Poultry
Horticulture
Horticulture (Small Fruits)
Farm Crops
The Poultry Committee of the Clackamas County Farm Program Conference presents the following recommendations for the betterment of the poultry industry locally and over the western slope.

The number of laying hens on Oregon Farms in 1948 is approximately 3,019,000 birds, a decrease of about 210,000 from the peak number six years ago. During the war period, population figures show a 30% increase in Oregon with even greater increases in California and Washington. The egg marketing situation has reversed itself prior to World War II. Oregon producers shipped large quantities of high quality surplus eggs both East and South. Today, the consumers of eggs in Oregon cannot get enough "home produced" eggs to supply the needs. Midwest eggs arriving in Oregon are common-place today. The general quality is found to be low, with the result that in many Oregon homes housewives are hesitant to buy eggs.

The fact that these eggs are being shipped to Oregon by carlot from the midwest indicates two things. One, an available surplus in the Midwest, two, an attractive price on the West coast.

1948 PRODUCTION

A total national reduction of 7% in hatchery production of baby chicks from 1947 is asked by the Federal Government. The number of chicks hatched in the U. S. in 1947 was a little less than the number hatched in 1946, when about 1,260,000,000 were hatched. The production of eggs over the nation during the first six months of 1948 is estimated to equal the corresponding production in 1947. The number of chicks hatched this spring will determine the egg supply for the last six months of the year.

In view of the fact that we are now importing eggs from the Middle West for increased population on the Western Slope, it is recommended by the committee that egg production in Clackamas County, and in this whole area, be maintained, at least, at the same levels as of a year ago.

1948 COSTS

Because of high production costs, quality stock will be necessary for profitable operation. Close culling and efficient use of feed stuffs is very essential.

BROILERS

Production of broilers should not be undertaken without a thorough study of costs, feeding, nutrition, breeds, types, disease, sanitation, and marketing. There will be good demand for poultry meat in the immediate future but quality must be maintained to compete in a permanent market paying top prices.
To enter the poultry business one should, under present conditions, figure on a capital investment of $5.00 per bird for building and equipment and $1.75 to $2.00 to raise pullets to laying age. One should plan on having about four acres of range space for every 500 pullets to be raised. A good range will materially lower the cost of producing pullets.

If the major source of farm income is to be derived from poultry, a unit of not less than 2000 laying hens should be developed.

For the farm with only a side line income from poultry, a unit should number at least 500 laying hens to justify a sound marketing program.

For the average farm family that wants eggs for home consumption only, a flock of 25 laying hens will be adequate.

It is desirable to brood chicks entirely separate from the laying flock to prevent contamination from the older birds. Five hundred chicks should be the maximum brooded in one group. Half this number is much to be preferred and will result in more and better pullets at maturity. Fifty square feet of inside floor space is an irreducible minimum per 100 chicks. Twice this space will prove a sound investment. Sun porches are recommended.

Two-thirds or more of the commercial laying flock should be replaced each year with a fresh supply of pullets. In breeding flocks, a 50% replacement each year is desirable. On the other hand, hens of two years and older which have demonstrated a capacity to live and resist disease should be retained only if they continue to produce a sufficient number of good eggs suitable for hatching.

Pullets should never be housed with older birds. Under such conditions they do not have an equal chance to eat and mature properly. There are often diseases carried by old hens which when started in a flock of pullets will result in heavy losses.

QUALITY ESSENTIAL

To stay in the poultry business, quality and economical production of eggs and meat are essential. In a long time breeding program there are many factors fully as important as high egg production that should be taken into consideration, such as egg quality, more desirable meat type, uniform conformation, livability and disease resistance, hatchability, fertility, rate of growth, rapid feathering, early maturity, freedom from broodiness, and freedom from winter pause in egg production. These additional factors pointing toward a balanced breeding program should receive greater attention by poultry breeders throughout the nation.

The work being done by the Poultry Improvement Association is to be commended and it is hoped that all possible educational work shall continue to be conducted in the direction of better poultry, better housing, better feeds, and in every way possible looking toward general poultry improvement and knowledge.
The committee also recommends that more work be done by the Oregon State College Experiment Station on poultry housing, especially to improve ventilation, to develop heating systems to keep litter dry, and to study methods to reduce labor of plant operation.

The committee recommends that the exhibiting of poultry at fairs be discontinued for reasons of protection against disease. It also recommends that competitive excellence in poultry raising be based upon individual records showing net gains and losses, improvements, etc.

The committee further proposes to the Oregon State College the establishment of a commercial poultry demonstration farm unit of not less than 2000 laying hens and recommends the selection of a site off the campus. The Clackamas County Red Soils Experiment Station is suggested as a suitable and accessible location in the heart of a major poultry-producing area.

Members of Poultry Committee present at this meeting included:
  - Barry Brownell
  - John Inskeep
  - Ewalt Ek
  - Fred Cockell

[Signature]
The Horticultural Planning Committee (Tree Fruits and Nuts) of Clackamas County presents the following suggestions and recommendations as an aid to the horticultural program of the county, and by thus doing so, as an aid to the horticulture of the State of Oregon.

General

Filberts, tree fruits, and other nuts are important horticultural crops in the agriculture of Clackamas County. In times of high industrial prosperity, growers of horticultural crops are able to realize a larger return than over periods of low industrial prosperity. Net returns realized by the producer are directly proportionate to the buying power of the consumer.

In the opinion of this committee, farmers of our horticultural crops are facing lower returns and high costs of production. Filberts, in addition, must meet competition from exports from foreign areas. To profitably produce these commodities, growers must determine methods of increasing production per acre on established plantings and to lower costs of production by use of economical practices.

Filberts and Walnuts

The filbert industry developed rapidly during the war years when foreign competition was small and prices received by growers were high. In many instances, small acreages of filberts were planted on any land available, often by people deriving their incomes from non-agricultural enterprises. These small acreages were able to realize a profit during and shortly following the war years; however, in times of greater competition these small acreages have become uneconomical units and growers are often unable to justify the high cost of necessary equipment.
Clackamas County horticultural outlook committees have always advised against indiscriminate plantings of filberts by those who are inexperienced, especially in small acreages which do not justify the full time of the operator and full use of his equipment.

Expanded filbert markets must be developed for this industry, and the committee recommends research to determine additional outlets and extension of present markets.

The committee recommends the continuation of fertilizer and permanent cover crop trials throughout the county in filbert and walnut orchards as a step in lowering costs of production.

Apples, Pears, Cherries

These are of minor economic importance in Clackamas County. The committee recommends planting of certified cherry nursery stock as an insurance against serious virus diseases found in other parts of Oregon.

Peaches

Most peaches grown in this area are sold for local consumption. However, certain processors have indicated interest in purchasing peaches for canning if they can be certain of a continuous supply each year, instead of loose crops which the local fresh market will not absorb. Before increasing acreages, farmers should be certain of an outlet.

Due to the serious nature of virus diseases found affecting peaches, the committee recommends the continuation and expansion of the certification program for peach nursery stock in Oregon.

Prunes

The outlook for prunes appears favorable, especially for the canning trade, and the committee recommends the rejuvenation of old orchards by well demonstrated methods. Canners will use only fruit of the highest quality and of large size.
However, costs of production must be lowered for profitable growing. The committee recommends the continuation of permanent cover crop trials in prune orchards as a step in reducing production costs.

The committee feels a slight increase in prune acreages may be justified in cases where soil conditions are suitable and market outlets are available.

Leon Garoian, Jr.
Secretary

Committee members present February 24, 1948

1. Allan Joy, Route 2, Oregon City
2. Emil Wanko, Route 3, Oregon City
3. Voryl Mumpower, Clackamas
4. Wm. F. Tucker, Estacada
5. Charles Finch, Estacada
6. J. J. Inskoop, County Agricultural Agent
7. Leon Garoian, Assistant County Agent
General

Due to the high quality of strawberries and cane fruits grown in this area, production of these small fruits is a major item in the agriculture of Clackamas County. Many plantings of berries and cane fruits have been located on marginal lands. It is the recommendation of this committee that plantings of these crops be limited to soils more adapted to their culture.

Certified strawberry plants are recommended for strawberry plantings. As to other berries, field inspection of plants is recommended before planting. Maintenance of fertility and erosion control in small fruits is necessary by cover cropping.

Berry growers in Clackamas County are greatly interested in a plan of plant improvement and certification of cane and trailing berries, and would like to see the early establishment of such a program.

Outlets for berries are through processors, which either can or freeze the fruit, or through wineries and the fresh market.

Before planting any crop, farmers should be certain of an outlet for their product.

Strawberries

Strawberries are one of the most popular small fruits being raised in Clackamas County, but farmers are having to contend with a serious disease and insect problem.

Demand for strawberries is good and will probably continue so for several years. Processors are expecting their heaviest pack this year. For processing, the Marshall variety is recommended.
At least a four year interval between strawberry plantings is recommended for planting.

The committee recommends continuation of fertilizer trials; establishment of a comparative nursery trial of certified strawberry plants from various sources; and a study made of the relation of cover cropping and humus content of the soil in relation to yields.

**Red Raspberries**

Demand for the red raspberry crop will probably continue good for several years. Since the decline of the Cuthbert raspberry, processors prefer the Washington at the present. For fresh market use, the fruit of the Willamette is outstanding.

Variety trials for new varieties are necessary and are recommended by the committee.

**Blackcaps**

Market outlets for blackcaps is increasing and in certain areas slight increases may be justified. Varieties being grown at the present time are Munger, Plum Farmer and Winfield.

**Trailing Berries (Boysen, Young, Logan, Black)**

These berries are used as a base for jams, by the bakery trade, and on the fresh market. Field selection of planting stock is important in these berries due to diseases. There is a good demand for these berries, but stiff competition from other states must be contended with.

**Vegetables**

Outlets for vegetables are freezing, canning, and the fresh market. Production of cole crops (cabbage, cauliflower, broccoli) and sweet corn should not be undertaken unless the grower is certain of an outlet.
Cover crops planted at the time of the last cultivation are recommended in these plantings to cut down soil erosion and to build up soil fertility.

Bulbs

Bulb farming is a highly specialized and competitive business. The original investment is too great to allow many farmers in this line. Competition from foreign countries plus serious disease and insect problems must be contended with. Sources of clean planting stock is limited. Plantings by inexperienced farmers is not recommended.

Committee members and others present included:
Allan Joy, Chairman, Oregon City, Oregon
Emil Wanke, Route 3, Oregon City, Oregon
Veryl Mumpower, Clackamas, Oregon
Wm. F. Tucker, Estacada, Oregon
Charles Finch, Estacada, Oregon
J. J. Inskeep, Clackamas County Agent
Leon Garoian, Jr., Clackamas County Assistant Agent

Leon Garoian, Jr., Secretary
The Farm Crops committee of the Clackamas County Farm Program Conference was called to order on January 15, 1948, in the Clairmont restaurant, Oregon City. Harold Ridings of Molalla, Chairman of the Committee presided.

County Agent J.J. Inskeep was asked by Chairman Ridings for a discussion of agricultural economics in Clackamas County. "Nearly nine out of ten people in Oregon receive directly, or indirectly, an agricultural income," Inskeep reported. He continued with Oregon's several problems of creating markets, shipping long distances, and producing high quality seeds; all important considerations in crop production. The meeting continued with a study of individual crops. Chairman Ridings first read the 1947 report concerning the crop under consideration, and then the report was brought up to date through suggestions by Committee members. All changes are incorporated herein.

Hairy Vetch

Production of hairy vetch, which was popular in the thirties, has declined to a point where it is no longer a major Clackamas County Crop. Southern cotton and corn growers prefer hairy vetch to Willamette and all other vetches for cover crop purposes. A good market for hairy vetch will undoubtedly exist for a number of years. Clackamas County's former large hairy vetch acreage declined during the past ten years due to advent of hairy vetch weevil into this territory and to objections on the part of growers to the volunteering habit of this legume. The objections have been largely overcome. Three percent D,D,T. used at the rate of 25 lbs. per acre effectively control vetch weevil. Vetch plants volunteering in grain or grass crops are eliminated by use of 2-4-D.

Hairy vetch can and should be grown on identical areas over a period of years where there is no need for control of volunteer plants. With yields running from 800 to 1000 lbs. per acre, on well tilled fields, and a price of around 15 cents a pound, this committee recommends an increase in hairy vetch acreage.
Willamette Vetch

Ever since the price of Willamette vetch seed has been supported by the AAA, it has been one of our most popular seed crops. Although there is no support price at present, local warehouses have been purchasing seed at the same price of 6¢ per pound.

The problem of dealer carry-over is of particular concern to the Willamette vetch grower. Our crop arrives in the south too late for fall plantings as cotton and corn cover crops and must be carried over by the southern dealer until the following year. Since the market may fluctuate during that period, dealers are hesitant about having considerable seed on hand.

Farmers like Willamette vetch as a crop. Although never a big "money-maker," it has been a profitable crop; both from a monetary standpoint, and in increasing the supply of humus in our soils.

Oats is grown as a companion crop with vetch, but it is often smothered out by the rank growth of vetch. Nitrogen applications at a rate of 30 pounds actual nitrogen per acre will increase early growth of oats and keep the two crops growing at the same rate of speed.

Generally planted in September or October, oats and vetch may be planted up until mid-February.

A ready market has existed since termination of the government support price two years ago and there is undoubtedly room for increased acreage this next month.

Common Vetch

Willamette vetch is a winter-hardy strain of Common vetch. Seeds of Willamette and Common are identical in appearance, and it is probable that all Common vetch has been replaced by Willamette.

Hungarian Vetch

Little Hungarian vetch has been produced on Clackamas County farms the past few years, but some growers do prefer Hungarian over other vetches for hay. Only a local market exists for this crop and no increased acreage is suggested.
Austrian Winter Field Peas

The surplus of several years standing has disappeared from the market place. Competing areas have stopped growing peas in favor of high priced wheat. Southern demand has increased and this committee recommends an increased acreage.

Yields varied from 1,000 to 1,200 pounds in 1947 with a price of 4 1/2 to 5 cents per pound. Peas may be planted up to the middle of February. Cracked peas, or those otherwise damaged, may be fed to livestock as a high protein supplement.

Red Clover

This crop is an important forage crop in Clackamas County, and depending upon the year, has also produced profitable seed yields. Red clover is generally planted in early spring, March or April, in fall-sowed grains.

The method of seeding will vary between individuals. Some prefer broadcasting and others believe drilling results in more uniform fields. Whether clover seed be broadcast or drilled, the important factors in red clover planting are a firm seed bed and a light covering of seed.

Importance of liming acid soils prior to planting red clover cannot be overemphasized. This crop flourishes on a near-neutral soil and a ton of lime may mean the difference between an excellent and a mediocre crop.

A common practice of Clackamas County farmers is to harvest the first cutting of red clover for hay and thresh the second for seed.

Cumberland strain is superior in the mid-western states to our common red clover and seed of this variety is in demand throughout that area. It is suggested that, if a grower is planting a field known to be free of volunteer clover, Cumberland be planted and the field entered for certification.

Red clover has been a profitable crop in a farm rotation, and more farmers could be growing it.
Alsike Clover

Clackamas County farmers harvested approximately 150 acres of alsike clover in 1947. Alsike is particularly suited to the same soil types as Big Trefoil (lotus uliginosis). For this reason growers are warned about planting alsike in ground that may later be used for big trefoil production.

Some of these fields, regarded as cold and wet, if drained and limed might be well-suited to red clover.

Little increase, if any, is suggested for the alsike clover acreage.

Big Trefoil (Lotus Ulignosis)

Big trefoil is a comparatively newcomer not only to Clackamas County, but to the entire United States as well. Local farmers are, however, more familiar with this legume than are their potential customers, the farmers of the southern gulf states.

For this reason, the committee suggests no seedings for seed production. Big trefoil utilization as hay and forage cannot be overlooked. Coming along later with continuous growth during dry summer months, this legume fits into our summer hay season more favorably than other legumes.

Big trefoil flourishes on our wet heavy soils and may be planted in late February and March. Complete planting directions may be obtained from a circular issued by the Clackamas County Agents office.

Birdsfoot Trefoil (Lotus corniculatus)

A ready market for certain strains of birdsfoot trefoil exists all the way from Iowa to Maine. The buyers of this district are well aware of the differences found among strains and will only purchase strains of known adaptability. The committee recommends small plantings of foundation seed for trial purposes.

Ladino Clover

Ladino clover is unsurpassed for irrigated pastures locally and for non-irrigated pastures generally from the gulf coast to Canada and Maine wherever white clover is adapted. It is generally assumed that ladino will pasture two cows
per acre through our dry summer months. In doing so, it will use two acre-inches of water every two weeks.

The ladino clover seed industry is a story in itself. Demand for seed is very great both locally and in the south and east. Seed growers are faced with a harvesting problem for harvest may be interrupted by early rains. Harvest equipment should be in excellent shape and farmers ready for a hasty harvest.

A continued seed demand may be expected for several years and an acreage is recommended wherever growing conditions are ideal. Clean ground is essential where growing ladino clover,

**Subterranean Clover**

Local subterranean clover seed plus imports have more than caught up with demand with the result that prices have declined. It is apparent that Southern States will use great quantities of the seeds of Sub-clover, once they learn about it. In the meanwhile we should gear our seed production to the actual demand.

This committee wishes again to call attention to the value of good permanent pastures for meat animals and dairy cattle and to the fact that subterranean clover has no superior as a legume in the local permanent pasture mixture. Increased and continued local use for this purpose is encouraged.

Sub clover may also fit in as a permanent cover crop for prune and filbert growers. These plantings are in an experimental stage, but do look promising.

**Dixie Crimson Clover**

Dixie crimson clover has a hard seed characteristic that is not found in our local strain of crimson, but plant growth of the two is similar.

This hard seed characteristic is desirable for two reasons. In the first place, southern farmers prefer it for, although only an annual crop, it reseeds somewhat like our subterranean clover and produces forage several years from one planting.
Oregon farmers will undoubtedly prefer Dixie also for, during harvest rains, Common Crimson generally tends to germinate with a consequent decrease in germination. The hard seed quality of Dixie will aid in overcoming germination troubles. Seed is available for those farmers desiring to plant.

**Alabama Crimson Clover**

Alabama Crimson Clover seems larger, and greener than Dixie Crimson in plant habit, but has never been grown in Oregon. If seed is available, trial plantings will be made this next year.

**Grass Seeds**

Grass seed production has become a major industry in Clackamas County, but purchasers are becoming increasingly allergic to mixtures. Purity in grass seed production cannot be over-emphasized.

**Common Ryegrass**

Common ryegrass is not an important crop in the county. No increased plantings are suggested at present.

**English or Perennial Ryegrass**

English ryegrass is well adapted to some of our wet lands and may be profitably produced in those areas. If planting for seed production, growers are reminded to purchase seed that is free from blind seed disease.

**Chewings Fescue**

The production of chewings fescue has about stabilized itself at 4,000 acres in Clackamas County. Production has caught up with present demand and it is suggested that only the better fields be harvested. One local problem is to get the current seasons production to market at an earlier date. Dealers would undoubtedly purchase more seed if this were possible.

Heavier seed is better for planting seed fields and should be used on new fields.
Red Creeping Fescue

The seed market for nearly all grasses has declined this past year and red creeping fescue, although a fine lawn grass, is faced with this marketing problem. Row plantings are time consuming and expensive, especially the first year, but do produce high quality and marketable seed.

Until the grass seed business stabilizes itself, the committee believes that no further plantings are advisable.

Alta Fescue

There is probably more room for high quality Alta fescue expansion than any of the other grasses. Alta is adapted to more growing area of the United States than most of our commercial grasses and its utilization is gaining national acclaim.

This crop lends itself favorably to row production with nearly 110 acres of certified seed already row planted in Clackamas County.

So that owners may know whether to harvest for seed or use as pasture, it is suggested that certified fields be inspected by the Certification Department, Oregon State College prior to March 15.

Turf Grasses

The three fescues, Alta, chewings, and red creeping have given remarkable results in specialized turf uses and more such utilization is recommended.

Multnomah Stadium, Portland and Estacada High School Athletic Field have been seeded to mixtures of chewings and red creeping fescue. These two grasses have stood up well under the cleated, tearing feet of football players.

Alta fescue has been used as an Airport turf in Indiana and as a lawn in Maryland. Both states have returned enthusiastic stories regarding Alta fescue as a turf grass.

Tualatin Meadow Oatgrass

This grass, originally known as non-shattering tall oatgrass, is more leafy than Alta Fescue, and is better as a hay grass.
A shortage of seed exists throughout the state, but at present, Tualatin Meadow Oatgrass is not important from a national standpoint and little increase in acreage is advised.

**Meadow Foxtail**

Meadow foxtail is a good wet land grass, but the carrying capacity is usually low. Seed productions is difficult with most of the seed being hand-stripped.

**Vegetable Seeds**

The committee wishes to call attention to the fact that vegetable seed production is strictly a contract business. Several sections of the county are well suited for vegetable seed production, but as yet the acreage has been limited to about 100 acres of sugar beets, beans, and onions harvested for seed.

**Hay**

During the past few years hay production in the Willamette Valley has decreased to the point where many farmers, particularly dairymen, are having to ship hay in for winter feed. This shortage may be even worse in the next few years and the Committee believes that more farmers may find it profitable to produce their own hay.

Emphasis can be placed on improved methods of hay making with stress on earlier cutting and increased use of lime and phosphate fertilizer.

**Corn**

The acreage of field corn has held fairly steady during the past ten years, but while most of the corn prior to 1936 was used for ensilage, nearly three-fourths of it is now used for grain. With little exception, all corn produced in Clackamas County is hybrid, with Oregon hybrids 355 and 410 being most popular.

Interplanting corn with rape is a common practice throughout Macksburg-Molalla area. Planted the last cultivation in late June, the rape and corn combination is ready for "hogging-off" by mid-September. The corn furnishes carbohydrates balanced by the protein found in rape. High yields with favorable prices has made corn a profitable crop to produce this past year.
Hops

Hop growers are faced with keen competition from other states which are now obtaining higher yields at lower costs per pound. In order to stay in the business we must learn to control downy mildew, the principle disease problem, and in rates, time, and quantity of fertilizer applications.

Seed Flax

A government support price of six cents plus high yields in 1947 will lead to increased plantings in 1948. Growers should remember that 1947 was an ideal year for seed flax and that yields of 25 bushels per acre should not be expected every year. Continuation of the 6-cent government support price makes this a good crop for 1948 spring plantings.

Fiber Flax

Clackamas County fiber flax production is regulated by our two flax associations. Inexperienced farmers should consult one of the local fiber flax plant managers prior to planting. Most of our fiber flax is grown under contract.

Potatoes

The potato industry is a highly specialized and scientific part of today's agriculture. Disease and insect problems are numerous and only the most skillful growers remain in production.

A large percentage of garden potato plantings are infested with diseased plants. This condition results in low yields for the gardener and a source of disease to the commercial and certified potato grower.

Using certified seed, roguing diseased plants, and dusting for insects will aid both the gardener and the commercial potato farmer.

Hannchen Barley

The huge price obtained by local growers in 1947 cannot be expected every year, however a fairly good price may be expected again in 1948.

Government agencies have purchased Hannchen for foreign shipment and it is suggested that those who expect to plant an acreage this spring should reserve seed for this purpose immediately.
A minimum of 30 pounds nitrogen is suggested as a fertilizer to be used at time of planting.

Pasture Crops

The committee wishes to stress the following points concerning pasture crops: (1) The growers of seed crop may utilize their fields as pasture area along with their seed business. (2) A good pasture program will cut down hay needs and provide better feed. (3) More permanent pastures should be worked into farm rotation. (4) A good pasture, through addition of organic matter will aid in building Clackamas County soils, and (5) use of mineral fertilizers are a must if the grower expects maximum results from his pasture.

Sudan Grass and Rape

The use of these two crops may be used to advantage by more people for temporary summer pasture. During the months of July and August sudan grass has been a big producer of high quality forage.

Burnet

Burnet, a member of rose family, is a highly palatable plant among our forage crops. A shortage of seed places it on the shelf until seed is available for more extensive planting.

Fertilizers

Although barnyard manure is recognized as one of our best fertilizers, a limited supply forces the farmer to look elsewhere for a source of plant food.

Phosphate is one fertilizer known to be lacking in most soil types of the county. A minimum of 30 pounds available phosphate is suggested for legumes as an annual application.

Nitrogen is also lacking and a similar application of 30 pounds nitrogen is suggested for grain crops as an annual application.

It is thought that drills with fertilizer attachments, or any fertilizer drill that puts fertilizer in bands at seed depth, will double the results over surface applications of fertilizers.
Another feature in placing fertilizer at a depth of from one and one-half to four inches in depth is a noticeable reduction in weed growth.

It is suggested when purchasing fertilizer, greater return per dollar may be expected from the higher percentage fertilizers.

**Lime**

Clackamas County farmers generally recognize desirability of using limestone on their fields, but we are using but a small fraction of our actual needs. Since we live adjacent to the crushing plant at Oswego, most farmers prefer to avail themselves of the plants' truck delivery and spreading service. However, almost everyone wants to spread lime at about the same time which means that only a few are fortunate enough to obtain delivery and spreading service.

This committee calls attention to the fact that the lime plant must operate on a year around basis if it is to be profitable and to produce enough ground stone for annual needs of the trade territory. We strongly recommend stockpiling limestone, either in bulk or in sacks, on the farm to be used as occasion demands. This is not the most convenient way but it is the only one which will give us enough ground stone to supply our annual needs.

**Weeds**

The use of selective weed killers in our grass and cereal fields is of major importance to Clackamas County farmers. Canada thistle may be efficiently controlled and killed by semi-annual sprayings; once just before the grain gets in the boot, and again just after harvest. Similar sprayings may be necessary a second year.

Quantity of water used in spraying has reduced from fifty to one hundred gallons down to ten gallons per acre. Spray pressures have also reduced in latest spray recommendations.

Sodium chlorate is most effective when used at the rate of four to five pounds per acre. This material must not be used for spraying grain fields prior to harvest.
A new product known as IPC for use on certain grasses has not proved too
effective and is not recommended at present.

When using present weed-killing agents, it is suggested that the user follow
the manufacturer's recommendations.

Red Soils Experiment Station

Crops that the committee feels the Red Soils Experiment Station should work
on, time and seed permitting, are Alabama Crimson Clover, the Beltsville strain
of creeping red fescue, and creeping alfalfa.

Committee members and others present at this meeting include:

Vetch: Fred Johnson, Route 2, Canby, Oregon
  Neal Thompson, Canby, Oregon

Turf: Wm. F. Tucker, Route 2, Estacada, Oregon
  Oliver Gerber, Route 2, Estacada, Oregon

Weeds: Charles Dietz, Canby, Oregon

Hops: Robert Seaman, Molalla, Oregon
  Louis Schwabauer, Hubbard, Oregon

Potatoes: John Dieninger, Route 2, Oregon City, Oregon

Borage Seed
  Crops: Ben Elmer, Route 1, Mulino, Oregon
        M. Fumimoto, Boring, Oregon

Pastures: Rognar Anderson, Colton, Oregon
        Everett Shibley, Route 1, Estacada, Oregon
        Ernest Josi, Route 3, Oregon City, Oregon

Rex Warron, Farm Crops Specialist, Oregon State College
J. J. Inskeep, Clackamas County Agent
Don C. Walrod, Clackamas County Assistant Agent
Jack McDermid, Superintendent, Red Soils Experimental Area
Creighton Lawson, Clackamas County AAA Secretary
Kenneth Arney, Wasco County AAA Secretary

Hollis Ottaway, Secretary