 and 19 (1946 school census). Of this number approximately 1,763 reside in rural school districts and 3,572 reside in districts which are largely urban or suburban.

During 1946 a total of 576 boys and girls completed their 4-H projects. This number consisted of 234 boys and 342 girls.

Fifty boys are enrolled in the agriculture department of the Myrtle Point High School. This school is the only one in the county offering a course in vocational agriculture.

With the above facts in mind, the committee makes the following recommendations to improve facilities for our youth.

I. Four-H Club Work

Four-H Club Work in the county should be expanded to provide Club work for every boy and girl giving them the opportunity to participate if they desire to do so. The quality of work done should be improved to obtain the best results, possible. The committee feels the following suggestions will be of help:

A. That parents familiarize themselves with the ideals and objectives of 4-H Club work, and by so doing, encourage their children to participate. Parents' assistance is needed in furnishing leadership, project material and meeting places.

B. Leaders should build up parent interest through encouraging their participation in the club programs, by making actively interested parents honorary members and by holding district achievement days to show parents the accomplishments of the members.

C. The participation of older youth in 4-H Club work should be encouraged. At the present time many youngsters drop their 4-H Club work as they enter high school. This is believed to be caused by (1) a lack of clubs available for them to join, (2) a program of work too elementary for them, and (3) competition from other activities of questionable value.

It is believed the number of older 4-H Club members can be increased through (1) organization of 4-H Clubs for members of High School age with a program of work planned by them.
and which provides a challenge to them, (2) utilizing capable 4-H Club members of high school age as junior leaders, and (3) promotion of booster clubs for older 4-H members.

D. Organizations such as Home Extension Units, the Grange, Agricultural Associations and cooperatives, service clubs, parent-teacher associations and others interested in Agriculture and rural life can help by appointing committees to assist with 4-H Club work in their communities. Club work can be sponsored by assisting in obtaining qualified leaders, helping leaders with the program for the club, and encouraging children in communities to participate in club work by furnishing scholarships and other awards.

E. Regular district 4-H Club leader training conferences should be held for those leaders, prospective leaders, junior leaders, and parents who may desire information on the different phases of club work. The leaders themselves should formulate these plans.

F. Coos County 4-H Local Leaders Association meetings are a means of encouraging and spreading the influence of club work. Meetings planned by the leaders themselves should include planning for:

1. County-wide youth events.
2. Leader fun.
3. Leader training.

G. The committee feels that the following points should be carefully considered by the Coos County Fair board:

1. The County Fair should be held before the State Fair to allow the winning exhibits to be shown at the State Fair.
2. Space for garden, forestry and Home Economics exhibits should be increased to allow all members possible to exhibit.
3. Dormitories should be provided for 4-H members who are exhibiting livestock.
4. Premiums should be adjusted to allow larger awards where competition is very keen.

II. Vocational Agriculture

A. The various high schools in the county should seriously consider the establishment of agriculture departments to care for the needs of the rural youth attending.

III. Youth Recreation Facilities

During 1946, 97 of the 576 boys and girls completing 4-H Club projects attended 4-H summer camp at Camp Lawhorne, McKinley, Oregon. Thirty-seven juvenile grange members attended camp at the same location. A number of other organizations held summer camps at the Coos County Youth Camp, also at McKinley. In view of these facts the following suggestions are made:

A. Youth Camps should be encouraged to improve their facilities and increase the number of youth participating.

B. Communities should provide recreational facilities for youth. Often community and Grange Halls can be used for basket ball and other activities.

HOUSING

Improved housing for Coos County farm families is one of the major needs in the next few years. Although there has been material improvement in the interior of the average farm home we still have 20 per cent of our farm homes without running water and 22 per cent without electricity (1945 census). Probably one of the greatest aids to a homemaker in the efficient management of her household would be the installation of hot and cold running water,
bathroom facilities and electrification. Many of those homes already having electricity need to modernize the system.

A method of attaining pride in one's home is through family effort to develop an attractive exterior. Since the outside appearance of Coos County rural homes lags behind inside improvements the committee includes recommendations on exteriors and landscapes.

In light of the foregoing facts the following recommendations are made:

I. Plumbing and Electrification

Homes not yet having the facilities of hot and cold running water, bathrooms and electricity should give first consideration to these installations:

A. Information on standards should be made available.
B. Information on the construction and installation of septic tanks should be made available.

II. Efficient Use of Electricity

Although 78 per cent (1945 census) of Coos County's homes are electrified, adequate use of electricity for home lighting and equipment still needs attention. Therefore, the committee recommends an educational program be conducted to show families how more adequate lighting and efficient use of electrical appliances could improve family living.

III. The statement has often been heard that painting a farm house and buildings would increase taxes. A statement from the tax department says that painting a house or increasing the size for the first time would raise the taxes only a few mills while repainting a house that has once been painted would not raise the taxes at all.

A. It is recommended that considerable work be done by means of publicity and demonstrations for the improvement of the exterior of farm homes — such as painting, mending steps and other repairs.

IV. Landscaping

Coos County abounds in wild native shrubs that can be used to beautify rural homes at small expense.

A. It is recommended that these shrubs be used for farm home plantings as recommended by the 1936 Home Beautifications committee and 1938 Farm Home and Rural Life Committee.

B. In connection with other plans to improve the appearance of rural homes, it is suggested that special emphasis be placed on the improvement of driveways and paths.

FAMILY AND COMMUNITY LIFE

The committee, realizing that a wholesome home life makes for a well developed, emotionally stable individual, is much concerned with the breakdown of family life in many Coos County communities.

Coos County had 311 divorces in 1946, and 436 marriage, or 71 per cent as many divorces as there were marriages. In 1945, there were 264 marriages and 178 divorces, the number of divorces amounting to 67 per cent of the number of marriages. The 1944 record shows 138 divorces and 303 wedding permits, the divorce rate being 45 per cent of the weddings.

Statistics obtained from the Coos County juvenile office show a high but slightly decreasing number of delinquent, neglected or dependent children requiring attention during the same period of years. After a peak of 602 cases in 1943 the figures show a downward trend of 529 cases in 1944, 516 in 1945 and 456 cases in 1946.

With the statistics of juvenile delinquency (which in fact is often parental delinquency) in mind the committee recommends the following:
and which provides a challenge to them (2) utilizing capable 4-H Club

I. Recreation

Wholesome recreation for both home and community should receive greater emphasis. This can be done in the following ways:

A. The home should be center for family fun and a social center for family friends.

1. Training meetings for members of the family as well as leaders from Extension Units, church groups, Parent-Teacher organizations and others, should be held to give help in creating fun for family and friends.

B. Many young people in rural areas commute to urban areas in search of recreational facilities. Desirable recreation should be encouraged in the home community. Therefore, the committee recommends:

1. That regular monthly recreation leader training meetings be held to train leaders from all organizations in community fun. This should be held open to all leaders from all organizations in the county. Training should be given in song leadership, pre-party games, active and quiet games, skits, plays, folk and square dancing.

C. In order to carry out a wholesome recreation program community facilities will need to improve or be secured.

1. School gymnasiums or grange or other community halls should be utilized to the fullest extent.

2. Towns in the county should consider the construction of swimming tanks to provide safe and sanitary recreation for youth and provide a means for them to learn to swim.

II. Family Life Education

An effort should be made to encourage all schools and groups related to public schools to consider the responsibility of the school in the matter of family life problems. This recommendation is being made hoping schools can increase the value of family life training, not as a substitute for training given at home, but as a long range plan for bringing it into the home.

A. This might be accomplished by schools giving training to both boys and girls in preparation for marriage and family living.

B. Special emphasis should be placed on helping them to accept their future responsibilities as parents.

III. Study Groups

It is suggested that communities work through established organizations, to create new groups, if necessary, for the purpose of family life studies.

IV. Reaching More People

Teachers and extension unit members' husbands should be invited to participate.

V. Parent-School Relationship

Action should be taken by the community to improve parent-school relationships, possibly through booster organizations.

VI. Janitor Service

The committee feels that janitor service in many rural schools is inadequate and recommends janitor training schools be suggested to the Coos County School Boards Association.

VII. Women's Lounge

In view of the fact that in various towns of Coos County the country women need a lounge in which to rest, change clothing, and feed the baby or wait for a friend, or husband while he farms up a street corner or does a little loafing, be it recommended that such a place be established in the major shopping centers. That this room be provided with adequate janitor service and hostesses, and have necessary facilities for mothers to rest and care for children. This room must be kept clean at all times and should be light and airy. Many
organizations and businesses could cooperate in making this a successful project.

HEALTH AND NUTRITION

Committee members, aware of the relation between health, the farm home and rural life, considered conditions affecting the well being of families living in rural areas. It was found that health facilities have not been adequate nor conditions satisfactory during the past few years. As a result, the following statements and recommendations are made.

I. Medical Facilities

Coos County has a population of 45,000 (figures taken from Coos Bay Times 9/9/46). There are 21 physicians and 15 dentists to serve these residents. This is one doctor for each 2143 of population, and one dentist for each 3,000 residents. Coquille, Myrtle Point, and Bandon need more hospital bed space.

A. It is recommended that an educational study be made of conditions, needs and improvements for health facilities in Coos County.

II. Nurses

More nurses are needed in the county and it is felt that if the cost of training were less more girls would take this training.

A. It is recommended that interested groups should endeavor in some way to help worthy students of nursing. This could be a project for one service club or a cooperative undertaking for several clubs.

III. Rodent Control

It is the opinion of this committee that more attention should be given to the control of rats in rural as well as urban areas. Cooperation between farm and town groups should be encouraged in this control. Rats are not only carriers of disease, but also costly and unwelcome tenants for the farm.

IV. Stream Pollution

Many streams in Coos County are used as outlets for sewage disposal, thus becoming unfit for swimming or other uses.

A. The committee recommends an educational program through newspapers, radio, and community meetings on Sanitary Codes and safe practices as a means to help combat stream pollution. These programs should include information as to the number of infections which are traced to polluted streams and by swimming in them.

V. Social Hygiene Studies and Health Clinics

It is recommended that the Home Extension Units, Grange, Parent-Teacher Organizations and others in the county help the Coos County Public Health Association in promoting the Social Hygiene Studies and Health Clinics.

VI. Legislation

Citizens should be alert to the measures which will come before the State legislature and make their desires known to their representatives.

VII. Gardening

Census figures for 1945 show that the farm furnished living (farm produce consumed by the family) is worth at least $367 to each Coos County farm family. Recognizing that this is a substantial supplement to the family income and that garden produce grows readily all year in Coos County the committee recommends that every farm family grow a year-round home vegetable garden. Information concerning all phases of gardening is available at the extension office.

VIII. Food Preservation

The committee also recommends that families use the newest approved methods of food preservation for canning, freezing or storing their food supply. Demonstrations on these methods should be given as frequently as changes demand.
SOIL CONSERVATION COMMITTEE REPORT

Coos County farms include approximately 50,000 acres of cleared tillable land and 240,000 acres of non-tillable grazing land. Most of this land is used to produce perennial grasses and legumes for pasture and hay crops. This type of farming has prevented serious erosion and has made it possible to preserve for a longer period the natural fertility of the land. As farming continues however, it becomes increasingly important to give careful consideration to several factors which are considered essential to the maintenance of permanent and profitable agriculture.

Agricultural Lime

Except for a small area in the vicinity of Broadbent near Myrtle Point, the soils of Coos County are generally acid. Tests which have been made on soil samples taken from many sections of the county indicate that two tons of lime is necessary to neutralize the acidity and encourage maximum crop growth. For many years an average of from 250 to 300 tons of lime was used annually in this county. This amount increased gradually to a peak of around 1,500 tons in the late 1930's. The lime used at that time came from local shell deposits and application was stimulated by AAA payments.

Certain crops produced here do not require applications of lime for maximum growth; these include berries, root crops, and some others. Legumes however, and most grasses respond most favorably to applications of lime. In addition to the advantages in crop growth it is believed by most that an adequate supply of lime in soils adds nutritional value to the forage crop produced when fed to livestock, and lime is considered important in the maintenance of good pasture and hay crops which are the backbone of Coos County agriculture.

During the past two years the supply has not been adequate to meet the demand for applications of lime which were planned through the agricultural conservation sign-up. It is expected that larger amount will be available from existing sources during 1947, especially following the month of May. The cost of this material sacked, on board cars at receiving points in this county will be around $10.00 per ton. Bulk lime is available at prices ranging from $2.00 to $3.00 lower.

Shell deposits in Coos County and at the mouth of the Coquille River have been the source of several hundred tons of lime during years past. There is still a large amount of this material which could be used to advantage with proper handling methods and machinery. Present plans call for dredging Coos Bay and Coos River. Much of the material which will be removed in the dredging process will be pure shell which would supply a large additional amount of lime for agricultural use, providing arrangements can be made to have the material deposited where it will be accessible for agricultural use.

In view of the need of farmers in this county for a larger supply of agricultural lime and to investigate the possibility of making the most efficient use of the local supply of shell, we recommend that the chairman of this conference appoint a committee to investigate the feasibility of handling lime in bulk, to investigate local shell deposits and to contact the Coos Bay Port Commission, the Army Engineers, and others in an effort to make the local supply of shell and that which is to be dredged from Coos Bay in the future, available for agricultural use.

Commercial Fertilizers

Except for phosphate which has been used during recent years as a
practice through the Agricultural Conservation Program, and in individual cases of intensive production of vegetables and specialty crops, commercial fertilizers have not been extensively used on Coos County farms. As our lands are farmed longer and as competition from other areas in the production of commodities produced here forces greater efficiency, a large amount of this material will be used.

Results obtained through applications of phosphate fertilizer on pasture and hay crops and on some cultivated crops, and results obtained from this element in other sections indicate that its use here is profitable on most soils. A number of small trials with the use of nitrogen on pastures have given excellent results in stimulating greater growth, especially early in the spring.

In view of this, we recommend the following standard application of commercial fertilizers on pasture and hay crops in this county, especially where irrigation is used:

Annual application of phosphate fertilizer (50 lb. P₂O₅)
Early spring application—20 lb. available nitrogen
Summer application—20 lb. available nitrogen

Manure Conservation
Based on the commercial value of the fertilizing elements contained, the manure produced by the milking dairy cows alone, in this county would be worth around $500,000.00. While a large amount of this material is deposited directly to the land during pasture season, heavy losses occur due to leaching of the materials accumulated around the barns. Because of the value of barn yard manure in maintaining fertility, the humus supply, and advantages in the soil for bacterial activity, we recommend that all dairy farmers and others maintaining livestock, be encouraged to construct a suitable manure pit or tank in which to store this material. Plans for the construction of either can be secured at the County Agent’s office.

Particular advantage in using this liquid tank for storing manure are as follows:
1. All elements of fertility are saved.
2. It is sanitary.
3. Saves a lot of hard work.
4. Pastures used sooner following application.
5. Provides easy method of adding phosphate.

Drainage
Better drainage is needed on several thousand acres of Coos County farm land. This is one of the most important factors in maintaining high production, and should be encouraged on individual farms or on a community basis where drainage is needed.

Assistance is available through the Agricultural Conservation Program and for community projects. These payments amount to 8¢ per cubic yard of dirt moved with a maximum payment of 50 per cent of the cost. Benefits in the amount of 80¢ per rod are also available for the installation of tile or lumber box drains which have a minimum diameter of four inches. Under a special project available this year for the first time, payments will also be made for installing tide boxes and gates on a basis of 8¢ per cubic yard of dirt moved in making the installation plus 5 1/2¢ per board foot of lumber used, or $9.00 per cubic yard of concrete used in constructing boxes. In view of this help, which is available to any farm operator participating in the Agri-
cultural Conservation Program, we recommend that drainage work needed on farms be completed as rapidly as feasible. This will make the land more productive and put it in a better position to enable the operator to compete during periods of lower prices, which may follow.

Two types of organizations may be of assistance under certain conditions. The district improvement district may be used to advantage to encourage group activity where legal entity is necessary in order to enter into cooperative agreements with other groups and where all land owners affected are willing to be included on a voluntary basis. The drainage district may be used in those cases where a more formal type of organization is required to bring about community effort or where all parties concerned are not willing to participate voluntarily.

Irrigation

Irrigation of pasture land and hay crops has been practiced in this county for the past 15 years. Even though we have around 66 inches of rainfall each year, it comes during the winter months when it is of no value for crop production. Summers in this county are usually dry and irrigation has been profitable when property managed. Dairymen report benefits which justify the rather heavy expenditure per acre for this practice.

We now have approximately 125 irrigation set-ups in this county. Most of them are the overhead type which is well adapted to our conditions. Under this system land leveling is not required, which off-sets the cost of equipment.

It should be mentioned that irrigation will not pay unless accompanied by the planting of crops which will respond to additional moisture, the application of fertilizers to maintain production, and sufficient livestock to make efficient use of the additional forage grown.

It is important that the system be carefully planned and that the equipment purchased be designed for the particular job. Competent engineering help is available from most of the companies selling this equipment and assistance in planning is available through the Extension Service. It is advisable to obtain a water right on the water which will be used.

Flood Control

Approximately 6,000 acres of Coquille Valley land is flooded from one to three months each year. While the major flood comes during the winter when it causes very little damage, late spring or early fall freshets often cause serious damage by covering pasture with silt, and make it necessary to feed dairy herds on hay after they have started the pasture season.

Additional areas on Coos River and in the upper Coquille Valley are often flooded for shorter periods of time causing damage to pasture land, erosion to plowed farm land, and stream bank erosion.

Several surveys have been made by Army Engineers in the Coquille Valley during past years. The last survey report recommended certain improvements in the form of diking low places along the river bank, bank protection, and diking to protect against flooding with salt water on the lower river. It recommended the appropriation of approximately $140,000.00 to be available for this work contingent upon raising $25,000.00 locally to assist in paying the costs. Federal funds to carry out this work may be appropriated this year but local funds have not been raised.

We understand that legislation passed since this report was completed, makes it possible to include
drainage improvement work and that this is being done in other sections of Oregon and many other states. In view of this we recommend that the Army Engineers be requested to re-review the Coquille Valley situation in light of the later legislation passed and that the chairman of this conference be authorized to appoint a Coquille Valley Flood Control Committee to make this request of the Army Engineers, and to take such steps as may seem feasible from time to time to bring about flood control work in this valley designed to prevent the early fall and late spring flooding which cause most of the damage. Because of the similarity of flood control work and soil conservation in general, we recommend further that this committee also be requested to investigate the feasibility of organizing a soil conservation district in this valley.

We recommend that the Coquille Valley Flood Control Committee, to be appointed, investigate damage being done at a number of points along the Coquille River through stream bank erosion and, if feasible, contact the Army Engineers in an effort to secure temporary aid in correcting this damage, pending the development of a more complete flood control program.

The flood on Coos River during this past year is considered to be the most serious since 1890. It caused damage on many of the farms in this area through loss of fertility and by covering over pasture lands with silt, sand, logs and debris and making it necessary to reseed the land. Log rafts maintained along this river, especially near its mouth, are believed to be factors in holding back natural run off and waves caused by scows and tug boats cause damage to river banks. Willows and other brush along creeks and streams often cause a deposit of silt and a tendency to losing the stream. The cutting of timber in this watershed has been rapid during recent years which may be a factor in causing similar floods during future years. Plans have been announced for deepening Coos River as an aid to transportation which may be a factor in preventing, or aggravating floods in the future. It is considered possible that a dam above Dellwood on the South Fork might be a factor in controlling floods.

In view of this situation, we recommend that a committee be appointed consisting of farm owners on Coos River to contact the Army Engineers and request that a survey be made in this area in an effort to determine methods of protecting agricultural lands against future flood damage, also to investigate the feasibility of attempting to organize a soil conservation district in northern Coos County, or as part of a county organization.

Sand Dune Control

Shifting of sand from dunes along the coast causes some damage in this area to agricultural lands. It appears to be more serious however, to highways and roads. Planting beach or Holland grass on the sand dune to prevent the shifting of sand has been reasonably successful in many areas along the coast and is recommended for this use wherever this type of protection is needed.

Soil Conservation District

 Approximately 60 per cent of the farm land in the United States is now included in Soil Conservation Districts which have been organized by the land owners for the purpose of preventing soil erosion and carrying out work on a community basis designed to conserve the soil. Fifteen such districts have been organized in Oregon. This type of organization makes
it possible to do certain types of soil conservation work to better advantage. Technical help may be furnished to the land owners included, through the Soil Conservation Service and in some cases heavy equipment used for ditching, land leveling, etc., is furnished on a rental basis at a cost sufficient to pay for operation and provide a reasonable sinking fund for replacement. To organize a soil conservation district requires an extensive educational program through which the owners of land in the proposed area are advised of the advantage which might be expected. It requires a vote of the people concerned and the districts are managed by a board of supervisors.

In order to determine whether or not a soil conservation district would be helpful in this county in connection with drainage, flood control, and other work of this type, we recommend that the flood control committees appointed for the Coquille River Valley and for the Coos River area investigate the advantages that a soil conservation district might have in stimulating the conservation program in this county. It is suggested that these committees study the Soil Conservation District Law, visit a soil conservation district now in operation, and take such other steps as are necessary. If, in the opinion of these committees such an organization would be of sufficient value to justify the large amount of education work and effort required, we recommend that necessary steps be taken to start the organization.

**Soil Survey Map**

In order to have basic information pertaining to the soil type, topography, etc., which is needed in connection with land classification and better soil management program, we recognize the value of a soil survey similar to that which has been completed in a number of Oregon counties by the Bureau of Soils, U.S.D.A., cooperating with the Soils Department at Oregon State College. Even though several requests have been filed in the past, we recommend that an application be made to the proper authorities by this conference for a soil survey of this county to be completed as soon as possible and that we solicit the support of other farm organizations in this respect.

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**DAIRY COMMITTEE REPORT**

During the five year period ending January 1, 1945, our national cow population increased about 8.7 per cent, heifers from one to two years about 14.5 per cent and heifers under one year about 21.7 per cent. In Oregon the population of cows two years old and over increased from 275,000 in 1935 to about 284,000 in 1944 and 1945 dropping to 261,000 in 1946.

According to the outlook report for 1947 the number of milk cows on farms on January 1, 1946, was 3.2 per cent smaller than a year earlier, and on June 1 the reduction was 4.3 per cent. In spite of this reduction in number of cattle the number on hand January 1, 1946, (26,785,000 head) was the largest on record except during the four peak years of 1934, 1943, 1944, and 1945. During this two year decline feed supplies were comparatively large and prices received for dairy products were above average in relation to feed prices, particularly during 1945, indicating that farm labor shortages and high returns from other enterprises have been significant factors in influencing dairymen to reduce their herds.
According to the agricultural census figures for 1945 and other available information, Coos County dairymen milked a little over 16,000 cows during 1946. These cows produced better than 4,000,000 lbs. of butterfat during this period which had a market value of a little over $3,225,000.00. This represents well over half of the agricultural income in the county.

Soil and climate conditions in this county are favorable for dairying. Some land suitable for this type of production is yet undeveloped. The per capita consumption of all dairy products in Oregon has probably increased during the war period. The human population of the west has increased and probably will continue to increase as industries born in the war years continue to develop. Important, too, is our closer national relationship to the Orient. Because of these and other factors dairy production in Coos County can be expected to expand even beyond our banner year of 1945.

Competition in the dairy industry is going to become more keen. Efficiency in both production and marketing must be the watch word. Even though a cost survey conducted in the coast section during 1933 shows that herds under 10 cows produced butterfat at 39c, 10 to 30 cow herds 35c, 30 to 50 cow herds 33c and over 50 cow herds 31c, indicating greater efficiency in the larger herds, many factors including the size of the farm, the feed supply, and the home labor available are important factors in determining the number of dairy animals to maintain.

To make the most profitable use of this increased acreage and larger number of dairy cattle it is important that high producing cows be maintained, and that careful attention be given to the most efficient production of high quality forage crops. This will involve the expanded use of many improved practices including production testing through the dairy herd improvement association, better breeding, the control of disease among dairy cattle, quality improvement and improved marketing, improved forage crops, better methods of handling forage, irrigation, manure conservation, the use of commercial fertilizers, better drainage, more efficient pasture management and others.

**Feed Supply**

Roughage including pasture, silage, and hay is the cheapest source of feed for dairy cattle. Good yields of high quality pasture, and silage crops can be produced on Coos County farms every year. Because of the large amount of rainfall, some of which comes during the haying season, this crop is often seriously damaged before harvesting is complete. Newer knowledge of nutrition indicates that roughage harvested when about two-thirds grown will be more palatable and will have a greater total food value. With the use of newer harvesting equipment and methods, silage probably preserves a greater food value at less cost than any other method of roughage harvest and storage. For these reasons more attention is being given by Coos County dairymen to the production of better pastures and silage crops on tillable land and to the purchase of their smaller requirements of high quality hay for their dairy herds.

Since good pastures provide the cheapest and best source of food for the dairy cow, we recommend that all dairymen in this county maintain as much land as possible in a desirable mixture of grasses and legumes to provide the major source of food for the herd throughout the pasture season. To make the best use of these pastures we believe
that it will be profitable to apply irrigation water where conditions are favorable for this practice. The management plan should provide for rotation grazing and one annual application of from two to three hundred pounds of superphosphate or its equivalent and two annual applications of around twenty pounds of available nitrogen, one in the spring and one in the fall. Recommendations as to the best varieties of grasses and clovers to include in pastures on the different types of land in this county are included in the farm crops section of this report.

The advent of the field ensilage harvester and other improved methods of silage making have given new and greater importance to grass and legume silage. Some dairymen feed as much as 70 to 80 lbs. daily. Under these harvesting methods silage probably preserves greater food value per acre at less cost than any other method of forage harvest and storage. It is well adapted to our system of farming in Coos County and provides a means of harvesting surplus grass and clover while young and while the protein content is high and preserving it for later use. Storing roughage in the form of grass silage to supplement the pasture feeding during fall, winter, and early spring has the following definite advantages in this county:

1. It has a relatively high protein content, so that in addition to cutting on the hay requirement it reduces the amount of expensive protein concentrates needed.

2. The carotene content of grass and legume crops is more fully preserved when used for silage than when harvested for hay, consequently milk produced on good grass silage has a higher carotene and vitamin A value.

3. Grass and legume silage is very palatable and is the best substitute for excellent well managed pasture.

4. Permanent seedings of grass and legumes are desirable for grass ensilage; thus eliminating annual plowing and fitting of the soil for other silage crops which is an expensive process.

5. Many common weeds and undesirable early mature grasses do not have a chance to mature and scatter seed when cut for silage. Weeds not strongly flavored have greater palatability when preserved as silage than when cured as hay.

6. Grass and legume silage contains more digestible protein and other nutrients in less space than other types of roughage and therefore reduces feed storage costs. A cubic foot of grass ensilage weighs 8 to 9 times as much as a cubic foot of loose hay, and contains 3 or more times as much food value.

7. Modern harvesting methods lower labor requirements and do away with much of the heavy work.

8. More than 20 per cent of farm fire losses are caused by spontaneous ignition of hay. A fire in the hay is practically impossible to control. Silage containing 60 per cent or more water will not burn spontaneously or otherwise.

9. Recent experimental work shows that immature grasses or legumes when ensiled produce more butterfat per acre than when made into hay even when drying conditions are perfect. Because of the above factors it would seem to the advantage of all dairymen in this section to give serious consideration to this method of storing a large percentage of the forage on the dairy farm.

Corn, vetch and oats, peas and barley, and occasionally other crops provide excellent feed for dairy cattle and can be used to advantage in connection with crop rotation. Some variety in roughage available for feeding dairy cattle is desirable.

If full advantage is taken of the possibility of producing most of the food for dairy cattle in pasture and silage the hay requirements will be
very small. On many farms, especially those which have higher land available, this can be produced to advantage on the farm. In other cases it will be profitable to buy enough alfalfa or other high quality hay from other sections to supply this requirement. In general, this method will be most profitable on the smaller farm where the land available for hay production is limited, and where it is necessary to increase the number of cows to provide an economic unit for the family.

Most years it will pay to feed some grain to good dairy cows. The amount will depend upon the amount and quality of other feeds available. Since silage is produced to advantage at home, and since grain and other concentrated feeds must be imported from other sections, it should be to the advantage of dairymen to supply most of the food requirement in the form of good roughage.

A pound of grain fed within reasonable limits to good dairy cows should produce around one-tenth of a pound of butterfat. When fed with high quality pasture or grass ensilage it is not necessary that the grain mixture have more than from 10 to 12 per cent protein. When fed with hay or other food of lower protein content the grain should contain up to 16 per cent protein.

Carrots, mangels, turnips, and other root crops provide an excellent source of succulents for dairy cattle during the fall and winter months. In some cases the labor requirement for producing, harvesting and feeding of these crops is excessive. In most cases where irrigated pasture is available and where grass ensilage is fed during the fall and winter months the production of roots has been discontinued. They do provide a means, however, of having good succulent

feed for dairy cows on farms too small to justify the expense of a silo.

**Dairy Herd Improvement Work**

The average butterfat production per cow in the United States is about one-hundred and eighty-nine lbs. The average in Oregon is about 248 lbs. per cow. The average for all cows in the state in Dairy Herd Improvement Association Work is 350 lbs., but the average of herds included in the testing work in Coos County is slightly less than this figure. We have in the state many herds with an average production of 450 lbs., or more. The following compilation of data obtained by the Extension Dairymen from Dairy Herd Improvement Associations in 1944 shows how sharply income over feed costs rises as the production level increases.

<table>
<thead>
<tr>
<th>Level of Production (pound)</th>
<th>Value of Butterfat (dollars)</th>
<th>Feed Cost (dollars)</th>
<th>Income over Feed Cost (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>94</td>
<td>83</td>
<td>11</td>
</tr>
<tr>
<td>200</td>
<td>176</td>
<td>98</td>
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<td>500</td>
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<td>269</td>
</tr>
<tr>
<td>600</td>
<td>493</td>
<td>159</td>
<td>334</td>
</tr>
</tbody>
</table>

On the basis of these figures if the dairymen has a herd of 20 cows with an average annual butterfat production of 200 lbs. his total income over feed costs would be 1560 dollars. If his herd produced 300 lbs. of butterfat per cow his total income over feed costs would be 2880 dollars and if the same herd produced four hundred lbs. it would yield for him a total income over feed costs of 4160 dollars.

The number of sires proved to be good in Oregon each year is far too small. Production testing is the only way of proving the value of sires. It is the only accurate way of determining the level of production of each cow. Knowledge of the level of production is basic to a sound feeding and management program.
Dairymen in Coos County have been testing less than 3,000 cows through dairy herd improvement testing during recent years. This is less than $1/5$ of the producing cows in the county. The shortage of testers and lack of labor on dairy farms have been factors contributing to the small number tested. Directors of each of the dairy herd improvement associations have been considering methods of making it possible to include more cows in this program. The owner-sampler method, through which the dairyman takes his own sample seems most feasible of any plan considered so far.

In order that the largest possible number of cows be included in this improvement work, we recommend that the testing through associations be increased as much as possible. This will make it necessary to carry many of the smaller herds under the owner-sampler plan, but will provide accurate production records on these herds which can be used by the owner for culling low producers, checking on the value of sires, and as a guide to better feeding and management.

**Improving the Herd by Better Breeding**

Many dairymen in Coos County are using registered sires some of which have been proven good. Many others are using unregistered or registered sires of unknown producing ability. Because of the necessity of maintaining cows of high producing ability in order to compete favorably on a long time basis and considering the importance of sires in producing dairy cows of high producing ability, we strongly urge all dairymen who may not be in a position to avail themselves of the use of proven sires to take advantage of the breeding service offered through the Coos County Dairy Breeders’ Association.

Artificial insemination of dairy cattle has passed the experimental stage. It provides the best known means for mass improvement in dairy herds through the use of good sires. Over 500,000 cows were artificially inseminated in the U. S. during 1946. Several states are now inseminating 10 per cent or more of their dairy cattle. Data from New York, New Jersey, and Massachusetts shows that cows resulting from artificial insemination from good sires produce from 20 to 30 lbs. more fat than their dams. The cost of the breeding service through an association is no greater and in most instances less than through natural service, and the efficiency is equal to natural service.

In order to take advantage of this opportunity of mass improvement of dairy cattle, dairymen in Coos County organized the Coos County Dairy Breeders Association early in 1946. The organization is a local unit of the state-wide plan known as the Oregon Dairy Breeders Association. Both the state organization and the county unit is a cooperative association owned and operated by dairymen for the purpose of providing members breeding service by means of artificial insemination. The membership is limited to producers within a reasonable mileage from the headquarters of the unit. It is financed by a $10.00 membership fee and a capital certificate valued at $5.00 for each cow to be bred. Operating costs are raised through a service fee of $7.00 per cow. After paying for services rendered by the association to members including reserves for depreciation, contingencies, and any necessary sinking funds including that for the revolving capital, any balance remaining shall be returned by the as-
association to the member in cash. This plan has been in operation in Coos County for two years. During 1945 on a private basis, and during 1946 through the association and on a private basis. Results to date indicate that artificial insemination of dairy cattle offers a real opportunity to many dairymen to obtain the services of a good sire at a cost less than that required to keep a poor sire on the farm. We urge all dairymen who do not now have the use of a good registered sire to give careful consideration to this plan by obtaining full information on it from any of the officers or directors including Meldon Carl and Frank Burbank, of Arago; Howard and Ray Detlefsen, Coquille; Ellis Shull, Myrtle Point, and J. Q. Corrie, Bandon.

Disease and Parasite Control

Important Diseased cattle or those seriously infested with parasites are unprofitable. Mastitis is recognized as a most serious disease as far as loss of income is concerned. Research on various phases of mastitis indicates that a sound program of control must be based on early detection of the disease, sanitary measures, and treatment of infected animals. Many remedies have been advanced without a high percentage of cures. Most recent developments are with the use of sulphur derivatives. Penicillin or similar products have been very encouraging.

Dairy cattle in Coos County have been tested annually for tuberculosis since about 1917. Along with many other counties throughout the country, Coos received modified accreditation for this disease in 1932. Because of the desire of the dairy industry to produce a clean wholesome product and considering the hazard to human health, and to economic production, we recommend that annual testing of all dairy herds be continued for this disease.

Bangs Disease Control

Because of the enormous loss it causes to dairymen, its danger to human health, and other unpleasant aspects for which it is responsible, our goal should be complete eradication of Bangs disease from dairy herds in this county.

While successful in some areas, the test and slaughter program as administered in Coos County since 1934 has not been effective in eradicating the disease in other areas. Intensive research in the use of vaccination with brucella abortus vaccine, strain 19, indicates that it has merit when used according to recommendations of the B. A. I. and in conjunction with the test and slaughter program. It is recognized that sanitary measures and good herd management must not be overlooked in any control program.

Your committee has given careful consideration to the many problems involved in a sound program of bangs disease control in this county and now recommends that our present law enacted as chapter 355 Oregon Laws of 1945 be continued with the following amendments and stringent enforcement.

1. Provision that Option 3 which expires on November 1, 1947, under the present law may be continued in emergency or extreme hardship cases after that date on special authorization of the director of the State Department of Agriculture.

2. Provision that strict quarantine and sanitary measures be followed in those herds where Option 3 is being continued to protect neighboring herds.

3. Must apply to all dairy cattle regardless of location or size of herd.

4. Beef cattle not to be included except when located adjoining or in close proximity of dairy cattle, in which case they may be tested as provided, or be maintained in quar-
antine to protect dairy cattle.
To serve in an advisory capacity to all agencies and individuals when dealing with the control of livestock diseases in this county we recommend that the chairman of this conference appoint a committee of five dairymen and livestock producers to serve as members of a Coos County Livestock Disease Control Advisory Committee.

We recognize that control over the movement of cattle is an important factor in livestock disease control. In view of this we recommend that the State Police and other law enforcement officers be requested to check carefully on all livestock being transported over the roads and highways to see that they have been inspected according to law and are free from infectious disease or are being moved directly for slaughter.

Parasites of Cattle
The ox warble or cattle grub which is widely distributed among dairy cattle in this county, and cattle lice, cause heavy losses in production each year. Both of these parasites can readily be controlled by a spray program. Special equipment is necessary especially if it is to be used for spraying sheep for tick control or lice. To protect against losses in production and damage to hides from the grub, all dairy cattle which are infected with either of these parasites should be sprayed during the winter months. In order to make this possible on a program basis, we recommend that careful consideration be given by the directors of the Coos County Dairymen's Association or other appropriate group to the purchase of suitable spraying equipment which may be used on a large number of cattle each year and which may be paid for by fees collected for the spraying. Information on the control of each of these pests can be furnished in bulletin form through the County Agent's Office.

Better Marketing and Quality Improvement
Better marketing of cheese and other dairy products will again become an important factor as prices work lower following the wartime peak. The quality of milk produced on the dairy farm is an important factor in the marketing program. To insure high quality production and avoid lowering the quality of the manufactured product with poor milk, we recommend that all milk be carefully graded at the factory, and that this grading be done by representatives of the State Department of Agriculture. It is further recommended that factories pay for milk on the basis of grade with a substantial differential between grades.

To encourage better manufacturing methods, we recommend that the cheese scoring program which was in effect prior to the war be reactivated and that all plants in Coos County be encouraged to participate in this quality improvement work.

Recognizing the importance of Coos as a dairying county, and considering the possible advantages in marketing cheese under one trade name, and in working together in other activities closely associated, we recommend that the chairman of this conference appoint a committee consisting of one representative from each cooperative dairy manufacturing plant in the county, to carefully investigate the dairy products marketing program and to take steps that seem feasible directed towards the establishment of a large cooperative sales agency.

During the war dairy products were in great demand for our fighting forces and for shipment under the Lease-Lend Program. Only limited amounts were available for do-
Domestic consumption. Manufacturers of substitutes for these products have had a distinct advantage during this period. Under the stress for increased production, quality has been neglected and the industry is in need of improved public relations.

Sales promotion of dairy products in Oregon is handled through the cooperative efforts of the Oregon Dairy Products Commission, the Oregon Dairy Council, and the National Dairy Council. This work is financed by the contribution of $1/2c per pound on all butterfat delivered in May of each year by all producers. This amount is deducted from each patron's check and turned over to the Oregon Dairy Products Commission. These funds are expended on a national basis through the National Dairy Council and on a state basis through the Oregon Dairy Council. Financial support of the dairy council and its activities by manufacturers and distributors is on the increase. In order that this important work may expand we recommend the continued support of producers and that manufacturers and distributors generally be induced to cooperate to the end that more funds are made available to advertise and promote the use of dairy products.

LIVESTOCK COMMITTEE REPORT

Coos County farmers own approximately 240,000 acres of grazing land. For the most part this consists of non-tillable cut-over land. A small amount of government land is leased for grazing.

The following table lists the number of livestock on Coos County farms:

<table>
<thead>
<tr>
<th>Livestock Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cattle and calves</td>
<td>29,983</td>
</tr>
<tr>
<td>All cows and heifers, two years and over</td>
<td>18,789</td>
</tr>
<tr>
<td>Cows and heifers milked</td>
<td>15,221</td>
</tr>
<tr>
<td>Beef cows and heifers, two years and over</td>
<td>3,568</td>
</tr>
<tr>
<td>Yearling beef heifers for replacement</td>
<td>600</td>
</tr>
<tr>
<td>Beef heifer calves for replacement</td>
<td>600</td>
</tr>
<tr>
<td>Beef cows and heifers</td>
<td>4,768</td>
</tr>
<tr>
<td>Calves retained for beef</td>
<td>1,500</td>
</tr>
<tr>
<td>Yearling steers and heifers for beef</td>
<td>1,000</td>
</tr>
<tr>
<td>Total beef cattle</td>
<td>7,268</td>
</tr>
<tr>
<td>All dairy cattle</td>
<td>22,715</td>
</tr>
<tr>
<td>Cows and heifers milked</td>
<td>16,000</td>
</tr>
<tr>
<td>Bulls and young stock</td>
<td>6,715</td>
</tr>
<tr>
<td>Bulls</td>
<td>715</td>
</tr>
<tr>
<td>Dairy calves and yearling heifers</td>
<td>6,000</td>
</tr>
<tr>
<td>Yearling heifers</td>
<td>2,800</td>
</tr>
<tr>
<td>Dairy calves</td>
<td>3,200</td>
</tr>
<tr>
<td>All goats and kids</td>
<td>1,294</td>
</tr>
<tr>
<td>All sheep and lambs</td>
<td>26,379</td>
</tr>
<tr>
<td>Ewes</td>
<td>21,257</td>
</tr>
<tr>
<td>Wool shorn</td>
<td>209,703</td>
</tr>
<tr>
<td>All hogs and pigs</td>
<td>1,878</td>
</tr>
<tr>
<td>Mules and mule colts</td>
<td>31</td>
</tr>
</tbody>
</table>
Horses and colts ........................................ 1,579
Turkeys .................................................. 5,074

Excepting the dairy cattle most of the livestock listed is maintained on this hill land. Most of this area has been classified by the Coos Forest Land Classification Committee as being best suited for grazing. The carrying capacity on some is rather low. This is due in a large measure to the difficulty involved in securing burning permits during the wartime period, and to the shortage of labor and equipment during recent years which has forced neglect of range land.

It is estimated that the range land in this county if properly developed and maintained could carry an additional 80,000 sheep. Figured on a basis of present income this should increase the return annually from livestock by nearly $1,000,000.

Range Development

Some of the factors considered important in increasing the carrying capacity of cut-over grazing land in Coos County are:

1. Better Forage Crops. Nursery trials in which many different grasses and legumes have been grown have been conducted for a number of years. Field seedings made in different sections of the county have also supplied valuable information on the best grasses and legumes for this purpose. The most adaptable legumes are Subterranean clover, Alsike clover, white clover and the most desirable grasses are English rye grass, Alta fescue, red creeping fescue, highland or Astoria bentgrass and a number of others. Detailed recommendations for seeding cut-over hill land are included in the Farm Crops section of this report.

2. Better Livestock Management including rotational grazing made possible by more fencing, water development and stock trails which make inaccessible areas available to stock.

3. The spread of certain weeds including Tansy Ragwort, Irish Furze or Gorse, Tipton weed and many others threatens to be a factor in reducing carrying capacity on this type of land. Every effort should be made to keep these weeds under control.

4. Clearing of certain areas over the range which are reasonably level and can be reached with the equipment has proved practical in some sections increasing the carrying capacity and making it possible to obtain a stand of grass and clover without depending upon burning for a seed bed.

Clearing cut-over land which is not too steep and not covered with too large stumps can be accomplished with bulldozer equipment at a reasonable cost. The exact amount will depend on a number of factors such as the type of brush, the number of logs, the size of stumps, the amount of moisture in the ground, the slope and topography of the land and many others. The average cost of clearing land covered with brush which is not too difficult to clear would be around $50.00 per acre according to figures submitted at livestock committee meetings. Land covered with myrtle and other stumps more difficult to clear would cost from $70.00 to $100.00 per acre. In spite of this cost it is believed that small areas can be cleared to advantage and would improve the carrying capacity of the land.

5. Control of burning through the organization of grazing districts, and fire-breaks could be an important factor in range development. It is recommended that consideration be given to organizing smaller areas or to the possibility of changing the plan to provide for cooperative efforts in constructing fire-breaks within grazing districts. We recommend that the fire patrol association be requested to give special assistance to ranchers in burning areas which contain a large amount of debris, and that during the summer, emergency fire crews be used to assist in the construction of fire trails between timber and grazing land, and in doing other work which
will facilitate burning in areas that need special attention.

6. Seeding of range land by airplane has been a factor in range development which makes it possible to apply the seed at one time during the fall which is not possible where hand seeding is used on larger areas. Better distribution of seed is also possible by a plane.

7. Rodent control is a factor that has been neglected during recent years and one which is causing considerable damage to range land in some areas. Ground squirrels which are most troublesome can be easily controlled with poison barley which is prepared by the Fish and Wildlife Service and distributed through the county agent's office.

Goats have been used to good advantage on many ranges in this area for the removal and control of brush, and they are recommended for this purpose where they can be controlled by fencing. The sale of Mohair from Angora goats can be expected to pay the overhead cost, and their main value then would be for their land clearing, and pasture improvement. Contrary to popular opinion, goats are not difficult to handle if ordinary care is used. The flock should be handled so that kids will come in May or June, and wethers should be separated at that time as they have a tendency to travel too far for the young goats. Coyotes and bobcats prefer young goats to sheep, and it is necessary to keep varmints under control in order to expect success from goats.

Predatory animal control is another important factor in range development, and in livestock management in Coos County. Coyotes, bobcats, bear and other predators often do a large amount of damage in some sections of the county. Two government trappers are maintained at the present time to control these animals. It is recommended that this service be continued on a permanent basis in order to protect the sheep industry.

Agricultural conservation practices are important in assisting the use of better seed on range land, fence construction, stock trail, fire-break construction, water development and pasture improvement.

The sustained yield program for timber production may have a tendency to increase problems of the range operator. It seems reasonable that the owner of timber land located within the grazing area, should cooperate on an equal basis with the owner of grazing land in the construction of fire-breaks between such lands. Also where fences are necessary between grazing and timber land, within grazing areas, the responsibility for this construction should be assumed equally by both owners. To eliminate the necessity for protecting timber within grazing areas as much as possible, we recommend that owners of grazing land give consideration to the purchase of timbered areas lying adjacent to their farm and then selling the timber to some logger who may be in a position to handle it. This plan has been approved by the Coos County Court for county owned land in grazing districts and where the price paid is equal to that offered by timber companies.

Sheep

Livestock operators in Coos County now own approximately 26,000 head of sheep. If we can make the best use of our grazing land this number can be increased to around 100,000 head. The sheep population in Oregon is now 40 per cent of the number 10 years ago. The greatest decrease in numbers has been in eastern Oregon, while in western Oregon there has been a slight increase. A gradual increase in sheep numbers in this county as rapidly as range land is developed would seem sound.
It is important to keep constantly in mind the need for better sires and better breeding ewes in order to have better wool and better lambs for market. The difference between a good yield of good wool, good lamb, and poor wool, poor lamb is often the difference between success and failure.

A study of Willamette valley hill pastures and their utilization by sheep, indicates a possibility of improving the yield of wool and lamb with different breeds of sheep. Work being done in Great Britain shows great advantages for use of hill and mountain breeds, and it is possible that the introduction of breeds not commonly used here now may be necessary in order to obtain the greatest possible efficiency in production.

While many excellent lambs are marketed from Coos County ranges, it has not been possible in the past to market all lambs when they are in best condition for shipment. Lack of adequate fencing, and in many cases sufficient time has forced the operator to sell all of his lambs at one time. Under this plan only a certain percentage are in top condition and a lower price is received for some of the lambs in these shipments handled in this manner. It also tends to lower the reputation for Coos County lambs on the market. The possibility of improving this situation by centralizing lambs and other livestock for shipment at points where pasture is available, has been considered by producers. This plan is believed to have merit and may be used in the future when the marketing system is more highly developed.

Lamb and wool shows have been effective in the past in centering attention on the production and marketing of lambs and wool of higher quality. Careful consideration should be given again to establishing these shows for that purpose, and to improving the sheep division of the Coos County Fair.

While the practicability of feeding sheep during the winter months while grazing on cut-over land is questioned by many operators, supplemental feeding of a protein concentrate, grain or hay, may be used to advantage on these ranges where the feeding areas are accessible to truck or pick-up during the winter months. A small amount of feed of this nature can be expected to improve the quality of the wool and of the lambs. Whether or not winter feeding will be profitable will depend upon the many factors involved and should be carefully analyzed and determined by each operator.

While losses from diseases or parasites have not been excessive in this county, it is believed that at least one educational meeting each year to discuss new developments in disease control would be helpful. The presence of internal parasites in sheep can be readily determined from specimens of droppings when tested at the veterinary department at the Oregon State College. Recommendations on the control of such parasites are available on request.

The use of high pressure sprayers are effective in the control of external parasites, such as lice and ticks on sheep. These sprayers are used extensively in some other areas, particularly in Idaho and eastern Oregon. At least one careful and thorough spraying of sheep during the winter would be relatively inexpensive in this county. Suitable equipment could be used for this purpose and for spraying cattle for ox warble and lice control. We recommend that the feasibility of obtaining such a sprayer for use in this county be given careful consideration.
and we urge sheep producers to participate in such a program, if available, in order to determine the value of the plan.

In order to assist in controlling predatory dogs, we recommend that part of the fees collected in dog taxes be used to apply on the salary of government trappers who are called upon to control dogs of this kind.

**Beef Cattle**

Producers in Coos County now own approximately 7,200 head of beef cattle. Most of the land especially suited for beef cattle production is now utilized for that purpose and no increase in the number of beef animals is recommended for this county.

**Goats**

The number of goats on Coos County farms is now 1,294, according to the Agricultural census in 1945. This number shows a small reduction in numbers since 1940. Most of the goats included in this number are Angoras and are used mainly for brush removal and clearing pasture land, a purpose for which they are considered valuable by those who have used them. To accomplish best results with goats, it is considered necessary to have enough to justify giving them good care and it is believed by the livestock committee that they can be used to an advantage on many Coos County farms.

**Hogs**

Census figures show that on January 1, 1945, we had 1,878 hogs on 382 farms in Coos County. This is about the same number maintained on farms in this county during 1940. Since this is not a grain producing area, hogs are recommended on farms here merely to utilize the by-products of the farm and garbage from the home. This will supply pork for home use and in some cases a few for market.

**Horses**

In spite of the interest which has been created in saddle-horses in different sections of Coos County and other areas, the total number of horses on farms are gradually reducing. Census figures show that in January of 1945 there were 1,579 horses in this county located on 684 farms. Most of these were saddle stock. The number of draft horses has reduced rapidly. There will always be a demand for a limited number of good saddle horses in this county, but it is believed that draft horses will be replaced almost entirely by tractors and for this reason their production could not be recommended.

**FARM CROPS COMMITTEE REPORT**

Most of the area of Coos County is hilly and devoted to timber production. A little over one-fourth of the county including 289,341 acres is included in farm ownership. Of this amount an estimated 50,000 acres are tillable. Approximately 35 per cent of the tillable lands are devoted to the production of harvested crops and the remainder is used for permanent pasture.

Following is a tabulation showing the acreage of various crops harvested in Coos County according to the agricultural census of 1940 and 1945.
Forage Crops

Since most of the tillable acreage as well as the non-tillable land is devoted to the production of forage crops best adapted to our various soils, and to recommending mixtures for use under different growing conditions.

All forage crop mixtures whether for hay or for pasture should include one or more legumes to improve the quality of the feed and to supply nitrates which will stimulate the growth of the grass. Legumes should be inoculated when seeded on land where this particular legume has not been successful in the past.

All forage crop mixtures should be seeded on a well prepared and very firm seed bed. This is extremely important in the case of lotus and other fine seeded legumes. A combination of grasses is usually better than a single grass in a mixture.

Following are mixtures considered most suitable by the crops committee for seeding under different conditions in this county. Included with each mixture listed are grasses and legumes which are well adapted and may be included if desired.

### Low Overflow Land

<table>
<thead>
<tr>
<th>Grass Type</th>
<th>Acreage 1940</th>
<th>Acreage 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reed Canary Grass</td>
<td>8 to 10 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Optional — Seaside Bentgrass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lotus Major — worthy of trial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meadow Foxtail — worthy of trial</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wet Bottom Land

<table>
<thead>
<tr>
<th>Grass Type</th>
<th>Acreage 1940</th>
<th>Acreage 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lotus Major</td>
<td>2 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Alsike and White Mixed</td>
<td>4 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Meadow Foxtail</td>
<td>5 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Alta Fescue</td>
<td>6 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>English Rye Grass</td>
<td>6 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Optional — Seaside Bentgrass</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Well Drained Bottom Ground

<table>
<thead>
<tr>
<th>Grass Type</th>
<th>Acreage 1940</th>
<th>Acreage 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Clover</td>
<td>5 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Alsike and White</td>
<td>4 pounds per acre</td>
<td></td>
</tr>
<tr>
<td>Irrigated Land</td>
<td>Bench Land</td>
<td>Hill Land</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Ladino Clover</td>
<td>Subterranean Clover</td>
<td>Subterranean Clover</td>
</tr>
<tr>
<td>English Rye Grass</td>
<td>Alta Fescue</td>
<td>Ailske and White Clover</td>
</tr>
<tr>
<td>Meadow Foxtail</td>
<td>Optional—Red Clover</td>
<td>Alta Fescue</td>
</tr>
<tr>
<td>Optional—Subterranean Clover, inoculated</td>
<td>English Rye Grass</td>
<td>English Rye Grass</td>
</tr>
<tr>
<td></td>
<td>Optional—Red Clover</td>
<td>Italian Rye Grass</td>
</tr>
<tr>
<td></td>
<td>Subterranean Clover</td>
<td>Optional—Lotus Corniculatus</td>
</tr>
<tr>
<td></td>
<td>Lotus Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alta Fescue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subterranean Clover</td>
<td></td>
</tr>
<tr>
<td>English Rye Grass</td>
<td>Alta Fescue</td>
<td>English Rye Grass</td>
</tr>
<tr>
<td>Optional—Red Clover</td>
<td>English Rye Grass</td>
<td>English Rye Grass</td>
</tr>
<tr>
<td></td>
<td>Subterranean Clover</td>
<td>English Rye Grass</td>
</tr>
<tr>
<td></td>
<td>Lotus Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alta Fescue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subterranean Clover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lotus Major</td>
<td></td>
</tr>
</tbody>
</table>
| | Alta Fescue | | spring months when most other le-
| | Subterranean Clover | | gumes do not grow. Either the Mount |
| | Lotus Major | | Barker or Tallerook strains are well |
| | Alta Fescue | | adapted and for best results this |
| | Subterranean Clover | | crop should be seeded in the early |
| | Lotus Major | | fall. There have been some failures |
from Subterranean Clover seeded on a burn, and it is considered best adapted for seeding on bench or hill land which can be tilled. The seed must be inoculated either with soil or cultured material.

Lotus Major is a legume which shows promise on low wet soils. At the J. J. A. Experiment Station at Astoria, and along with the northern coast sections of Oregon it is competing favorably with tussocks and other wet land crops, and it produces a large amount of palatable nutritious forage. The smooth leaf strain appears to be more palatable to livestock, and it may be more tolerant of extremely wet conditions. The seed must be inoculated preferably with soil taken around thrifty plants, and it is extremely important that it be seeded in the spring on a very firm seed bed on top of the ground or lightly covered. Because of the need for a legume that will do well on low wet land in this county, and considering the high value of this particular legume we recommend it for further trial on wet land throughout the county.

Lotus Corniculatus is another legume of excellent quality. While some of our earlier seeding trials were unsuccessful later experience on at least one farm in Coos County indicates that these failures may have been due to methods used when seeding. Because of the high value of this legume in areas where it is grown extensively, we recommend it for more extensive trials especially in higher land. The seed should be sown in the spring, and must be inoculated either with soil or with cultured material. It is extremely important that the seed bed be well prepared and very firm.

Meadow Foxtail is a very palatable grass which will grow on very wet soils. It is not a heavy producer of forage, but is worthy of trial on wet land in this area. It is an ideal grass to mix with Lotus Major on low poorly drained soils and should be a good one to include in the mixture seeded on irrigated land.

Reed Canary Grass is a heavy producer of forage, and will grow under extremely wet conditions. It makes a very good quality grass for either pasture, hay, or silage if cut young. Its ability to stand long periods of flooding, and its long life makes it a desirable crop for the low overflow lands in the Coquille river valley.

Annual Crops often seeded in this area for forage include sudan grass, vetches, and grains. Sudan is palatable especially for pasture, and is favored by many dairymen in the higher parts of the county. It can be seeded late in the spring and often serves to advantage as a catch crop during years when other crops have failed. Italian rye grass is often seeded with sudan to advantage.

Root Crops
For many years root crops including mangels, carrots and turnips were extensively grown in this area to provide succulent feed for dairy cattle during the fall and winter months. They are excellent for this purpose and can be recommended especially on farms which do not have silos. Mangels which have proved satisfactory in the past include the prize winner Giant Gatepost and Danish Sludstrup and Giant Red Eckendorf. Carrot varieties include Chantenay, Ox-heart, and White Belgian. Commonly grown turnips include Bortfield, White Pomeranian, and Purple Top.

Silage Crops
Corn has been successfully used for silage for many years, the yield is high and good corn silage is helpful in keeping cattle in good flesh during
the winter months. McKay’s Yellow Dent, Minnesota 13, and local strains of Yellow Dent corn have been popular silage varieties during past years. More recently some of the Oregon hybrids including No. 525 and 355 and some of the Kings Cross varieties are proving better because of the high yield of earlier maturing corn produced. Sunflowers are often planted with corn for silage and tend to increase the total yield per acre. Grass and legume silage fits well into our farming program in the coast section of Oregon. Its use is expanding rapidly in all sections. It is highly recommended for any of our dairy or livestock farms in this section for the following reasons:

1. Grass and legume silage is the best substitute for pasture.
2. Hay requirements are reduced 50-75 per cent.
3. The amount of expensive protein concentrates is reduced.
4. Silage may be made during wet weather.
5. Experimental evidence indicates grass and legume silage produces more butterfat per acre than the same crop made into hay.
6. Weeds do not have an opportunity to mature and scatter seeds.
7. Silage requires less storage space than hay.
8. The cost of producing and handling grass or legume silage compares favorably with hay when modern machinery is used.
9. Fire hazards are reduced.
10. Reed Canary grass clipped in the spring can be used for silage when weather conditions prevent curing for hay.

While any kind of silage may be satisfactorily stored in pit or trench silos the labor requirement for handling and feeding silage in this manner is usually high. On most farms in this area the advantages in the upright silo justify the additional cost of constructing. When lumber is available at reasonable cost we recommend the wooden stave silo to be most satisfactory if properly handled to prevent the action of the acid in the silage on the structure and to prevent rusting in the case of the steel silo.

Seed Production

For a number of years large quantities of seed were harvested on our Reed Canary grass and Bentgrass fields. The value of these areas for grazing cattle during recent years has been responsible for a substantial reduction in the amount of these seeds produced in this area. Until the price of feed crops is higher so that the return per acre from the seed is more nearly in line with the return derived from the same land used for grazing, no expansion from seed production can be expected. It is believed by the crops committee, however, that some of the acreage devoted to these two crops will be used for seed production in future years. The production of seed for local use and for expanding the acreage of some of our newer crops such as Lotus Major and Subterranean Clover seems practical, and it eliminated the necessity of spending large sums of money to establish these crops on local farms.

Potatoes

While excellent potatoes are produced in some sections of Coos County the production of this crop commercially is not recommended. It is difficult to compete favorably here with growers in other sections of the state where larger yields of better market potatoes are grown. For the home garden and the family use Bliss Triumph and Earliest of All are recommended for early potatoes, and Burbank Netted Gem and Later Rose are recommended for the main or later crop.

Weed Control

The control of perennial noxious
weeds require special attention in this area. This problem is aggravated by the large amount of forest and publicly owned land on which noxious weeds do little damage, but from which they spread to farm land. Because of the nature of this problem we recommend that the committee carefully consider the advisability or organizing a weed control district in the county in an effort to obtain better control.

**Gorse** or Irish Furze is rapidly spreading along the coast of Oregon, Washington and California. It is also getting a start in some of the inland counties. As a result of state and county cooperation in financing the project late extensive work is being done mainly in Curry county to determine the best method of control. While this work has not progressed to the point where definite recommendations can be made the results obtained so far are encouraging, and the use of ammonate weed killer is recommended to those who may want to control small patches of new infestations of this pest.

**Tansy Ragwort** is becoming established in a number of sections of this county. To prevent its spread we strongly recommend cutting or spraying to prevent seed from maturing. Infestations of this weed on cultivated land may be controlled by tillage, or the use of sodium chlorate spread on the ground dry at the rate of 4 or 5 pounds per square rod, or sprayed on the plants in solution mixed at the rate of 1 pound to each gallon of water. On cut-over areas inaccessible to machinery, cutting seems to be the only practical recommendation at this time. The use of highly concentrated weed control chemicals may prove effective in the future.

**Canadian Thistle** is one of the mostly widely spread perennial noxious weeds in Coos County. It is difficult to control through cultivation, but is held in check to a large extent by dense pasture seedings especially where the thistles are clipped with the mower once or twice a year. The use of 2, 4-d which is not dangerous to livestock is recommended as the most promising chemical known at present for Canadian Thistle. For most effective control it is suggested that thistles be sprayed while growing vigorously, and when from 12 to 14 inches high they should not be mowed for at least two or three weeks following spraying.

**Blackberries** of all kinds are cultivated in some areas, but are considered weed pests in this section. They may be controlled with chlorate materials providing the work is conducted for two or three years. After the vines have been thoroughly sprayed with this material they readily die and part of the root system is killed. For effective control it is important that seed growth be sprayed each year until the plants are killed. For respraying the use of ammonate may be most effective.

**Tussocks** are a rather serious weed pest in this county on poorly drained land. They can be controlled satisfactorily by tillage and recent experiment work indicates that 2, 4-d with oils may be effective for this purpose. It is worthy of trial on any farm in this area.
HORTICULTURAL AND SPECIALTY CROPS
COMMITTEE REPORT

The acreage of truck crops, tree fruits, small fruits, nursery, and greenhouse crops is placed at 914 acres in 1946. Coos County has abundant acreage suitable to the production of horticultural crops. The limiting factors that have prevented acreage expansion of these crops was the lack of market and marketing facilities. With the report that the Cranberry Cannery may expand, and probably will receive many different kinds of small fruits, puts a new light on the horticultural outlook for Coos County.

Tree Fruits

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, hardpan, 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 textures for a depth of eight or more feet for best results. The slope is best if less than ten per cent in order to help prevent erosion and ease cultivation.

Orchard soils require annual addition to the humus supply to assist with the maintenance of soil fertility, and as an important aid to prevent soil erosion. Orchards grow older and soils poorer year by year and a cover crop is not a luxury but a necessity in a well managed orchard. Cover crops should be used following or preceding most horticulture and specialty crops. See the soil conservation report.

Planting of apples is recommended only for home use or for local market. Commercial apple production in Coos County has been declining since imported fruits have discouraged local commercial apple producers who formerly took very good care of their orchards. The first commercial apple orchards were established in Coos County in the seventies.

Varieties adapted to Coos County are Yellow Transparent, Gravenstein, Baldwin, King, Delicious, Grimes Golden, and Spy. Varieties unsuited for local use should be removed or topworked to standard varieties.

Generally Coos County apple orchards have been neglected in recent years. 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 diseases 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 6-6-100 Bordeaux mixture should be applied before any fall rains, to control anthracnose disease.
- Late winter spray of lime sulphur solution for the control of San Jose scale, blister mite, and as a general clean-up spray.
- 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 exist 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 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.

Rain during the blooming period of sweet cherries interferes with fruit set similar to the condition existing with prunes. The Bing, Lambert, and Royal Anne cherries require pollenizers. Proven pollenizing varieties such as Black Tartarian, Black Republican, Governor Wood, and Centennial should be provided.

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 your county agent.

Walnut production has not proven successful in Coos County. There may be possibilities in sheltered upland locations but thorough trials of these locations have not yet been made in Coos County. Walnut blight is the most widespread and destructive disease of the English walnut, but it can be controlled by a properly followed spray or dust program.

Filbert production offers possibilities in sheltered locations and on deep soil in the inland valleys but attention to pollenizers must be given. Marketing is the main problem with this crop now that larger acreages are coming into production in the Northwest, and imports have again started from European countries.

**Small Fruits**

The growing of small fruits has been in practice in Coos County since the settlement of Southwestern Oregon; although there are not enough small fruits grown in Coos County to supply the home demand at this time.

Raspberries, Loganberries, Youngberries, Gooseberries, Boysenberries, Currants, and Cascade berries all do well here when good clean planting stock is obtained and when they are planted in the right location and given the proper care.

In the middle 20's 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. With the report that the local cranberry cannery may expand and receive other small fruits besides cranberries, a gateway may be opening to a larger small fruit industry in Coos County.

The Narcissa Strawberry, a fresh fruit berry, has given very good results in this locality and some instances may replace other early varieties. It has high production, good appearance, and a pleasing flavor.

The Marshall variety 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. One should secure certified plants to avoid this difficulty or select non-affected planting stock.

Red Heart, a 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 diseases such as crinkle, yellows, stunt, red stele, and black root.

Rockhill, is one of the most popular everbearing varieties in this section, and it is gaining in popularity.

The youngberry has proven popular in coast fresh fruit marketing, and their production is worth a trial on deep fertile soil in a sheltered location. Leaf spot is a serious disease in most cane fruits, and since the sources of infection are the spots on the leaves and the canes, it is recommended that as a sanitary measure that the old canes be removed as soon as the crop is harvested, especially in years of severe infection. The spray which has proven most satisfactory for leaf and cane-spot control is lime-sulphur applied once during February or March after the old canes have been cut out and the fruiting canes have been trellised.

Black Cap Raspberries produce fairly well in sheltered locations on deep fertile soils. Production should be limited to home use and local fresh fruit trade. Disease free planting stock should be used. Plum Farmer and Cumberland are suggested varieties.

In recent years Washington, Willamette and Newberg varieties of Red Raspberries have given fair returns of fruit in Coos County on fertile soils sheltered from severe winds. The Washington and Willamette are fairly new varieties, but are proving successful on trials. The Cuthbert variety is usually unsatisfactory locally.

The soil for small fruits should be deep and well drained, easily worked and fertile. Building up fertility of small fruit tracts after the crops have been planted is a discouraging and disappointing process. Depleted and worn out soil should have the fertility renewed by application of farm manure, cover crops, commercial fertilizers, and some times lime before the small fruits are planted. See soil conservation report.

Cranberries

The production of cultivated cranberries, now a $10,000,000 business, is a farming enterprise confined almost exclusively to the United States. Cultivation of cranberries is limited to a few areas in the northern part of this country with world production being almost entirely in Massachusetts, New Jersey, Wisconsin, Washington and Oregon.

The 1946 cranberry crop totaled 833,100 barrels of about 100 pounds, only five per cent less than the 1937 record of 877,300 barrels. During the past six years production has averaged around 680,000 barrels which is about double of the output around 1900.

Since 1909 the average price per barrel received by growers has ranged from as low as $4.02 in 1914 to as high as $24.30 in 1944. The farm value of the crop has been at or close to $10,000,000 in recent years compared with only $200,000 in the early 1900's.

Production in Washington and Oregon concentrated chiefly in a few narrow strips along the coast was negligible till the 1920's. The 1940 crops here set new records, Washington producing 46,200 barrels and Oregon 13,970 barrels.

The cranberry acreage in Coos County can be doubled without seriously affecting the United States 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 cranberry industry in this section has been compiled:
Number of acres in production (1946) and varieties:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>McFarlin</td>
<td>112</td>
</tr>
<tr>
<td>Stankavich</td>
<td>34(\frac{3}{4})</td>
</tr>
<tr>
<td>Howes</td>
<td>14(\frac{1}{2})</td>
</tr>
<tr>
<td>Searles</td>
<td>13</td>
</tr>
<tr>
<td>Centennial</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Bennett</td>
<td>1(\frac{1}{4})</td>
</tr>
</tbody>
</table>

174 acres

Number of acres planted but not producing and varieties:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>McFarlin</td>
<td>86</td>
</tr>
<tr>
<td>Stankavich</td>
<td>7(\frac{1}{2})</td>
</tr>
<tr>
<td>Howes</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Searles</td>
<td>1</td>
</tr>
</tbody>
</table>

96 acres

Total prospective acreage of cranberry land; which is now owned by growers and prospective growers, 1,318 acres.

Costs per acre of construction and bringing a bog into production in four years:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing and Stumping</td>
<td>$200 to $250</td>
</tr>
<tr>
<td>Leveling</td>
<td>$200 to $250</td>
</tr>
<tr>
<td>Sanding</td>
<td>$150 to $200</td>
</tr>
<tr>
<td>Ditching and Dyking</td>
<td>$200 to $300</td>
</tr>
<tr>
<td>Plants and Planting</td>
<td>$150 to $200</td>
</tr>
<tr>
<td>Weeding</td>
<td>$400 to $500</td>
</tr>
<tr>
<td>Building and Tools</td>
<td>$200 to $300</td>
</tr>
<tr>
<td>Irrigation</td>
<td>$750 to $1,000</td>
</tr>
</tbody>
</table>

$2,250 to $3,000

These costs are average and will vary either up or down a great deal, depending on the following:

- Type of land, topography and location of the bog land,
- Availability of sand and water supply, and type of irrigation system to be used.

Average yields for all bogs under varying conditions was 74.54 barrels per acre in 1946. Varieties grown in Coos County are McFarlin, Stankavich, Searles, Howes, Bennett, and Centennial.

Spraying has been done to a very limited extent due to the fact that there has been no commercial damage by either insect pests or plant diseases. There is some evidence however of tip worm, fruit worm, strawberry root weevil, fireworm, and cabbage worm. Close watch should be maintained in order to prevent any unseen trouble by these sources.

Fertilizers have not been used to any great extent in the past years but they are becoming more and more of a year around practice in cranberry production.

There are two classes of berries to consider in the choice of plants, hand picking 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 three or four 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.
- Another very fine berry for hand picking or machine picking is the Stankavich berry.

It has been developed in this locality and some of the characteristics are:

Advantages:

- Large in size and 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 reasons.
- Will produce extra heavy crops under the right condition.

Pruning Stankavich vines in February or March will help cut down summer blooming.

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 bogs as possible and learn from the experience of others.
- Have soil tested for acidity.
- Be sure and check the water supply as to the amount and availability, as water is one of the most limiting factors in cranberry production.
- Make a check on maximum and minimum temperatures.
- Have enough capital to bring the bog into production.
- Secure plants from sources free from disease and insects. Also avoid the introduction of weeds with the vines.

It is felt by this committee that more research work should be carried on in the field on weed control and with fertilizers. It is also felt that a full time research worker in the field working closely with the growers, extension workers, and with the experiment station at Long Beach, Washington, would be an important step towards a sound development of this industry in Oregon.

Blueberries

Even though there are a few fairly large plantings of blueberries in the coast section of Oregon, most of the blueberry growing is still in the experimental stage.

A few of the essentials that are required for successful blueberry culture are:

- Having a soil which has a strong acidity reaction, with the water table at least 14 to 30 inches below the surface.
- Blueberry plants are usually found in the wild state on soils ranging from sand to peat. For some time it was thought that they would not grow on clay soil. However, recent experiments have shown that blueberry plants will grow on such soil provided it is sufficiently acid.

Good drainage is necessary as blueberries can not stand a water logged or boggy land. The best results are obtained on well aeriated soils.
Irrigation is very important in the dry months, as blueberries require a great deal of water. Either ditch or overhead irrigation systems can be used. One advantage of overhead sprinklers is that they can be used for frost protection in the spring.

The blueberry plant is very shallow-rooted and accordingly, cultivation or mulching is necessary to help conserve moisture. Very shallow cultivation is necessary to avoid destruction of the feeder roots.

A few of the well known varieties are: Atlantic, Pemberton, Dixie, Jersey, Concord, Stanley and Rubel. Each variety has its merits, some are best for freezing, others best for fresh fruits, while others are good producers yet too tender for shipping and are processed.

Blueberries have a place in the home garden if the soil is naturally acid or if it is properly treated. They do not succeed in ordinary rich garden soils and soon die, but they do thrive in naturally moist acid soils such as those in which native blueberries and huckleberries, azaleas, laurel, and rhodendrons grow. For small plantings mulching with leaves, sawdust, hay, or straw to a depth of five or six inches helps to retain moisture, to keep down weeds, to control erosion, and to keep the ground cool. Blueberries should not be planted on soils that have been limed in recent years unless tests have shown that they are still acid enough for blue berries. For the less acid soils, decaying acid peat mixed in the soil around the plants helps to make conditions suitable, but plants on such soils always require extra care.

**Truck Crops**

Several tons of vegetables are brought into Coos County each week from outside points, and local growers either can not or do not choose to meet the competition from outside points in the vegetable trade.

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

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

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

Home gardens have an important place in Coos County, and all homes having land available should have a family garden.

The asparagus grown locally does not supply the demand, there being room for a 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, and Snowball.

Root maggots are one of the limiting factors in the production of cabbage, cauliflower, and broccoli and can be controlled by the use of tar-paper disks, or wet soil around plants with corrosive sublimate solution at intervals of 10 days, beginning three days after transplanting. Make four applications. Screen late plants with mosquito bar on wire to exclude the flies that produce the maggots.

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.

Production of carrots to supply local markets can be continued. Chan-
tenay, Coreless, and Nantes are the recommended varieties.

There is a 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 the late winter, spring, and in early summer. There is an opportunity for production in season for local consumption. Varieties suggested are Golden Acre for round head early summer use, and Danish Baldhead selections for the main crop. A succession of plantings may be made during the season.

Production of dry onions is recommended for farm and city garden use and for local markets where the production conditions are favorable for maturing and curing the crop. Suggested varieties are Yellow Globe, Danver and Ebenezer.

Very little celery is produced for local market, but it does well when grown on the proper soil and where lots of water is available for irrigation. Green Utah is the recommended variety. A spray program is necessary to prevent blight.

Production of surplus vegetables on 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.

Bulbs, Cut Flowers, and Shrubs

The lily industry was good during the war years, but this year the price dropped considerably and not all bulbs were marketed. The price is expected to drop even more by next year, but it is hoped that through advertising and by getting together with the jobbers that all bulbs can be marketed this coming year.

One of the problems the lily grower faces, is finding a way to raise bulbs cheap enough to make a profit. Many lily growers are either shifting to the Croft or Ace varieties, or going out of business.

Lily bulbs grown in Oregon, are free from dangerous virus diseases, while many foreign bulbs have virus diseases that would hinder their production in Coos County as well as to destroy the bulb business.

It is felt that foreign bulbs of poor quality and infected with diseases should be kept out of the United States.

Planting stock of the King Alfred daffodil sold for around $600.00 per ton this year. It is felt that there is a good future for interested persons with the right land. There will be foreign competition, but good growers can compete with this. When growing King Alfred daffodils grow them for only one purpose, flowers or bulbs, but not for both.

Cut flowers, such as Sweet Peas, Asters, Zinnias, and many others do well in this county, and the summer cut flower business is one of the best things to look forward to in the flower industry, especially the shipping of mid-summer flowers to the east and south, when air transportation becomes more available.

The production of Dutch Iris and Gladiolus bulbs is carried on to some extent in this county, by only a few growers. Anyone interested in these crops should contact the county agent for information on them.

There is a large demand for native shrubs, such as Azaleas, Rhododendrons, and Huckleberry. They grow well here, and nurserymen have difficulty in getting native plants, especially Rhododendrons.

The demand for native greenery such as huckleberry, salal, cedar, and fern leaves is very good and the market is already set up for handling such crops. More people should give some thought to this business.
Irrigation is very important in the dry months, as blueberries require a great deal of water. Either ditch or overhead irrigation systems can be used. One advantage of overhead sprinklers is that they can be used for frost protection in the spring.

The blueberry plant is very shallow-rooted and accordingly, cultivation or mulching is necessary to help conserve moisture. Very shallow cultivation is necessary to avoid destruction of the feeder roots.

A few of the well known varieties are: Atlantic, Pemberton, Dixie. Jersey, Concord, Stanley and Rubel. Each variety has its merits, some are best for freezing, others best for fresh fruits, while others are good producers yet too tender for shipping and are processed.

COUNTY PLANNING COMMITTEE
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Mr. Everett Messerlie, Catching Inlet
Mrs. Lela McCue, Coquille
Mr. J. D. Carl, Arago
Mr. Leland Peterson, Coquille
Mr. Sam Dement, Myrtle Point
Mr. Henry George, Coquille
Mr. Ted Kirsoh, Myrtle Point
Mrs. Charles McCulloch, North Bend
Mrs. Jean Davenport, Myrtle Point

General Chairman
Land Use Committee
Pomona Grange Agricultural Committee
Farm Home and Rural Life Committee
Soil Conservation Committee
Dairy Committee
Livestock Committee
Field and Farm Crops Committee
Horticulture and Specialty Crops Comm.
Local 4-H Leaders’ Association
Home Economics Advisory Council

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Ella Dement,
Myrtle Point, Oregon
R. L. Clark,
Bo Dine & Clark, South Portland, Ore.

Dairy Brownens,
Bridge, Oregon
Archie Ross,
Bandon, Oregon
Clayman Colver,
Catching Inlet, Coos Bay, Oregon
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Lester Clausen,
Bandon, Riverton Route
J. B. Mahaffy,
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Edward Leatherman,
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Coquille, Oregon

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Frank Wilson,
Coquille, Oregon
John Milton,
Coos River, Coos Bay, Oregon
M. J. Monson,
Lampa Creek, Oregon

To meet the competition from outside points in the vegetable trade.

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

Produce the vegetables in seasonable quantities sufficient to supply the trade regularly.

Vegetables offered must be of high quality, carefully graded, carefully packaged, and of proper varieties.

Prices of competing sections would have to be met.

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

Home gardens have an important place in Coos County, and all homes having land available should have a family garden.
### FARM HOME AND RURAL LIFE COMMITTEE

- Mrs. Lela McCue, Coquille, Oregon
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- Mrs. Faye Schoolcraft, Rte. 1, Coos Bay, Oregon
- Mrs. Charles McCulloch, Rte. 1, North Bend, Oregon
- Mrs. John Devereaux, Bandon, Oregon
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- Mrs. Hilda Reiher, Rte. 1, North Bend, Oregon
- Mrs. Olive Hooper, Myrtle Point, Oregon
- Mrs. Martha Purdy, Coquille, Oregon

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- Clark McCarthy, Summer, Oregon
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- L. B. Jennings, Remote, Oregon
- Ray Waterman, Myrtle Point, Oregon
- Darrell Anderson, Arago Rte., Coquille, Oregon
- Cliff Brunnell, North Coos River, Coos Bay, Oregon
- John Carman, Gaylord, Oregon
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- Mrs. C. M. Hartwell, Bandon, Oregon
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- Al Crawford, Arago, Oregon

### FARM CROPS COMMITTEE

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- Jack Knife, Arago, Oregon
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- Randall Johnson, Riverton, Oregon
- Herbert Carl, Arago, Oregon
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- M. M. Schmidt, Norway, Oregon
- Andrew Waterman, Bridge Rte., Myrtle Point, Oregon

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- Russell Anderson, Rte. 1, North Bend, Oregon
- Orvis Miller, Sitkum, Rte., Myrtle Point, Oregon
- Harold Ames, Myrtle Point, Oregon

### COMMITTEE

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- Charles Mack, Bridge Route, Myrtle Point, Oregon
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- W. C. Foster, Langlois, Oregon
- Verlin Herman, Broadbent, Oregon
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- M. G. Sumerlin, McKinley Rte., Coquille, Oregon
- J. C. Page, Bandon, Oregon
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R. F. MATSON,
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A. BE GROSSEN,
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TRUCK

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WILLIAM BEALES,
Bullards Rte., Coquille, Oregon
C. M. CONNER,
Rte. 1, Coquille, Oregon
SAM ARNOLD,
Bullards Rte., Coquille, Oregon
T. V. JOHNSON,
Broadbent, Oregon
JAMES C. WILSON,
Coos Bay, Oregon (On Blossom Gulch)
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A. M. COOPER,
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GLENN M. STORY,
Coquille, Oregon
M. O. HAWKINS,
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TREE AND SMALL FRUITS

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Broadbent, Oregon
ELDON MATTHEWS,
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EVERETT HAMILTON,
Gaylord, Oregon
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