Complete Report
of
WALLOWA COUNTY
AGRICULTURAL OUTLOOK
CONFERENCE

ENTERPRISE, OREGON
March 12-13, 1936

County Agent
Enterprise, Oregon

Published by
County Agent's Office, Wallowa County
The Granges of Wallowa County
Wallowa County Wool Growers' Association
Wallowa County Cattle & Horse Raisers' Association
U. S. Department of Agriculture, through Oregon State College
Wallowa county, like all other counties in Eastern Oregon, is dependent for its agricultural income fundamentally on irrigated and dry farmed lands. It is true that about sixty percent of the cash income of the farmers of the county comes from livestock enterprises, but very little, if any, livestock could be grown in Wallowa county if it were not for the forage crops furnished by the irrigated lands.

In contrast to other Eastern Oregon counties, Wallowa county has a water supply which, in normal years, in the larger irrigated valleys, is ample for the land now being irrigated. In spite of this general fact, there are in the county many smaller areas where the water supply is not sufficient for irrigation of the land which is otherwise suitable for crop production.

In those areas where water is plentiful, the use of water has in many instances been excessive, and the result is becoming evident in reduced yields of crops, and the waterlogging of lower lands. This reduction in yield appears to be due in part to the washing off of the better surface soil, and in part to the leaching out of the mineral nutrients.

Experience in older irrigated projects throughout the western United States has demonstrated that reasonably accurate knowledge of the quantity of water being diverted to irrigation canals and to individual irrigated farms is essential if the water supply, whether it be excessive or limited, is to be put to its best use. In addition to the practical benefits which may be secured from the measurement of irrigation water, a considerable benefit which cannot be measured in dollars and cents arises from the marked decrease in neighborhood arguments as to water distribution.

In some of the smaller valleys of Wallowa county, there are opportunities for spreading the spring run-off on deep soils. If this is done, it will often be possible to secure a single good crop of alfalfa on land which now produces a little grain hay or nothing at all. In other areas, it may be possible to store the spring run-off in small reservoirs. The water stored in such reservoirs may be useful either for stock water or for irrigation.

On the dry farmed lands of the county, soil erosion by wind and by the run-off from rains and the melting snows is a serious problem. In some areas the ridges have been so denuded of the surface soil that the wheat yields have been very markedly decreased.

The Soil Conservation Service of the United States Department of Agriculture has secured excellent results in the control of erosion in the Wild Horse area of Umatilla county. The erosion problem on the dry farm lands of Wallowa county is similar to that in Umatilla county, and it is probable that much benefit could be secured by following some or all of the methods found successful in the Umatilla area.

In other sections of Eastern Oregon, it has been found that sulphur or other fertilizers have been useful in increasing yields of alfalfa and other crops. It is probable that similar results may be secured on some types of soil in Wallowa county.

In order that information secured in the studies of irrigation water applications and the use of fertilizers may be most useful, and to assist in the planning of various crop programs, a detailed soil survey of Wallowa county would be of very great value.
Recommendations.

In view of the conditions which have been described, the soils, irrigation, and erosion committee makes the following recommendations:

1. That the County Agent and the County Watermaster arrange for the establishment of irrigation demonstrations which will show the best methods of preparing the land and applying water for irrigation under the different conditions found in various sections of Wallowa county. It is suggested that such a demonstration might be secured by the cooperation of the Oregon State Agricultural College, the Wallowa County Court, the irrigation companies, and the United States Department of Agriculture.

2. That the measurement of irrigation water supplies both to the various ditches and, in the case of the major ditches, to individual land owners, be adopted as a general policy in Wallowa county. It is suggested that permanent measuring devices, preferably weirs or Parshall measuring flumes, be installed in canals, laterals, and outlets as fast as economic considerations will permit.

3. That the snow survey and forecast of irrigation water supplies being carried on by the county watermaster be continued and extended through co-operation of the state engineer, the United States Bureau of Agricultural Engineering and the United States Geological Survey.

4. That, where feasible, spring run-off water in small channels which would otherwise go to waste be used for the irrigation of alfalfa or other crops. It is suggested that the early run-off water be applied to deep soils where irrigation water will not be available during the normal irrigation season.

5. That the Works Progress Administration be encouraged in carrying forward the surveys of small dams under their present project. It is further recommended that the Federal Government be urged to develop small storage reservoirs through such agencies as the Soil Conservation Service, the Works Progress Administration, and the CCC organization. It is suggested that in many locations such small dams would furnish supplies of water for range stock and in some instances for irrigation, and would aid in the general policy of conservation of water supply.

6. That the County Agent proceed to take the steps necessary to form an Erosion Control District in Wallowa county, to be supervised by the Soil Conservation Service of the United States Department of Agriculture. It is suggested that the assistance of the officials of the Soil Conservation Service be secured in working out this project.

7. That individual land owners of Wallowa county take more interest in the problem of erosion on their own lands, whether they be irrigated or dry farmed. It is suggested that the damage by erosion is often so gradual that the land owner himself does not realize its serious nature until serious harm has been done. On the irrigated lands care should be taken in the irrigation of the steeper land. On the dry farmed lands it is suggested that the wheat land disc or some similar tillage implement be substituted where practicable for the moldboard plow. It is also suggested that whenever possible dry land farmers study the methods and results being obtained on the Wild Horse project.

8. That fertilizer trials be established by the County Agent in different sections of the county, and that these trials include the use of sulphur and sulphur-bearing minerals.

9. That the Oregon State College and the United States Department of Agriculture be requested to make a detailed survey of the soils of Wallowa county. It is suggested that this request be called to the attention of both state and Federal agencies.
**Livestock**


**CATTLE**

To correct the general opinion among cattlemen that there is a present shortage of cattle, the livestock committee thought it would be well to devote one paragraph of this report to state the numbers of cattle in the United States at the present time. The reason for the common opinion that the numbers of cattle are low at present is that so many cattle were slaughtered during the drought of 1934 and the numbers reduced by the Bang's disease program. The number of cattle (all cattle, both beef and dairy) of all ages on farms and ranches in the United States on January 1, 1935, was 68,284,409 which exceeded the 63,895,826 head on hand April 1, 1930, by 4,388,583, or 7.0 percent. This increase is more commanding when it is remembered that extremely heavy marketings of foundation stock were made in the drought year 1934.

The present large numbers of cattle are even more startling when we consider that much of this increase in cattle is in the increased number of breeding cows. The number of cows and heifers two years old and over on January 1, 1935, was 36,930,584, as compared with the slightly smaller group of cows and heifers over 27 months of age on April 1, 1930, of 28,335,945, or an increase of 30.3 percent.

The committee recommends that general range improvement such as the development of water holes both on public and private ranges is an effective method of increasing the carrying capacity of Wallowa County pastures and ranges.

The reseeding of Wallowa County pastures and ranges with hardy dry land grasses of approved varieties is another effective means of increasing the carrying capacity of Wallowa County ranges and pastures. Cattlemen present, especially Jack Tippett, testified that a grass known as Crested Wheat Grass, was making a very good growth on his land and was furnishing good cattle feed and was also effective in controlling soil erosion.

The livestock committee appreciates that while the quality of the cattle in Wallowa County is very good at the present time the more general use of beef bulls of good purebred breeding and good type will start a new program for the general improvement of the quality of cattle in Wallowa County. This improvement in the quality of the cattle will increase the returns from the sale of these cattle. The use of better bulls is only one step in the improvement of the cattle and another important step is the culling out of cows that are not of good beef type and not good milkers.

The United States census figures for January 1, 1935, show a total of 41,265 head of all cattle of all ages and breeds in Wallowa County.

The practice now in general use by many of the cattlemen in Wallowa County of breeding their range cows in pastures insures a higher percentage of calves. The lack of rainfall during the past few years is responsible for the depleting and over-grazing of Wallowa County ranges more than the actual number of stock being carried on many of our ranges.

The practice of rotating the grazing was recommended as an important step in protecting our ranges. It was recommended that wherever possible the cattle should not be turned out on the same part of the range or pasture each spring. If they are turned out on one par-
ticular part of a range one year this range should be protected the next year to give the grass on some section of the range a chance to make a good spring growth once every few years so that some of the grass may go to seed.

The present tendency of the cattlemen is to market cattle at a younger age. Most of the cattlemen are now selling calves and yearlings as feeders where they formerly sold older cattle.

The practice of orderly marketing is very important and everything should be done to expand this program. The County Livestock Associations at the present time get in touch with each other during the fall of the year to market their cattle in an orderly fashion with only a few shipments going down each week end. The committee recommends that this practice should be extended to other counties.

The committee is in favor of the present Bang's program and consider that much good has been done to the county by eliminating these diseased cattle from their herds. However, some cattlemen in the county and in the state could not get their cattle tested during the fiscal year and an extension of the Bang's disease program for another year is desirable.

When the supply of hay and feed grains in the valley is plentiful the fattening of cattle is a recommended practice.

BRAND INSPECTION

After considerable discussion, the cattlemen present were agreed that the present brand inspecting system was inefficient and was not giving the cattlemen the protection that they were entitled to. It was the recommendation of the livestock committee that the general chairman appoint a committee of cattlemen to take such steps as are necessary to have the present system of brand inspection changed and a system more efficient provided for. This committee is authorized to bring this matter before the Oregon Cattle and Horse Raisers' Association at their annual meeting in June and have arrangements made to have the present brand inspection law modified at the next session of the Legislature so that it will be more effective and give the cattlemen more protection. It is further recommended that the County Agent take this up with other County Cattlemen's Associations.

HORSES

Because Wallowa County is better situated to raise horses than most other parts of the state, we recommend that this county continue the raising of both good draft and saddle type horses for local replacements and for outside sale.

While we have some very excellent purebred horses in the county, we recommend that many of the grade and mongrel stallions which are also in use be replaced with good purebred stallions.

HOGS

The livestock committee generally recognized that Wallowa County is especially adapted to the raising of hogs and that hog raising is now and has been for a period of years one of the leading sources of income to Wallowa County farmers. Wallowa County hogs are considered superior to the hogs raised in any other county in Oregon.

While the present hogs in Wallowa County are of good quality and uniformity, it was the recommendation of the committee that the general use of more purebred boars of the best type available be used to keep the Wallowa County hogs up to their present high standard and also tend to improve their quality and uniformity.

For the raising of market hogs, the practice of cross breeding is recommended for the reason that crossbred hogs will make more efficient and more rapid gains than purebred hogs. However, it is recommended that only the best of purebred boars be used in this cross breeding program.

In order to keep away from worm infestations or other hog disease, we recommend that every precaution necessary be taken at farrow-
tug time to have the brood sows in clean quarters and after they have farrowed to be put on clean pastures.

It was the recommendation that brood sows should be fed some bone meal along with their grain ration at the rate of about two pounds of bone meal with each 100 pounds of grain, in order that there would be a sufficient amount of mineral in the ration to keep the brood sow in a stronger physical condition and to raise a good strong litter of pigs.

Where skim milk is not available the use of tankage is a recommended practice for getting rapid gains in hogs that are being fattened for market. Wheat will produce more rapid gains and less wheat is required to produce 100 pounds of gain than barley.

Sheep

The present number of sheep in the United States is somewhat less than five years ago and the present activities of woolen mills make the conditions in the sheep business look reasonably profitable for the next few years. The sheepmen in the committee recommend improvement in quality of the sheep in Wallowa County—both the farm flocks and on the range—but do not recommend any increase in numbers. The method to use in improving the quality of sheep is by the use of the best purebred sires available and the culling out of the undesirable ewes in the bands. The culling of the undesirable ewes will result in larger returns in wool and lambs from the remaining ewes in the band.

The committee further recommends that the use of good ewes in the farm flock of definite breeding would result in larger wool crops per ewe than the use of ewes of mixed and indefinite breeding prevalent in many flocks at the present time.

The fattening of lambs is an important operation for Wallowa County especially where the feeder raises his own hay and grain. The livestock committee did not wish to convey the idea that any-one could fatten lambs and be successful. It was generally recognized that lamb fattening was a specialized business and that the prospective lamb feeder should gain experience by fattening out a small number of lambs and increase his lamb fattening operations only as he gains experience. The committee, however, wishes to call attention to the fact that Wallowa County is in a good location in that present railroad facilities make it possible to ship Wallowa County fat lambs to Eastern markets or any of the Coast markets.

In view of the fact that many sheep diseases such as white scours in lambs, lung diseases of ewes, stiff lambs, eye diseases, etc., are present in Eastern Oregon, we recommend that sufficient funds be made available to establish a sheep disease laboratory at the Eastern Oregon Experiment Station at Union.

General

The diversion privilege which we have on the Portland market is a very important item in maintaining the price and in preventing the manipulation of the market. This privilege should be maintained at all costs.

We need better train service from Wallowa County, particularly at least twice a week west bound schedule that will allow for less delay in reaching Portland.

The stockyard facilities maintained at Joseph, Enterprise, Lostine and Wallowa at times prove very inadequate for the number of stock being shipped. We recommend that the railroad company increase holding facilities at all of these points mentioned.

Government meat grading is a good thing and we are in favor of compulsory grading on our markets wherever government inspection is available.

The livestock committee is strongly in favor of a plan for stabilizing the livestock industry. A part of this plan is to not reduce numbers of livestock from the well-established permittees.
In regard to the recent stability recommendation of Secretary Wallace that a very much wider use of forest range land is demanded for helping many unfortunate people now on relief, we do not think that it is a workable plan to cut down small well organized livestock units now using the forest in order to help small owners who are without sufficient range. Such a policy will only succeed in injuring present permittees without giving desired help to the class of applicants which such a plan is intended to help. After twenty-five years of experience in forest grazing, there has been developed a personnel of men supervising the forest lands that this country can be proud of. Their honesty and intelligence is unquestioned. These men have found that they must demand commensurate rights and a thorough understanding and ability to running livestock business before granting the grazing privilege in the forest. The Forest Service records will show the elimination of a very large majority of applicants through failure where these recommendations were not demanded.

The livestock committee wishes to go on record as being in favor of the present 4-H Boys' and Girls' program as a splendid plan for developing the boys and girls of Wallowa County. We believe the 4-H Livestock club work and Future Farmers of America projects should be continued and increased and urge livestock breeders in Wallowa County to help the boys and girls in getting good quality livestock for 4-H Club work. This program would not only help the boys and girls but will help advertise the excellent quality of Wallowa County livestock when they are exhibited at the Pacific International Livestock show and other fairs wherever they may be exhibited.

Coyotes and bobcats are the most destructive of the predatory animals. We believe that the system of predatory animal control now in effect through the cooperative efforts of the Biological Survey are the most efficient and economical and urge the Wallowa County Court to increase the appropriation in order that more hunters may be employed and better control of these predators obtained.

It is the recommendation of this committee that no more of the public lands of this state be withdrawn from grazing and placed in game preserves or in National Parks.

The livestock committee recommends that some county-wide plan be worked out this year so that our increasing number of rodents, ground squirrels, red squirrels and gophers may be greatly reduced.

The livestock committee, after careful discussion, recommends to the county court that all the county owned land within the boundaries of the National Forest be deeded to the National Forest and that county owned land bordering on the National Forest in some cases also be deeded to the National Forest.

Information from the Forest Service indicates that they will not have a CCC camp in Wallowa County for the coming season. Because there is a great need for range improvement such as rodent control, water development, poisonous weed control, predatory animal control and range fence construction, we recommend that the livestock committee through the general chairman of this economic outlook conference take this matter up with C. J. Buck, Regional Forester, and request a Wallowa Forest CCC camp for the above mentioned range improvements.
BASIC LAND STATISTICS FOR EASTERN OREGON, Wallowa County

1. Total area of the county, census 1930 2,028,160
2. Gross area of national forest—national forest data, June 30, 1935 1,235,550
3. Net area of national forest—national forest data, June 30, 1935 1,133,011
4. Alienated land within national forest boundaries—No. 2—No. 3 102,539
5. Timber land outside national forest boundaries—planimeter measurements from timber maps of state forester and U. S. Experiment Station 397,541
6. Land in farms—census 1930 569,759
7. Total crop land—census 1930 116,187
8. Pasture not woodland—census 1930 *255,913
9. Woodland pasture and woodland not pasture—census 1930 111,783
10. Other land—Census 1930 15,409
11. Unreserved public domain July 1, 1933—Dept. of Interior 7,560
12. Total of 2, 5, 7, 8, 10, 11 2,028,160
13. Balance unaccounted for—No. 1—No. 12—Includes miscellaneous federal lands and scattered tracts of untimbered lands not counted as farms by the census None

*Actually 326,350 as given in the census but it is estimated that 70,467 acres of unwooded pasture is included in item 3 since the Wallowa N. F. includes much untimbered grazing land. Item 8 therefore is figured in the balance as 255,913.

Date August, 1935 Prepared by ROBERT WILCOX.

Dairy


1. The General Dairy Situation:
The number of dairy cows in the United States, of milking age, as shown by the Census, had steadily increased since 1890. From 1928 to 1934, the number of cows of milking age on farms in the United States increased about three percent per year, reaching an all-time peak of an estimated 26,185,000 early in 1934.

During that period pastures and feeding conditions were below normal in all or part of the major dairy states of the country, so that production only increased one percent per year. The 1934 drouth started a decline in cattle numbers which brought them down to an estimated 24,500,000 on January 1, 1936. The following table shows the number of dairy cows by census periods since 1890 in the United States, the eleven western states, Oregon, and Wallowa county.

The eleven Western States have

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>11 Western States</th>
<th>Oregon</th>
<th>Wallowa Co.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890</td>
<td>16,512 (1)</td>
<td>721 (1)</td>
<td>114 (1)</td>
<td>3546</td>
</tr>
<tr>
<td>1900</td>
<td>17,136 (1)</td>
<td>987 (1)</td>
<td>109 (1)</td>
<td>2242</td>
</tr>
<tr>
<td>1910</td>
<td>20,625 (2)</td>
<td>1,341 (2)</td>
<td>152 (2)</td>
<td>3426</td>
</tr>
<tr>
<td>1920</td>
<td>21,455 (3) (4)</td>
<td>1,541 (3)</td>
<td>200 (3)</td>
<td>3871</td>
</tr>
<tr>
<td>1925</td>
<td>22,575 (3) (4)</td>
<td>1,623 (3)</td>
<td>217 (3)</td>
<td>3210</td>
</tr>
<tr>
<td>1930</td>
<td>23,196 (3) (4)</td>
<td>1,814 (2)</td>
<td>282 (3)</td>
<td>5501</td>
</tr>
<tr>
<td>1935</td>
<td>26,236 (3) (4)</td>
<td>2,264 (3) (4)</td>
<td>270 (3)</td>
<td>5100 (Est.)</td>
</tr>
</tbody>
</table>

(1) June 1 (2) April 15 (3) January 1 (4) Estimates by B. A. E.
for a number of years had about the same percentage of the human population of the country as there were of the dairy cows of the nation, and there has been little net movement of dairy products between the Pacific slope and the East until 1935 when considerable Eastern butter was shipped to California markets. Oregon produces a surplus of cheese and butter, marketing most of it in California. For a number of years between nine and ten million pounds of Oregon cheese have been shipped to Los Angeles and San Francisco markets, as well as from six to eight million pounds of butter. This amount of cheese is about all that can be expected to be marketed from this state at profitable prices.

It appears that any increase in surplus dairy products of Oregon should be made with the view of producing high quality butter for these markets.

The following table shows the human population of the United States and the eleven Western States, and Oregon since 1890:

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>11 Western States</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890</td>
<td>62,947,714</td>
<td>3,102,269</td>
<td>317,704</td>
</tr>
<tr>
<td>1900</td>
<td>75,994,575</td>
<td>4,091,349</td>
<td>413,536</td>
</tr>
<tr>
<td>1910</td>
<td>91,972,266</td>
<td>6,325,821</td>
<td>672,765</td>
</tr>
<tr>
<td>1920</td>
<td>105,710,620</td>
<td>8,902,972</td>
<td>763,985</td>
</tr>
<tr>
<td>1930</td>
<td>113,495,720</td>
<td>10,982,281</td>
<td>848,061</td>
</tr>
<tr>
<td>1934*</td>
<td>125,693,000</td>
<td>12,530,606</td>
<td>983,000</td>
</tr>
</tbody>
</table>


During the past sixteen years, for which records are available, there has been very close relationship between the price of manufactured dairy products and the industrial payrolls of the nation. The 1936 United States Department of Agriculture Outlook Reports indicate that dairymen are planning to increase their numbers of cows, but that they now have on hand fewer heifers under two years of age than will be needed for replacements in the present national herd, so that there is no apparent prospect of an increase of dairy cow numbers for the next couple of years. However, the committee wishes to call attention to the fact that the present estimates of cow numbers show only 700,000 less than were on hand in 1933 when 100,000,000 pounds of butter was placed in storage in excess of normal storage operations. If consumers buying power should decrease, particularly as indicated by industrial payrolls, the demand for dairy products would probably fall off and by the same reasoning, if consumers’ buying power should increase, prices for dairy products should make further improvement.

II. The Situation in Wallowa County—

The number of dairy cows kept in Wallowa county remained fairly stable at between 3000 and 3500 until 1925. Following this, there was an increase to 5500 in 1930, and it is estimated to have decreased to about 5100 in 1935.

Dairying provides approximately fifteen per cent of the total farm cash income of the county. The committee believes that dairying is a sound enterprise on diversified and specialized dairy farms, and that production costs are as low as in any section of Oregon. However, there are no exceptions to the necessity of following well-known principles of good dairy cattle management, if the enterprise is to be successful from a financial standpoint. Marketing and manufacturing facilities, both independent and cooperative, are adequate, and prices in general are in line with prices on the Portland and California markets. The average wholesale price of butter in Portland, San Francisco, and Chicago
for the years 1930-1935 are shown in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Portland</th>
<th>San Fran.</th>
<th>Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935</td>
<td>29.3</td>
<td>30.12</td>
<td>28.78</td>
</tr>
<tr>
<td>1934</td>
<td>24.3</td>
<td>25.05</td>
<td>24.78</td>
</tr>
<tr>
<td>1933</td>
<td>20.4*</td>
<td>21.11</td>
<td>20.79</td>
</tr>
<tr>
<td>1932</td>
<td>23.5**</td>
<td>21.98</td>
<td>20.07</td>
</tr>
<tr>
<td>1931</td>
<td>29.4**</td>
<td>28.13</td>
<td>27.05</td>
</tr>
<tr>
<td>1930</td>
<td>35.5**</td>
<td>36.31</td>
<td>35.28</td>
</tr>
</tbody>
</table>

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


Recommendations

1. The committee believes that the major problems of dairy industry of the county are lowering the cost of producing butterfat and further improvement in the quality of products produced. We believe that any future expansion of the industry in the county should take place by increasing the production per cow, rather than any marked increase in cow numbers at the present time.

2. We recognize that a sound public and range land use policy is of importance to dairymen, and other producers, as well as livestock men in the state, and that any policy that affects one branch of the livestock industry adversely, ultimately affects all other livestock or livestock products producers. We believe that a sound general livestock policy for Oregon and the West is enough range livestock to utilize available range forage to the best advantage, using surplus farm forage for dairy cattle, farm sheep, and feeding operations.

3. The best method of increasing production per cow is by continued record keeping. We recommend that the conference chairman appoint a committee of dairymen from different sections of the county to work with the County Agent in getting some kind of organized testing work, such as dairy herd improvement association work, under way in the county. We believe that such work should not only emphasize culling low producers and better feeding and management, but should include proving sires as one of the major objectives of such an organization.

4. We recommend that consideration be given to the possibility of forming one or more cooperative bull associations, especially among members of such a testing association when it is formed. Safe-keeper bull pens with a strongly fenced small pasture are recommended wherever dairy bulls are kept. This promotes safety and must be done where controlled breeding is practiced.

5. Too many herds in Wallowa county are using dairy sires without production records behind them, and as a result are not building up profitable production. Not only should a sire be pure-bred, but sufficient records should be available from his dams, sisters, and daughters, to show just the kind of production he should transmit to his daughters.

6. The United States Department of Agriculture Outlook Reports indicate that there is a swing towards more spring freshening over the country as a whole. We recommend dairymen give consideration to the advisability of more fall freshening in this county, taking into account any possible decrease in production costs, better use of farm labor, and advantage of higher price usually obtainable during the winter months when butter is moving out of storage.

7. The cost of producing butterfat is lower with higher-producing cows. Under good feeding and management conditions, dairymen should work toward an average minimum production of 300 pounds per cow.

8. The use of succulent feeds, particularly silage and roots, is recommended where these crops can be grown and put up cheaply.
9. It has been demonstrated many times that when you take a crop from the soil you must return the equivalent in the form of manure or organic matter in order to maintain the fertility of the soil. The dairy cow on a diversified farm is probably the cheapest way to return the fertility to the soil. When a crop is fed to the dairy herd you not only realize an income from the products but you also realize a profit from the land by maintaining fertility, in returning the manure to the land.

The average composition of fresh cow manure is:
- Nitrogen, 12 lbs. per ton.
- Phosphorus, 3 lbs. per ton.
- Potash, 9 lbs. per ton.
- Value per ton, $2.23.

Losses in plant feeds from manure as ordinarily handled run as high as 80 percent. Proper handling can reduce this loss to as low as 20 percent. Losses may be cut down by:
1. Protecting it from leaching.
2. Keeping moist during the dry season.
3. Adding super-phosphate to prevent escape of ammonia.
4. Applying promptly to the soil.
5. Water-tight floors in stables and the use of manure pits.

10. We believe there is a possibility of increasing pasture yields by the use of better pasture mixtures for permanent pastures, dividing the pasture into two or more lots and practicing rotation grazing, and the use of banyard manure as a pasture fertilizer.

11. Production costs are lower with larger sized herds, but the size of the herd should be adapted to the feed and labor resources of the farm.

12. Many dairy heifers are being bred to freshen too young. We recommend breeding to freshen at about two years of age. Cows should have twelve months between freshening periods, and should be given a two-months' dry period for most profitable production.

13. Wallowa county is a modified accredited tuberculosis-free area, and testing should be continued to keep this rating. We recommend that all dairymen take advantage of the Federal Bang's disease program, so that the disease can be eliminated while Federal indemnities are available. Since the clean-up started in Wallowa county, a considerable increase in the price paid for clean stock is being realized. We feel that we should be in a position to take advantage of this market as it develops in other counties and other states. We also recommend that proper steps be taken to bring the county under the state Bang's Disease compulsory testing act when it becomes effective in 1937.

14. The market for surplus Wallowa county dairy products is for high-quality butter to be sold in the Portland and California markets. The amount of dairy products consumed by the public depends to a large extent on the quality of these products. Wallowa county has made marked progress in improving the quality of butter produced in the county, but we believe there is room and necessity for further improvement. The responsibility for high-quality milk and cream delivered to the manufacturer rests upon the producers.

We recommend further improvement in quality by more careful sterilization of equipment, better cooling and holding at proper temperatures. Off-flavors and odors either from feed or handling of milk should be avoided. We recommend that manufacturers continually grade cream more strictly, increase the spread between first and second grade cream, and use every effort in assisting producers in an educational way in improving the quality of their product.

15. We believe that 4-H Club work provides valuable training to the boys and girls on farms. We recommend continued support of this activity, and development of more dairy calf clubs in the county.
Farm Crops


WHEAT.

A. THE SITUATION.

1. Acreage—
The wheat acreage in the country has been decreasing as indicated by the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>12,265</td>
</tr>
<tr>
<td>1919</td>
<td>33,204</td>
</tr>
<tr>
<td>1924</td>
<td>26,382</td>
</tr>
<tr>
<td>1929</td>
<td>35,629</td>
</tr>
<tr>
<td>1934</td>
<td>21,808</td>
</tr>
</tbody>
</table>

Using the census figures as a guide, the committee estimated that these wheat acres had been changed to other crops as follows:

- Rye: 1,000 acres
- Alfalfa: 2,300 acres
- Grain hay: 8,100 acres

In addition, some acreage formerly in wheat has now been abandoned due to low prices and drought years.

2. Varieties—

Based on a survey of elevators and warehouses made in 1934, the committee decided that the varieties occupied the percentage of the total wheat acreage as follows:

<table>
<thead>
<tr>
<th>Varieties</th>
<th>Percent of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forty Fold</td>
<td>45%</td>
</tr>
<tr>
<td>Federation</td>
<td>15</td>
</tr>
<tr>
<td>Albit</td>
<td>15</td>
</tr>
<tr>
<td>Hard Federation</td>
<td>10</td>
</tr>
<tr>
<td>Tripit</td>
<td>9</td>
</tr>
</tbody>
</table>

Since that time, some switches in varieties have occurred, such as Rex, Forty Fold-Federation cross, Oro, etc.

The preponderance of Forty Fold is due to the following advantages:

a. Men who buy wheat for hog feed like it better than most varieties.

b. It makes excellent hay, in case crops must be cut for hay due to frost or drought.

c. It makes a good fall growth and so furnishes good pasture and competes well with weeds.

All of the growers on the committee agreed that Forty Fold has the following disadvantages:

a. It smuts badly.

b. It shatters, and so is unsuited to farms with ridges and swales which ripen unevenly.

c. It crosses easily with other varieties and so mixes badly in the field.

3. Markets

Of the half million bushels of wheat grown here, about 70% is used locally for feed and seed and about 30% is normally shipped out. In years of very low prices, such as 1933, practically all of the crop was fed. In years of high prices, as much as half may be shipped out.

4. Comparative Yields

In 1934 the census reported the average yields of the four grains as follows:

<table>
<thead>
<tr>
<th>Grain</th>
<th>Pounds per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>1,242</td>
</tr>
<tr>
<td>Oats</td>
<td>1,286</td>
</tr>
<tr>
<td>Barley</td>
<td>2,054</td>
</tr>
<tr>
<td>Rye</td>
<td>936</td>
</tr>
</tbody>
</table>

The committee members agreed that barley on most soils will yield more pounds than oats, but that the apparent advantage over wheat is due solely to the fact that a large part of the wheat is grown on dry land, whereas nearly all of the barley is grown under irrigation. Committee members believe that wheat will yield about as many pounds per acre under irrigation as barley will and that it competes better with Canadian Thistles.

B. Recommendations.

1. Acreages—
The committee recommends no immediate further reduction in wheat acres unless there are benefit payments available through the A. A. A., because of lack of any suitable crop to replace it. Wheat has a more certain and more de-
penable outside market than oats, barley, or rye, even if the price is sometimes low.

The committee realizes that summerfallow farming results in washing of soils, and that eventually some system must be used to replace wheat part of the time in order to conserve soils. This is a long time program however.

2. Erosion—

The committee recommends a study of the erosion prevention practices being used now in Umatilla county and urges work to obtain assistance from the Soil Conservation Service of the C. C. C. in instituting such work here on wheat lands.

3. Varieties—

We recommend thorough trials of Rex and Hybrid 63 as possible wheats to replace Forty Fold. On the lower yielding soils, we recommend Oro. On the good irrigated lands Federation is still the most satisfactory wheat for spring planting. Union wheat is higher yielding on the best lands but is rather late and will sometimes frost where the Federation will mature.

Winter wheat is recommended for trial on irrigated lands where thistles are bad since a winter grain will come on ahead of the thistles in the spring and tend to shade them out.

4. Seed Supplies—

We recommend that at least one farmer in the county concentrate on producing pure seed of each of the varieties grown. This will involve roguing the fields to get rid of other varieties and rye. This seed should be grown on land practically free from noxious weeds.

5. Wheat Nurseries—

We urge the County Agent to cooperate with the Experiment Station in maintaining grain nurseries on both irrigated and dry land where the new smut resistant varieties can be thoroughly tried out.

6. We suggest a thorough study of the possibilities of a local unit of the North Pacific Grain Growers but believe that there is not room here for two grain handling concerns.

7. We recommend the use of Ceresan for treating wheat for smut.

**BARLEY AND OATS.**

A. The Situation.

1. Acreage—

The barley acreage normally fluctuates from four to seven thousand acres, and the oat acreage from three to four thousand acres.

2. No Outside Market Available—

In most years neither oats nor barley has a satisfactory outside market. Occasionally years occur when there is a shortage somewhere else but in general the oats and barley must be fed locally. The price of wheat per pound is normally greater for shipping out of the county than the price of either oats or barley, and since wheat yields more on dry land and as much on irrigated land, there is no object in growing either oats or barley for shipping out.

3. Varieties—

Practically all of the barley acreage is Trebi, there is a little Hannchen grown on dry land and a little winter barley. Most of the oat acreage is Markton with occasional fields of Victory and other varieties.

B. Recommendations

1. Acreage—

We recommend a small increase in barley to take care of local feeding needs. If feeding operations increase here, additional barley and oats may be required, although plenty of local experience indicates that wheat can be used satisfactorily for finishing animals.

2. Varieties—

We recommend Victory oats for irrigated lands where plenty of water is available. On very gravelly soils which will not hold water or on farms where water is apt to be short, or on dry land we recommend Markton oats. Trebi barley is recommended for all of the irrigated lands and Hannchen or Meloy for dry lands.

A supply of Union and Beardless barley seed should be developed.
for local use for hay and for seeding in thin alfalfa meadows.

3 Seed Treatment—
We recommend Ceresan as a seed treatment for oats and barley as well as for wheat.

**HAY.**

### A. The Situation

1. **Acreage**—
Hay occupies about 60% of the entire cropped land of the county. Hay acreage in 1934 was 42,224 and only 77,222 acres in the county produced crops of any kind.

2. **Kinds of Hay**—
The hay acreage was divided in different kinds of hay as follows:

<table>
<thead>
<tr>
<th>Kinds of Hay</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>13,631</td>
</tr>
<tr>
<td>Timothy and Clover</td>
<td>3,729</td>
</tr>
<tr>
<td>Sweet Clover</td>
<td>111</td>
</tr>
<tr>
<td>Grain hay</td>
<td>21,083</td>
</tr>
<tr>
<td>Wild Hay</td>
<td>3,615</td>
</tr>
</tbody>
</table>

It is thus seen that half of the acreage is grain hay and about a third is alfalfa.

3. **Yields**—
The alfalfa in 1934 averaged 2.6 tons per acre. The grain hay averaged 1.5 tons.

4. **Balance between Livestock and Hay**—
The committee agreed that the present hay acreage is adequate to care for the livestock now on hand. Any increase in dairy cows, beef cattle or sheep will have to be accompanied by an increase in hay acreage which will require a decrease in wheat.

Half of the total hay acreage is grain hay which is practically all on dry land. Most of this hay is fed to livestock on the farms where it is produced. It is therefore not available for range livestock or for winter feeding operations.

5 **Trends in Yields**—
Most of the committee reported that alfalfa is not yielding as much as it formerly did. They reported that the use of barn yard manure helped, and that sulphur helped in some parts of the county but not everywhere.

### B Recommendations

1. **Ladak Alfalfa Recommended**—
Ladak alfalfa is the highest yielding variety at nearly all of the Northern Experiment Stations and especially at the high elevation stations. Experience of farmers in other Eastern Oregon counties indicates additional advantages as follows:

   a. High resistance to frost in the spring.
   b. Longer life.
   c. A larger first cutting and hence greater yield in areas with short water supplies.
   d. More cold and drought resistance
   e. Greater leafiness and higher feeding value.
   f. Resistance to various diseases and to some insect pests.

2. **Beardless Barley Recommended**—
As a crop to seed in thin alfalfa and as a grain hay crop beardless barley has advantages over other grains. The variety developed at the Union Experiment Station should be used.

3. **Peas Increase Hay Yields**—
When grain hay is to be grown on irrigated land, the addition of peas either to wheat, oats, or barley can be expected to increase yields of hay about 1 ton per acre according to results at the Union Experiment Station.

4. **Alfalfa Will Control Thistles**—
On farms with lots of thistles, the easiest method of keeping them under control is to keep the land in alfalfa as long as possible and Ladak alfalfa will last longer than other varieties. The Ladak alfalfa is therefore recommended for this purpose.

### WEEDS

#### A. The Situation.

1. **Extent of Infestation**—
Canada thistles occur on practically every irrigated farm in the county. In addition they are found in brushy places, in creek bottoms, and even in spots in the forest.

Quack grass exists more or less all over the irrigated sections of the county, but is not regarded as seriously as the thistles.

White top and Morning Glories are beginning to appear. The Morn-
ing Glories are very numerous in gardens.

2. Control Measures Practiced—

Several members of the committee reported that they had completely killed Canada thistles in one year of cultivation, and that plowing in hot weather with some cultivation afterward had killed quack grass in one season.

Alfalfa was used by most of the committee members to hold the thistles down and they reported that when the fields were finally plowed, some thistles appeared but that they were by no means as numerous as when the fields were planted to alfalfa.

For working thistle land the committee members recommend Rod Weeders.

B. Recommendations.

1. White Top Eradication—

The committee recommends that in view of the seriousness of white top and the small acreage now infested, the County Court be asked to appropriate sufficient money to completely kill these small patches.

2. Morning Glory Control—

Since morning glories like thistles can be controlled by planting the land to alfalfa, this weed is not as serious as White Top which can not be controlled in that manner. We recommend, however, that individual farmers spray or otherwise clean up their morning glories as fast as possible to keep them from spreading over the entire county the way the thistles have.

3. Canadian Thistle Control—

The committee believes that Canada Thistles are beyond the control stage in the county and that methods from now on should be devoted to systems of farming to live with the thistles rather than trying to eradicate them. Individual farmers can eradicate them from their farms and these farms may be kept relatively free by holding grain acres to a minimum. Some of the farming systems which offer possibilities are:

a. Keep the farm in alfalfa and pasture, mowing the pastures regularly. Frequent mowing over a period of years will gradually reduce the thistles.

b. In years when grain is produced, use winter wheat or winter rye instead of spring grain.

c. When fields become infested, either practice summer long cultivation with frequent plowings and by working the soil at least once a week, or use a modification of the summerfallow method. This modification is to seed winter rye or winter wheat in the fall, cut it for hay in the milk stage and plow immediately, working the field frequently the balance of the summer. This summer working is about as effective as season long cultivation.

4. Avoid Cheap Seed—

To keep from getting white top, Russian Knapp weed or other bad weeds, we urge growers to beware of cheap alfalfa grass or clover seeds. Seed offered for less than the market price is almost certain to contain noxious weed seeds or to be low in germination.

5. Develop Special Sentiment Against One Year Leases—

In nearly every case, land owned by absentee owners and leased on a year to year basis becomes a breeding ground for weeds with resulting damage to neighboring lands. In addition these farms are run down in fertility and become eye sores in a community, resulting in lower land values for everyone. Granges and other organizations should develop sentiment against these one year leases.

6. Weed and Seed Law Changes—

We urge modifications in the Weed and Seed law so that weed free areas may be developed much like the tubercular free area for dairy cows. If White Top, for example, were completely eradicated from the county, this county could then be proclaimed a White Top Free area with restrictions against shipping in seed or hay containing white top.

PASTURES.

A. The Situation.

1. Pasture Area—

The census reports 15,764 acres
of plowable pasture in the county, 85,298 acres of wood land pasture and 336,861 acres of other pasture.

2. Bunch Grass Pastures Badly Damaged—
Wallowa county originally had the best bunch grass pasture in the state. Much of this has been killed by frequent grazing, especially in the dry years. There are many good pastures remaining but a large share of the area is now pretty well covered by will Brome grass or Broncho grass or as it is variously called Cheet Grass or Needle Grass.

B. Recommendations.
1. Crested Wheat Grass for Dry Lands—
We urge that wheat lands no longer profitable to farming, be planted to Crested Wheat Grass as rapidly as possible. Steep side hills which are beginning to wash badly should also be planted to keep them from being rendered worthless by erosion.

Range lands could be brought back by seeding Crested Wheat Grass on them. For methods of seeding, the County Agent should be consulted.

Either range livestock men or wheat farmers with large areas of land to seed should plant a few acres of crested wheat grass in rows and grow their own seed. In this manner the cash expense of seeding can be largely avoided.

2. Early Spring Grazing Harmful—
Due to the methods of growth of dry land grasses, early grazing year after year will kill out any of the good grasses. Every range should therefore be divided and grazed early on alternate years to give those grasses a chance to reestablish themselves. A range handled in this way would keep good indefinitely and would not become covered by the Broncho grass.

3. Grass Mixtures Recommended—
For permanent irrigated pastures we recommend mixtures containing meadow fescue, orchard grass, English rye grass and some other grasses depending upon water supplies. No one mixture will be suitable for all lands in the county. The County Agent should be consulted for the best grass mixture. These mixtures can be depended upon to produce more feed than Blue Grass or White Clover particularly in the hotter months when pasture is most badly needed.

4. Sweet Clover is recommended for a temporary pasture on irrigated land. It will produce more feed than any other crop.

Farm Business


SOURCES OF AGRICULTURAL INCOME
In common with other Blue Mountain counties by far the largest part of the agricultural income of Wallowa County is derived from the sale of animal products, these classes of income accounting for two-thirds of the total. Beef cattle, sheep and hogs account for almost exactly half of the total agricultural income, dairy products about one-seventh, while the revenue from poultry and eggs is relatively insignificant.

The income from crop products is closely related to the local livestock industries inasmuch as a very substantial part of the crops, including grains and hay, is used for the feeding of livestock. Additional data on sources of income are carried in Table A attached hereto.

LAND OWNERSHIP
Agricultural development in
Wallowa County must be closely tied into the ownership of the land. Land in private hands is more or less flexible as to its use. Such lands as are owned by public agencies, however, are not so flexible. Especially does this statement apply to the use of federally owned lands with voters and tax payers in other sections of the country becoming more and more interested in the use of such federally owned lands.

Approximately 60 percent of the entire land area of Wallowa County is publicly owned. The holdings of state and county lands being light, nearly all of the 60 percent is in federal ownership, mostly in National Forests.

Land in farms makes up only 28 percent of the total county area. Of this 28 percent of the county total classified as land in farms rather less than one-fourth of it is improved land, or a total of slightly under 128,000 acres. Of the 128,000 acres improved, a little more than 43,000 acres are irrigated with a greater or lesser water supply.

The number of farms in Wallowa County reflects the homesteading following the passage of the 1909 and 1916 acts, followed by heavy abandonment in recent years and the combining of these homestead tracts with older settled lands. The number of farms in the county dropped from 1149 in 1920 to 952 in 1930. The tendency since 1930 appears to be to subdivide lands and to increase the number of farms individually operated.

Inasmuch as the improved land in Wallowa county has changed very little in the last 16 years, in fact the change that has taken place has been a reduction in the improved area, your committee points out that there is a limit beyond which subdivision of properties should not proceed. See discussion below under land settlement.

The reduction in the number of farms between 1920 and 1930 involved the combining of a number of tracts into larger places. During this period, there was a very sharp reduction in the number of Wallowa County farms ranging in size from 100 to 500 acres. On the other hand there was an increase in the number of farms of from 500 acres upward.

Additional data on the land resources of Wallowa County will be found in Tables B, C and D attached to this report.

FARM ORGANIZATION

In the summer fallow or dry tillage regions of the county your committee holds that an operator should have a minimum of 500 acres of crop land in order to provide an adequate living and to have some chance of increasing his equity in the property.

Experience suggests that a minimum economic unit for a beef operation would be about 200 head of cattle. Between 20 and 40 acres of range land should be available for each head.

For additional comment on farm organization, see land settlement below.

LAND SETTLEMENT

There is room in Wallowa County for a few additional settlers in addition to such people as may come in and buy out existing set-ups. It is the belief of your committee that 80 acres of irrigated land should be regarded as a minimum size. Such a place would call for dairying or other livestock production as the major sources of income. The elevation and the resulting short growing season does not make promising the development of a number of specialized crops that may appeal to growers of other sections.

The recommendation relative to size is related to the fact that smaller acreages require about the same equipment and that the cost for equipment, including livestock, on a much smaller place soon becomes excessive when reduced to an acre basis.

Much consideration has been given to the minimum capital with which a new settler should be supplied before being encouraged to establish himself in the Wallowa valley. In spite of the fact that
your committee does not look with favor upon renting as a permanent form of land occupancy, we believe it advisable that a new comer rent for a year or two in order to become acquainted with the district. In fact, one would be justified in working for wages for a time in order that he might establish himself more safely after becoming acquainted with conditions. In principle, we are convinced the settler should be supplied with sufficient capital or equipment to set up operations on a place including machinery and livestock and sufficient funds to meet his operating expenses and living costs until the first crop is harvested. If settlers are fortified with this amount of capital we believe the community need not be concerned about such people becoming public charges. The community owes an obligation to new comers to see that they are established in such manner and under such conditions that they have a chance to make a go of things and to stay off public relief.

**PART TIME FARMING**

There appears to be little or no place in Wallowa County for so-called part time farming operations, that is, the division of an operator's time between a small tract of land and some job in industry. While this type of agriculture may have a place close to the larger industrial centers, it appears to your committee that the industrial payroll in Wallowa County promises to be too limited to encourage this type of land use.

**DISPOSITION OF COUNTY OWNED LANDS**

The County of Wallowa owns about 75,000 acres to which title has been taken following foreclosure of tax liens. Your committee believes that as a policy such county owned lands should be disposed of in such manner that they will stay sold and not revert to county title. With some exceptions, it seems that there are very few economic units now held by the county and that the most of these lands properly should be bought by the owners of adjacent properties.

There is little to be gained in disposing of county properties to people who would set up farming units that cannot possibly be maintained. Hence our thought that most county lands now should be combined with adjacent properties.

There seems to be need for a more accurate classification of county lands with respect to the proper use to which they should be put. More information on these property uses not only will lead to getting lands into permanent private ownership but will result in a higher salvage on the part of the county.

**PROPOSED RESTRICTION ON LANDS**

Your committee has given consideration to the growing restrictions on the use of federally owned grass lands. We are disposed to approve of such restrictions as increase the carrying capacity of these lands and in principle raise no question about policies laid down designed to increase this carrying capacity. However, we are very much impressed at two current developments each of which would restrict grazing far below such restrictions as might be related to increasing carrying capacity. We refer to the passage by the National Cooperative Council at its last annual meeting of the following resolution offered by C. A. Ewing, Decatur, Illinois, and president of the National Livestock Marketing Association. The resolution follows:

"The grazing use of land under control of the Federal Government should be controlled so as to regulate cattle and sheep production in harmony with our market requirements and in the interest of maintaining more stable price structures for these classes of livestock as well as in the interest of protecting the grazing lands from overstocking."

Let us repeat that we do not challenge grazing policies related to
conservation of forage. But here is a resolution apparently having wide-spread support in the politically powerful midwest that would use the national forests and the unappropriated public domain under the jurisdiction of the Taylor Grazing Administration as a means for regulating nationally the numbers of beef cattle and sheep. Inasmuch as only about one-third of the beef cattle of the United States are in the western states at all, and since Texas with its heavy holdings has no federal land within its boundaries, it goes without saying that the Ewing proposal promises to restrict grazing in the public land states to a point where operations for a great many individuals would become utterly impossible. The effect upon sheep numbers would not be disastrous since the western states have a much larger proportion of the total sheep numbers of the country than in the case of beef.

It need not be pointed out to Wallowa County stockmen that any considerable reduction of their grazing privileges on the National forest would result in a sharp reduction in animals that could be carried, in a sharp reduction of agricultural income in this county, and to a disturbance of farm and ranch operations that would spell nothing less than disaster to large numbers of our operators.

An immediate result would be a surplus of hay and irrigated pasture and the hay growers probably would be the first ones to face bankruptcy. It is our belief that ultimately the public land states would increase their dairy production very sharply, that type of livestock husbandry offering the only feasible outlet for the surplus of hay and irrigated pasture available following the contraction of grazing privileges on Federal lands. Butterfat production in the United States already is so close to the export point that any marked increase of butterfat production throughout the West might easily wreck the butter market and reduce prices to the extent of the tariff which now is 14 cents a pound.

This proposal is so inequitable as to appear impossible, but it now has gained no inconsiderable support among organized Midwest farmers and we feel that Western livestock interests not only should recognize the danger to their enterprises but should take positive steps to inform voters in the Midwest relative to the conditions under which Western beef and sheep are produced.

GAME AND ITS RELATION TO WALLOWA COUNTY AGRICULTURE

Wallowa County stockmen and other citizens always have recognized the propriety of regarding game as a natural resource and of taking any necessary steps to conserve that resource for the present generation and for posterity. The fact that the Blue Mountains are and have been a famous hunting ground attests the interest of users of the public lands in this region. It seems, though, that the public in the East and again in the Midwest is demanding a higher and higher game population in the public land states. Your committee suspects that a part of this interest coming out of the Midwest is related to the desire of Corn Belt farmers for a reduction of beef and sheep numbers. This pressure being what it is, your committee advances a game policy for your consideration, that is, that forage eating game be maintained only in such numbers that it is provided with winter grazing on publicly owned rather than upon private lands. No reasonable citizen at all familiar with farm and ranching conditions in this territory will contend that owners of private lands are under any obligation to carry game animals through the winter.

FARM CREDIT

What with the four units of the Farm Credit Administration, with the Rural Rehabilitation Loan Service and with local banking facili-
ties, your committee believes that the sound credit demands of the county are being met in full. The Farm Credit Administration is deserving of much praise for the effective manner in which it not only has met credit needs during a period of crisis, but has maintained more than a semblance of sound loaning practice during this same period.

Your committee feels it worth while to point out that "Government Credit" is all but a myth. With the exceptions of Emergency Crop Loans, Rural Rehabilitation loans and Commissioners' Loans, funds advanced by so-called government credit agencies are private capital exclusively. The Federal Land Bank obtains its funds by the sale of its own bonds to the public at large. The security for these bonds is the mortgages taken from borrowing farmers.

The Bank for Cooperatives and the Production Credit Associations discount notes taken from their borrowers with the Intermediate Credit Bank which latter organization in turn sells its notes or debentures to the investing public. Agricultural borrowers will be justified in insisting that the affairs of these four loan agencies be conducted in such a way that the integrity of their securities in the hands of the investing public may never be brought to question.

Recent loaning activities point more definitely than ever before to the need for agricultural borrowers maintaining certain necessary records of their operations. Nowadays two types of financial statements are called for by virtually all credit agencies before a loan will be extended. The borrower must indicate his worth by filing a statement showing all property owned, all the claims or debts against him or the property in question, and show the balance between the two or his equity or net worth.

Since loans are made basically against the earnings of an enterprise rather than against the security posted to guarantee its payment, it is necessary that the earnings be set out, preferably for a period of years. By no other means is it possible to anticipate what may be the earnings in the future from which a loan must be repaid. Records sufficiently detailed to reflect the earnings or the losses of a business for a term of years should be maintained.

Not all borrowers realize that credit agencies positively do not wish to take possession of collateral posted to secure a loan. Collateral is required solely as a guarantee that the loan may be liquidated in case the anticipated earnings do not materialize.

Consideration has been given the currently discussed proposal that beneficiaries of Rural Rehabilitation activities be granted permits on the National forest and that present permits be reduced enough to make room for this new type of permit. Your committee subscribes to the idea that the National forest should not be closed or monopolized by any class of users. Provision definitely must be made for new users of the forests. We believe that permits to rural rehabilitation clients very generally should be denied but only for the reason that holders of permits for a very low number of animals, say five to 15, simply have no chance of making any net gains from the use of such permits. Further, the net income of operators who would be compelled to reduce their holdings would suffer. As we see the situation, there would be nothing gained by opening the forest to very small herds and there would be considerable of loss in the end. Attention is called to the records of the Forest Service which develop in a highly convincing manner that the smaller permits are of very short life. It is so difficult and expensive per head to look after these small herds that the National Forests simply are not a profitable kind of pasture.

Your committee has given consideration to some of the possible effects of the National program to take out of soil depleting crops
some 30,000,000 acres and to put upon this vast area grasses and legumes. Without very rigid restriction as to use we are confident that the welfare of beef, sheep and dairy products producers may easily and quickly be jeopardized. It goes without saying that such restrictions upon the use of these converted lands must be laid in connection with any formal government program so that the net gains to producers of wheat, corn, cotton, tobacco and other crops may not be more than offset by losses suffered on the part of the aforementioned livestock operators.

TENANCY CONTRACTS

In 1930 twenty-five percent of Wallowa County farms were operated by tenants. By 1935 this figure had risen to thirty-two percent. In spite of the undesirability of tenancy as a form of land tenure it seems that it grows as a section becomes older; likewise, it increases with a rise of the agricultural income.

Since we must live with tenancy, your committee feels that rental contracts should be revised to the end that the tenant and the land may be tied together more closely to the common benefit of the land owner, the tenant and the community.

The worst features of land renting, we believe, arise from short term rental contracts especially one crop or one year contracts. From the very nature of the contract the tenant is driven to crop farming at the expense of livestock husbandry; soil fertility of course cannot be maintained; the weed problem, desperate even on the owner-operated places, is worse under rentals: buildings and fences are not kept up; stability of community life suffers; all incidental to short term leases.

Your committee urges that Wallowa County agriculture cannot measure up to its opportunities with one-third of its farms occupied by more or less transient operators. We urge that the best thought of the community be brought to bear upon the need for long term rental contracts, so drawn as to protect both owner and tenant and so as to encourage sound farming practices, maintenance of places and a more nearly fixed agricultural population.

DELINQUENT TAXES

Present Law

The Act of the Second Special Session of the 1935 Legislature provides for the cancellation of all certificates of delinquency heretofore issued on delinquent taxes and provides that if a delinquent taxpayer pays the tax for the current year plus one-quarter of the tax for the oldest year unpaid and in succeeding years continues to pay the tax for the current year plus one-quarter of the oldest year unpaid he will have no interest to pay on the taxes now delinquent, either in the past or in the future. In some instances this cancels interest on the delinquent taxes not only in the past but for as long as twenty years in the future.

Abuse Developing

The Act further provides that in the event the current and delinquent taxes are not so paid a Certificate of Delinquency shall be issued and the tax shall be foreclosed five years after the new delinquency, that is, five years after the time the current tax for the year 1936 and one-quarter of the tax for the oldest year should be paid. This will permit a person owing 1931 tax or taxes for prior years than 1931 to remain in possession of the real property upon which he has paid no tax in the past and upon which he will not pay any tax in the future for five years to remain in possession of this property without at any time paying any tax thereon for a period of nine years, which is far too long a time to permit a person to hold real property without paying some tax thereon. The law formerly provided that three years after delinquency on any tax a Certificate of Delinquency should be issued and the tax
foreclosed and this was not compulsory and even under such a set-up foreclosures were not instituted in the counties when this three years had expired and the property owner was permitted to remain in possession of the property upon which the tax should have been foreclosed. The recent Act of the Legislature extends this period from three to five years and sets up a new delinquency date from which the five years commences to run.

Recommendations of Committee
The committee does not criticize that part of the Act of the Legislature which grants an extension of time on the payment of taxes during those years of economic distress from 1930 to 1934. The committee does criticize the failure of the Legislature, after cancelling all back interest on delinquent taxes as well as interest in the future on such delinquent taxes for as long a time as twenty years, to fail to provide that if the taxes are not paid at the time and in the manner as provided in the extension of time granted without interest, that the tax should be immediately foreclosed and the committee criticizes the change in the law which provides that the tax must be delinquent for five years before a foreclosure may be instituted. The result being that a taxpayer who pays no tax is thereby permitted to remain in possession of the property on which the taxes should be paid for nine or ten years without payment of taxes thereon. This collection policy can only be conducive to further tax delinquency, with the further and necessary result that the property that is paying its taxes before delinquency must carry the entire load of the tax levying bodies with a continuing increase in the tax levy that is made against such taxpaying property, penalizing the person who pays the tax to the benefit of the tax-dodger.

The law should provide and should be changed so as to provide that foreclosure shall be instituted immediately upon a tax becoming and being delinquent for a period of three years after the due date and this is particularly true where interest on back taxes is cancelled, past and future, and payment is permitted in installments with new delinquency dates.
"A"

1926—1930 AVERAGE CASH FARM INCOME—Wallowa County.
Tabulated by the Oregon State Agricultural College Extension Service.
1926—1930 Average Cash Farm Income .................................................. $3,037,000.00
Per cent from Sale of All Crop Products .................................................. 32.8
Field Crops ........................................................................................................ 30.9
Truck Crops ....................................................................................................... 1.5
Tree Fruits and Nuts ............................................................................................ 1.8
Small Fruits, Nursery, Greenhouse, etc .............................................................. 1.8
Per cent Farm Sale of All Animal Products ..................................................... 67.2
Poultry and Eggs .................................................................................................. 8.2
Dairy Products ..................................................................................................... 15.1
Livestock and Products* .................................................................................... 49.2
Other Animal Products** ................................................................................... .1
* Includes cattle and calves, sheep and lambs, hogs, wool, horses, mohair.
** Includes rabbits, fur animals, honey.

"B"

LAND OWNERSHIP—Wallowa County.
Source of data: Forest Statistics and 1935 census of Agriculture.
Percent of
Acres County Area
Total County Area* ................................................................. 2,028,160 100
Privately owned land, total .............................................................. 824,950 40.7
Land in farms ............................................................................................... 566,359 27.9
Other private owned land ........................................................................... 258,591 12.8
Public lands, total ......................................................................................... 1,203,210 59.3
State lands ................................................................................................... 29,584 1.5
County lands ............................................................................................... 14,470 .7
National forest ............................................................................................... 1,133,011 55.9
Other federal lands ....................................................................................... 26,145 1.3

* The total area for the county as determined by this survey does not always agree with hitherto accepted total area data.
Tabulated by the Oregon State Agricultural College Extension Service.

"C"

AGRICULTURAL DEVELOPMENT—Wallowa County.
Census of All land in farms Number Ave. Size Imp. Land in Farms
of Acres Percent Farms Farms Acr Acres Percent Acre
1880 1880
1890 1890
1900 192.255 9.6 803 240.7 55,131 28.5 68.7
1910 554,732 17.6 1,058 335.3 80,049 24.3 81.3
1920 524,029 25.8 1,149 451.1 141,404 27.0 125.0
1925 550,722 27.3 961 579.3 128,762 23.1 135.9
1930 569,759 28.1 952 598.5 134,261 23.6 141.0
1935 566,359 27.9 1,030 549.9 127,978 22.6 124.2

Note—Wallowa formed from part of Union in 1887. Part annexed from Union between 1890 and 1900 Total area of county for census years 1900-1910 given as 2,012,800 acres and for 1920-1935 as 2,028,160.
Source—U. S. Census of Agriculture, retabulated by O. S. C. Extension Service from "Statistics of Agricultural Development in Oregon."
### TREND IN SIZE OF FARMS—Wallowa County, Oregon

#### All Farms

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres per Farm (Total)</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>1,149</td>
<td>100</td>
<td>456.1</td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>961</td>
<td>100</td>
<td>579.3</td>
<td>77.1</td>
</tr>
<tr>
<td>1930</td>
<td>952</td>
<td>100</td>
<td>598.5</td>
<td>88.5</td>
</tr>
</tbody>
</table>

#### Under 3 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>4</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1930</td>
<td>14</td>
<td>1.5</td>
<td>.14</td>
</tr>
</tbody>
</table>

#### 3 to 9 Acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>10</td>
<td>.9</td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>23</td>
<td>2.4</td>
<td>1.8</td>
</tr>
<tr>
<td>1930</td>
<td>32</td>
<td>3.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

#### 10 to 19 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>19</td>
<td>1.7</td>
<td>13.3</td>
</tr>
<tr>
<td>1925</td>
<td>25</td>
<td>2.6</td>
<td>12.5</td>
</tr>
<tr>
<td>1930</td>
<td>27</td>
<td>2.8</td>
<td>12.6</td>
</tr>
</tbody>
</table>

#### 20 to 49 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>57</td>
<td>5</td>
<td>33.1</td>
</tr>
<tr>
<td>1925</td>
<td>50</td>
<td>5.2</td>
<td>35</td>
</tr>
<tr>
<td>1930</td>
<td>53</td>
<td>5.6</td>
<td>35.2</td>
</tr>
</tbody>
</table>

#### 50 to 99 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>62</td>
<td>5.4</td>
<td>75.3</td>
</tr>
<tr>
<td>1925</td>
<td>68</td>
<td>7.1</td>
<td>73.0</td>
</tr>
<tr>
<td>1930</td>
<td>74</td>
<td>7.8</td>
<td>76.7</td>
</tr>
</tbody>
</table>

#### 100 to 174 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>277</td>
<td>24.1</td>
<td>150.9</td>
</tr>
<tr>
<td>1925</td>
<td>214</td>
<td>22.3</td>
<td>150.1</td>
</tr>
<tr>
<td>1930</td>
<td>166</td>
<td>17.4</td>
<td>147</td>
</tr>
</tbody>
</table>

#### 175 to 259 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>113</td>
<td>9.2</td>
<td>220.7</td>
</tr>
<tr>
<td>1925</td>
<td>83</td>
<td>6.6</td>
<td>218.5</td>
</tr>
<tr>
<td>1930</td>
<td>82</td>
<td>5.6</td>
<td>217.7</td>
</tr>
</tbody>
</table>

#### 260 to 499 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>236</td>
<td>20.6</td>
<td>366.0</td>
</tr>
<tr>
<td>1925</td>
<td>235</td>
<td>24.5</td>
<td>324.3</td>
</tr>
<tr>
<td>1930</td>
<td>196</td>
<td>20.6</td>
<td>366.0</td>
</tr>
</tbody>
</table>

#### 500 to 999 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>180</td>
<td>15.7</td>
<td>674.9</td>
</tr>
<tr>
<td>1925</td>
<td>173</td>
<td>18</td>
<td>702.0</td>
</tr>
<tr>
<td>1930</td>
<td>181</td>
<td>19</td>
<td>698.1</td>
</tr>
</tbody>
</table>

#### 1000 to 4999 acres

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>86</td>
<td>7.5</td>
<td>1722.6</td>
</tr>
<tr>
<td>1925</td>
<td>84</td>
<td>8.7</td>
<td>1640.1</td>
</tr>
<tr>
<td>1930</td>
<td>119</td>
<td>12.5</td>
<td>1728.8</td>
</tr>
</tbody>
</table>

#### 5000 acres and over

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
<th>Percent of All Farms</th>
<th>Ave. Acres Harvested Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>5</td>
<td>.44</td>
<td>11978.8</td>
</tr>
<tr>
<td>1925</td>
<td>5</td>
<td>.5</td>
<td>30772.2</td>
</tr>
<tr>
<td>1930</td>
<td>8</td>
<td>.8</td>
<td>14425</td>
</tr>
</tbody>
</table>

Source of data: U. S. Census of 1920, 1925, and 1930. Tabulated by the Oregon State Agricultural College Extension Service.