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No. 8

Livestock on Farms Building Up

Number of livestock on farms in Northern Pacific country is somewhat higher than a year ago, according to estimates of the United States department of agriculture made annually as of January 1. Figures are shown for sheep, cattle, horses, hogs and chickens at the bottom of the page in six states served by the railway—Minnesota, North Dakota, Montana, Idaho, Washington and Oregon.

Sheep in these states total more than 10,000,000 head and comprise about one-fifth of all sheep in the United States. The number increased approximately a quarter of a million over the year before, with increases in each of the six states with the exception of Idaho. Cattle population in these states now is about 300,000 greater than a year ago and at 8,127,000 head

When You Move

When you move, drop a postal card to J. W. Haw, Northern Pacific Railway, St. Paul, Minn., and mention your old address and your new one. This will insure your receiving promptly further numbers of the Northwest magazine. Frequently people moving do not leave notice of forwarding addresses at their old post offices and in other cases these notices expire in a short time so that in either instance there often is much delay in sending mail to new addresses. The best way is to inform us promptly of your new location.

it is about one-eighth of all cattle in the country. Most significant increase was in Montana, from 890,000 to 1,016,000 head.

Hog numbers in the six states are relatively small, with the exception of those in Minnesota. However, in addition to a sizable increase in Minnesota the number of hogs went up slightly in Montana, Idaho and Washington.

In chickens, with approximately one-twelfth of the U. S. numbers, there was an increase in the territory of a little more than a million and a half in the year, accounted for principally by greater numbers in Minnesota. North Dakota had nearly half a million more chickens the first of this year than last but in the important poultry areas of the North Pacific states there was considerable decrease.

LIVESTOCK ON FARMS

January 1, 1938 and 1939
U.S.D.A. Source

| | SHEEP AND LAMBS | | CATTLE AND CALVES | | HOGS | | HORSES AND COLTS | | CHICKENS | |
|-----------------|-----------------|------------|-------------------|------------|------------|------------|------------------|------------|-------------|-------------|
| | 1938 | 1939 | 1938 | 1939 | 1938 | 1939 | 1938 | 1939 | 1938 | 1939 |
| Minnesota | 1,305,000 | 1,325,000 | 3,275,000 | 3,341,000 | 2,466,000 | 2,737,000 | 682,000 | 662,000 | 16,990,000 | 18,501,000 |
| North Dakota | 822,000 | 830,000 | 1,190,000 | 1,238,000 | 311,000 | 311,000 | 405,000 | 389,000 | 3,333,000 | 3,816,000 |
| Montana | 2,926,000 | 3,210,000 | 890,000 | 1,016,000 | 76,000 | 84,000 | 261,000 | 253,000 | 1,770,000 | 2,048,000 |
| Idaho | 2,203,000 | 2,089,000 | 745,000 | 745,000 | 289,000 | 292,000 | 183,000 | 181,000 | 2,279,000 | 2,397,000 |
| Washington | 670,000 | 682,000 | 771,000 | 794,000 | 216,000 | 227,000 | 157,000 | 152,000 | 6,023,000 | 5,383,000 |
| Oregon | 2,118,000 | 2,144,000 | 964,000 | 993,000 | 247,000 | 242,000 | 155,000 | 155,000 | 2,976,000 | 2,834,000 |
| Totals 6 States | 10,044,000 | 10,280,000 | 7,835,000 | 8,127,000 | 3,605,000 | 3,893,000 | 1,843,000 | 1,792,000 | 33,371,000 | 34,979,000 |
| U. S. Totals | 52,682,000 | 53,762,000 | 66,083,000 | 66,821,000 | 44,218,000 | 49,011,000 | 11,128,000 | 10,800,000 | 386,573,000 | 412,647,000 |



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NORTHERN PACIFIC RAILWAY

"First of the Northern Transcontinentals"

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This magazine is sent free for five months to those indicating an interest in the Northwest states. On expiration of that period it may be obtained on a yearly basis by sending 25 cents in stamps, coin or money order made out to J. W. Haw. If you wish to renew on a complimentary basis for five months this may be done by making a written request.

MARCH, 1939

KNOCKOUT ON LEAFY SPURGE

Leafy spurge, the weed many farmers know very well but have trouble in eradicating, has received a body blow in North Dakota. In the first place the animal husbandry section of the state college demonstrated that, contrary to a notion of long standing, leafy spurge is not poisonous to livestock. Second, the North Dakota people have shown that ewes and lambs pastured consistently on spurge like it and thrive during the grazing period and at the same

time reduce the vigor of the weed to such an extent that it kills out. Ewes on heavy leafy spurge pasture maintained about normal weight and lambs gained 28 pounds per head from early July to late September. Spurge pastured regularly for four or five seasons was almost entirely eradicated and in cultivated crops following on the same land there was only infrequent occurrence of the weed.

ORESTAN IN OREGON

Oregonians have a new kind of alfalfa. It is called Orestan and is making a good record because of its resistance to bacterial wilt, the disease that proves destructive in many alfalfa growing areas. This one was brought to the U. S by plant specialists and it came from Turkestan. Tried in Oregon plots where wilt is prevalent it maintains almost 100 per cent stand after 11 years while susceptible kinds grown next to it have given way because of the disease.

2,000 FAMILIES LOCATE

In the last four years the land department of the Portland, Ore., Chamber of Commerce has corresponded with 20,000 people about farm opportunities in the West. The department estimates in that time 2,000 families have come from outside the state and located in Oregon.

During 1938, fishways at Bonneville dam in the Columbia river were used by 858,414 fish of different kinds. Of this number 271,799 were chinook salmon.

CLOSE-UPS

Short Paragraphs About Agriculture in Northern Pacific Territory

Eleven farmers in Carbon county, Montana, had 12,700 sheep and 815 head of cattle on feed this winter.

George Marley, Yakima valley, Washington, fruit grower, produces 125,000 boxes of apples annually.

After buying 40 acres a mile north of Weippe, Idaho, Chancey Johnson moved to his new location from Wyoming.

Albert Sinner fed cattle during the fall on sugar beet tops, straw and bone-meal. The average daily gain on this ration was a pound a day per head.

Redskin is a new tomato in North Dakota. Its seed planted in the garden late in May will produce ripe fruit by the middle or latter part of August.

In addition to groups on three irrigation projects in North Dakota, 75 individual farmers last year irrigated from two to 200 acres each. Further, more than 100 garden spots were irrigated.

John Jackson, Cass county, North Dakota, sold 700 turkeys last fall and winter and all of them graded No. 1 except four birds. Top price was 25 cents a pound. Jackson says that turkeys are a sideline to his grain farming.

In the Miles City, Mont., country, John Childress is a stockman who insures his hay crop by use of flood irrigation. He sold a shipment of yearling feeder steers last fall for \$8.50 a hundred, the average weight being 730 pounds.

Forrest Markle, Sidney, eastern Montana, got 22 eggs per hen in a month from a flock of 298 White Leghorns. At Trout Creek, in the western part of the state, L. J. Weir, got an average of 24 eggs per hen from a flock of 100 layers.

Oregon and Washington English walnut growers harvested their largest crop in 1938. The merchantable pack amounted to 4,900 tons. It was also declared the best crop that has been produced in the area from the standpoint of quality.

At the purebred livestock sale in connection with the annual winter shows at Crookston, Minn., ewes sold for \$23, sows for \$43, rams for \$38, a Holstein cow for \$95 and a beef bull for \$152.50. These were the top prices. More than \$3,000 worth of livestock was sold.



Times have changed. This kind of farming 10 years ago in North Dakota would have been labeled slovenly. Now rough fallow for checking erosion and holding moisture is accepted as good culture. Plowing like this in eastern North Dakota last year upped grain yields 15 per cent over conventional tillage.



MORE NEW WHEATS

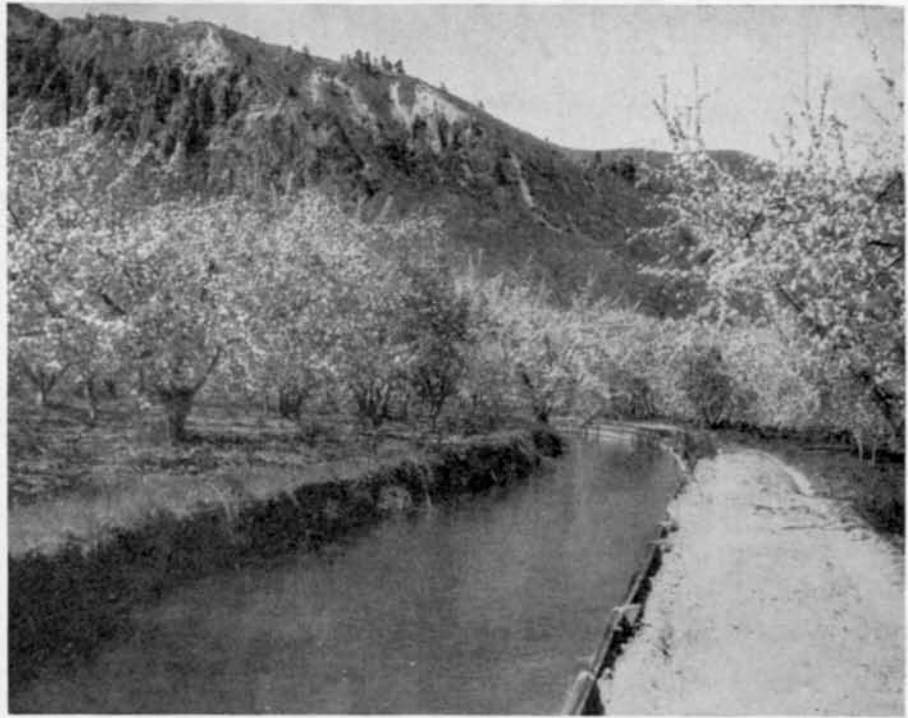
In addition to the new spring wheats announced in the January issue of the "Northwest," Pilot and Rival, four others have been named. These are Mercury, Vesta, Premier and Merit. While something like 2,000 bushels of Pilot and Rival are being distributed to selected growers under a contract by the North Dakota Experiment station for seed increase this year, very small amounts of the other four are on hand and these are being used for 1939 under complete control conditions. Mercury, Vesta and Merit are North Dakota Experiment station varieties and trace back through the Hope-Ceres-Florence combination which Dr. L. R. Waldron is using to bring out rust resisting kinds of wheat. All are high yielders under experimental conditions, but offer somewhat varying results in their reactions to rust infection and in their apparent quality for milling. Merit, like Pilot, is a U. S. bureau of plant industry variety. It is a selection from crosses of H-44 and Ceres. It is believed some of these new ones will prove to have definite location adaptations while others may prove of general application in the spring wheat area.

LIVING IS BETTER

Says Hugh B. Hammer, who lives in northwestern Washington, "I have bought a 30-acre farm partly cleared, have built two houses, barn and other buildings. So far we have been living better than we did in Nebraska. We raise most of the things we eat. Since we came here three years ago there have been several families come to the vicinity of Skagit county and they still are coming. They like the climate and living conditions. I sincerely believe you will be doing the farmers of the dust bowl area a favor by sending them your literature."

COULEE DAM GETS BIGGER

With coming of spring several hundred more men have been employed at Grand Coulee dam in the Columbia river in Washington, enlarging the force of 2,000 who have been at work there in recent months. Pouring of concrete has



Water is where you want it in the Pacific Northwest on this irrigation project, as apple blooms galore come out in the spring and the producer has made preparations for another growing season. Pacific Northwest apples in storage have lately been moving out at a notable rate and supplies have been reduced below storage amounts of a year ago this time.

been resumed and by midsummer a day's output going into the structure will approximate enough to make seven and a half miles of standard 20-foot highway pavement. The contractor expects to place this year as much concrete as there is in all of Boulder dam. More than 100 trainloads of cement will be used by July 1.

BOUGHT SON A FARM

In Whatcom county, western Washington, Robert Sorenson, Sr., has made farming pay. Starting in 1907 with a 20-acre "stump ranch" in this cutover country, he has since spent \$22,500 for land, buildings, clearing, ditches and other improvements. He has 100 acres, 90 of which are in cultivation. In 1933, he borrowed \$5,000 to pay for some of his land and a year ago made a down payment of \$1,500 on a \$9,000 farm near by for his son Robert Jr.

Diversification has been a wise practice for the senior Sorenson. He has a dairy herd, but it accounts for less than 25 per cent of his income. He grows cash crops, some sheep, hogs and a few beef cattle to sell. He also sells and

leases out horses. Soil conservation has been a lifelong practice. When Robert Jr. took over the new farm last year he grew a crop twice as large as that harvested from the land in any of the previous 10 years.

GETS TOP DAIRY RECORD

Near Walla Walla, in south central Washington, Frank Nelson has been breeding Jersey cattle since 1920 and has 72 purebred cows that averaged 45 pounds of butterfat each for the month of August, 1938, the highest record for the month in the United States for herds of more than 50 cows. In 1936 the Nelson average was 457 pounds of butterfat per cow, second highest average among herds of more than 50 cows in the country and the 1937 average of 407 pounds was another mark near the top.

All production records on the Nelson farm have been made on machine milking, twice daily, and a ration consisting of alfalfa hay, rolled wheat, barley, oats, cornmeal, linseed oilmeal, mill run, molasses, mineral, pasture, squash and, when available, wet brewer's grain.



Has North Dakota Farming a Future?

Long Grass Country, in Eastern Part of the State,
Still Offers Openings That No Other Areas Have

By FRANK W. REINOEHL

An address delivered by Mr. Reinoehl before the annual meeting of the Northwest Farm Managers' Association, February, 1939, at Fargo, N. D.

There is hope for farmers in North Dakota because the fertile soils of this state will produce wealth to support its people with a satisfactory standard of living, provided farming methods are adapted to meet the climatic hazards. It is true there has been deflation of land values in some districts and there must be adjustments in type of farming and in farming practices. According to many statements appearing during the past few years, it would appear that all the states of the Great Plains area, and especially North Dakota, have disappeared from the map of agricultural production. North Dakota has been subject to some eight years of unfavorable conditions through a combination of drouth, grasshoppers and low prices, unprecedented in the history of the state.

It is true that there has been a greatly reduced income from the farms of North Dakota during these years, but it is not true that this economic failure is due entirely to drouth. Low prices, rust and grasshoppers have contributed very much to this economic failure. Statements which are available show that during the years from 1886 to 1938, a period of 52 years, only 11 of these years can be classed as drouth years. That means that 41 of these 52 years were years of fair moisture. In this listing of the dry years, 1936-37-38 are listed as drouth years. Consider the effect of rust and grasshoppers during 1938. These factors contributed much to the crop failure in the western portions of this state. Drouth, of course, is not a controllable factor, but its effects can be minimized by proper management and tillage

Rich In Soil Wealth

Farmed under the systems of culture which it is now apparent are most suited to the area, the long grass section of North Dakota, says Frank W. Reinoehl, farm credit administration officer and previously a North Dakota farmer, is one of the richest and wealthiest agricultural regions of the world. Farming, particularly in the eastern part, in this state, is of more significance than famed gold mines, for mining some time must run out, but North Dakota soils properly treated will produce forever. The needs for both livestock and crop production are present.

practices. Analyzing these dry years, we can readily realize what is meant by a drouth year. Rust, which is controllable, contributed to the lack of crop production in North Dakota last year. In many sections, grasshoppers took what would have otherwise been a small crop. Low prices cannot be charged against the resources of the state.

Overcoming Hazards

Rust-resistant wheat has been a realization for some years. Loss from this source is inexcusable and can be corrected and is rapidly being corrected. As far as grasshoppers are concerned there is a difference of opinion as to whether this is a controllable or a preventable factor. The chances are that this hazard to North Dakota agriculture is preventable. A continuous campaign against these pests during those years when crops are good and when the weather and other elements would aid us might lead to their extermination. Now we wait until the whole Great Plains area is infested with eggs, wait to see if it is a wet or dry year, and then start a campaign of control, and often too late. But whether grasshoppers are preventable or not, selection of crops and

management practices can be adjusted to meet this menace to some extent

It is my considered judgment that we will discover the great losses which the farmers have sustained during the past years are for the most part preventable and can be greatly reduced. A short crop occasionally with a fair price will not destroy the farmers of the state, but crop failures caused by preventable hazards can and should be greatly reduced.

One of the most serious problems that presents itself in the western two-thirds of North Dakota, which may be described as the short-grass area of the state and which some people want to call the drouth area, is that too many farm families have been settled in these regions. The question is raised periodically as to whether such families should be transported to other and more desirable agricultural districts. All of such districts have had, and still have, available to them railroads, roads, schools, churches, towns, good farm homes, villages, and social and public services of various kinds. No one would like to see this portion of the state abandoned. The whole problem is how to maintain people in these regions and make them self-supporting. Reduction in population is not a serious matter. One hundred prosperous farm families are far more desirable than 200 families on relief.

Conserving Moisture

If these people remain in this territory a number of things will have to be done. The first step is to make a survey of the land and decide what should be kept under cultivation and which land should be regrassed and revert to range. The taking and keeping of the land with the poorer soils out of cultivation does not mean the abandonment of any section of this state. It does mean a reduced population.



Interspersed among the poor lands of the state may be found small areas of good heavy soil whose productive capacity is much greater than the surrounding land. Unfortunately for North Dakota, not much of this land can be irrigated as can be done in the state of Montana. With much larger farming units than formerly existed, with regrassed lands for pasture, the better soils for forage and small grain production, with small farm units joined together into larger farming units, and in some sections of the state lands administered under the Taylor Grazing act for pasture, families will be able to maintain themselves under proper living conditions by practicing a type of farming adapted to this region. However, before this can be done methods of reducing the hazards of farming on the better soils of the Great Plains area must be worked out. The remedy for lessening these hazards will be found in many directions and in no one way can this be solved.

Farmers must improve their method of tillage and cultivation whereby a far greater part of the moisture precipitation can be retained in the soil for crop production. The Soil Conservation service of the department of agriculture is demonstrating in many sections of



How Great Plains farmers alter their implements and their methods to meet conditions of climate and culture. A triple-gang with moldboards removed, a conversion which makes a fallow machine for soil and water conservation purposes. It does the job illustrated on page two.

this area the extent to which this can be done. Correct tillage at proper times will do much in reducing and controlling soil erosion by wind and water. The use of proper tillage machinery, such as the damming lister and similar types of machinery, will preserve for crop production the abundant rains which fall on the land at certain seasons of the year. Summer fallow will always be a part of the farming practices of this section, but this practice must be adapted to conserving rather than losing moisture. Strip farming is only one means of aiding in the control of soil drifting in light soils. These strips aid also in holding the snows of the winter.

This land to produce crops must be free from weeds. With a scarcity of moisture to begin with, weeds cannot be permitted to utilize any moisture; all must be con-

served for the growing of crops. Because of lack of moisture and general conditions of the soil, less frequent use of the land is required. Crops should be raised less often and the land should be returned to grass and remain there for several years. This is one of the reasons why larger farming units are required and considerable reorganization of farms and families must be made throughout these regions. Of course, the trend toward this type of farming has already brought on lower land values than the former values based on a type of agriculture unsuitable to the country.

New Ideas on Farming

During the seasons of greatest rainfall it is possible to get stands of grasses and sweet clover which will improve the soil. When once seeded down land should not be plowed up for some time, but given a good rest even though net returns in the way of forage are very small. Real progress is being made in methods of regrassing land in the short-grass regions of the Great Plains. During the past two summers I have had the opportunity of making trips across the state and across Montana from the east to the west and back again. My observations have convinced me that the regrassing of the poorer soils of our Great Plains region is a thing that can be accomplished and within a reasonable period of time.

Semiarid farming is, relatively speaking, comparatively new. Dry land farming in Montana and in the Dakotas has been a field in which unsound theories have been projected into the farming practices of this region. The dust-mulch theory is one of them. Deep plowing and subsoiling is another. Summer fallow practices must be



North Dakota farmers brushed up on latest Great Plains farming practices when four Northern Pacific cars equipped with exhibits were shown at 27 points in the state. The state college, the soil conservation service, the grasshopper control office of the U. S. department of agriculture, and machine companies were among the co-operators in presenting these exhibits.



An Ottertail county, Minnesota, farm for sale, described on page seven as M-73.7. It consists of 80 acres near New York Mills.

corrected so as to conserve rather than waste moisture.

Climate and Soil Advantage

When we are thinking about the difficulties of North Dakota we almost forget the soils of this state. While it is true that there are vast areas of low grade soils which must be taken out of cultivation, I doubt if any of you who live in this region realize the advantages of the best soils and the advantage of the climatic conditions in relation to these soils. Here we have a climate where the soil is sealed tightly during the long winter months. From early November until March the fertility of the soil is locked in the embrace of the frosts of winter. Farther south in the more open winters and especially in the regions of no winter where there are heavy rains, through leaching and erosion the loss of soil fertility is one of the greatest problems of farming. Use of fertilizers and costs of keeping up soil fertility are factors in the cost of production that make it possible for the farmers of the northern latitudes to compete with what we are inclined to consider much more favorable farming regions. Because of the very lack of heavy rainfall, which leaches the soil of its fertility, of the long winter seasons when the ground is frozen and firm, the fertility of the soils of North Dakota under proper husbandry will produce crops for many generations, whereas if this soil existed under other climatic conditions such would not be the case. In truth, the reasons for the wonderful soils of the great spring wheat areas of this country and Canada are due to climatic conditions.

Quality For Canneries

Canneries handling peas in central Washington and Oregon last year packed 2,650,000 cases, or approximately half a million more than the previous year. Seven canneries operating during 1938 in May, June, July and part of August employed 3,000 to 3,500 people. Most of the farmers who raise peas are contracting direct with the factories with a price agreed on for extra fancy, fancy and standard peas. The extra fancy comprises about four-fifths of the crop, a much higher proportion than in most pea-growing areas.

The fertile soils of this state extend to a depth unapproached by soils developed under humid conditions. A leading soil scientist makes this significant statement in speaking of such soils, "The world's experience up to the present time affords no basis for placing an estimate on the duration of the productivity of these lands." This high fertility of the good soils of the state, while being the greatest asset of the state, producing high yielding crops in years of plentiful moisture, unfortunately is also the cause of the greatest misuse of this soil. Bumper crops in good years lead to gambling on crops instead of following a safe type of farming adapted to the Great Plains area.

Place for Livestock

Too much has been said in the past about the disadvantage of raising livestock in North Dakota. So often you hear the statement made that this country cannot compete with the Argentine, other foreign countries, and other dis-

tricts of the United States in the low cost production of livestock products. I want to present another side of this picture. North Dakota can compete in the markets of the world with its livestock products. Whenever the farmers of any section of the country can sell at a profitable price, the farmers of this state can make good money at that price and more than break even. Production of livestock with proper limitations is an indispensable part of the farm economy of any grain-raising country. I have said many times in your hearing that the raising of livestock is an absolute necessity on grain farms if it is going to be possible to continue to raise grain at a profit. This does not mean that livestock should be the major project of any farm. It is but a side issue, a by-product, and if the farmer breaks even on his livestock he is still ahead. Year after year the grain is raised on the livestock farm at less cost because of increased yields. Many of the great hazards of grain farming are removed. Much of the work in the care of livestock comes at a period when there is nothing else to be accomplished. Much of the production of the farm in the way of forage crops with feeding value and other by-products of grain farming will be an entire waste unless they are utilized through the means of livestock. During the dry years when crops are scarcely worth harvesting, the short crop of grain is an entire loss unless there is livestock to consume it. I have seen thrifty farmers in the drouth areas live well and have sufficient money to carry on the farming operations entirely because they had livestock to utilize what

(Continued on page 8)



FARM AND HOME OPPORTUNITIES

You may select from this list of typical bargains or ask us for other propositions suited to your needs. Additional information, including addresses of the owners, will be furnished on request.

MINNESOTA

M-111.2—261-acre lakeshore farm, 4 miles from Detroit Lakes, in Becker county, west central Minnesota. Large barn, in first class condition, 36x80, with two silos, room for 50 head of stock, loft holds 60 tons hay, well in barn, newly painted. New chicken house for 300 hens, brooder coop, granary for 2,000 bushels grain, woodshed holds year's supply of wood, new double garage and workshop, machine shed. Dwelling, 1½ stories with porch and full basement, newly painted and shingled. Summer kitchen with porch, icehouse, new summer cottage on lake. Ample lakeshore affords good opportunity for more cabins and resort. Rural school located on farm. About 100 acres hay land, about 90 acres pasture and 70 acres plow land. An ideal dairy farm. To close estate, will sell for \$10,500 on reasonable terms.

M-69.3—158 acres with 60 acres cleared, 45 acres under plow, seeded to alfalfa and alfalfa, located on Beaver Brook, 6 miles from Littlefork, in northern Minnesota. Small shack on place and considerable marketable timber. Will be about 3 miles from town when new proposed highway is constructed. Price \$12 per acre; terms.

M-111.3—160 acres, 10¼ miles from Blackduck and 4½ miles from smaller community, in productive soil area of northern Minnesota. 40 acres in alfalfa, clover and timothy, 120 acres for pasture with second-growth poplar, birch and some balsam trees, easy to clear, no rocks, clay loam soil, partly fenced. Dandy hay land and pasture along running creek with water year around. Hayshed with hay track. Well. Located 1¼ miles from Blackduck school bus. A nice dairy farm for \$1,120. \$400 cash, balance terms.

M-73.7—80 acres, 2½ miles from New York Mills, in Ottertail county, west central Minnesota. Good house, barn, chicken house, granary, machine shed, windmill and good well. Good heavy soil. Farm all fenced and cross-fenced, about 52 acres under plow, balance meadow and pasture. Price \$3,200. About \$800 cash will handle. (See picture on page six.)

NORTH DAKOTA

N-95.9—High class stock and grain farm of 517 acres on Sheyenne river, 1½ miles north of the Armour packing plant and the Midwest stockyards, on main line of N. P. Ry. and good highway, only few miles from Fargo and agricultural college. All well-drained, deep, black loam soil, no stones or waste land, 15 acres of fine oak timber around buildings on river. An ideal

place to feed stock. Practically new six-room house, full basement; large barn with leanto; granary, garage, poultry house, best of water. Can have possession in fall with owner's share of crop if purchased at this time. Will sell very reasonably.

MONTANA

S-114—320 acres, 3 miles from Hamilton, in Bitter Root valley, western Montana. About 30 acres irrigated native hay land and considerable irrigated pasture, balance is brush and timber land. Opportunity for some further development. Ample supply of timber for fuel and posts. Seven-room house and other buildings in fair condition, on graded county road, nearly all fenced, good well. Good dairy ranch and poultry farm. Price \$2,400; terms.

S-115—Another good western Montana ranch proposition, consisting of 240 acres in all. Ranch proper includes 160 acres with more than 100 acres irrigated, free irrigation water and only one short span of ditch to keep up. Located 1¼ miles west of ranch is 80 acres of timber and pasture, with year-around stream and considerable saleable timber. Good ten-room house with water piped in, barn for 20 head of stock, other buildings, running water in all fields and pastures year around. High school bus by place, about 40 rods to grade school, daily mail service, about 4 miles from Stevensville, in Bitter Root valley. Price \$10,500. Or will sell with about 18 head dairy cattle, two teams and all farm equipment for \$12,000. Owner must sell on account of advanced age and poor health. Would consider trading for good income property in Missoula. Adapted to grains, alfalfa, hay crops and general farming.

S-61.4—157-acre dairy farm, 3 miles from good town, schools, store, church, etc., in Sanders county, western Montana. Good house, 24x26; fair barn, 14x16; chicken house, spring water. 10 springs on place, black loam soil, sub-irrigated. 10 acres cleared and cultivated, balance is second-growth timber. Practically all of place can be easily cleared and cultivated, no brush on most of it and no rocks. Creek runs through place and considerable pasture is fenced. Place can provide pasture and winter feed for 15 cows. Price only \$1,570. \$300 cash will handle. Taxes on place are about \$14 annually.

IDAHO

I-72.3—200 acres, timbered land, 3 miles from Coeur d'Alene, in Kootenai county, located on nice, level road, only ¼ mile from main highway. Owner says about three-fourths of land can

be grain farmed when cleared. None actually cleared, but many spots practically ready to plow. No buildings, but log buildings may be put up or sawmills will deliver lumber. Owner estimates that amount of cordwood timber on place should easily pay for the land. Price only \$4.50 per acre. Terms.

I-52.9—120 acres, small frame house, no other improvements. Timbered land, rolling to hilly, 50 to 60 acres can be cleared, three springs, lots of saw logs and cordwood, plenty outside range. Located 15 miles southwest of Sandpoint, 80 rods from a good county road, 2 miles from school, in Bonner county, northern Idaho. Sell for \$600. \$300 cash, balance terms.

WASHINGTON

W-231.0—SELL OR TRADE: 160 acres for stock farming, preferably dairying, located in Kittitas valley, central Washington, 5 miles from Ellensburg, ½ mile from paved Ellensburg-Spokane highway. Nice creek through place adjacent to buildings. Four-room dwelling, large barn for 15 or more cattle, and chicken house. Soil adapted to grain and hay crops, all cultivated, under High Line irrigation canal. Will sell reasonably or trade for more picturesque location in eastern Cle Elum district, close to good hunting and fishing, and not more than 100 miles from Snoqualmie Pass, Washington.

W-203.3—Fine 85-acre dairy, poultry and turkey farm, all level land with sandy loam soil, 35 acres cleared, balance in second growth and large timber. Eight-room house, has plumbing, stone foundation, rooms on first floor all plastered. Other buildings smaller and need repairing. Farm has 1,900-foot frontage on pavement between Tacoma and Olympia, in western Washington. Fine concreted well on place. Farm owned by out-of-state party who cannot give proper attention to it. To effect quick sale, has reduced price to \$2,000, with \$500 down payment and \$20 per month.

OREGON

O-103.1—40-acre western Oregon farm, 20 acres cultivated, all good land except 5 acres which is a little steep for cultivation, 7 acres timber with about 400 cords of wood. Five-room house, double constructed throughout, bath, hot and cold water, laundry trays on covered back porch. Chicken house for about 100 hens, double garage with basement, fruit for family use. Price \$2,500. Half cash, balance 3 years, 6 per cent interest.

(Continued on page 8)



HAS NORTH DAKOTA FARMING A FUTURE?

(Continued from page 4)

was almost an entire crop failure. In considering the resources of North Dakota and the future of farming in North Dakota, we should not forget the Red River valley with its great possibilities and the section of the state lying immediately west of it; in fact, all of that portion of the state which we might designate as the long-grass area of this state.

Better Than Gold

Attention of the people of this state should now be given to sound measures and the development of farming practices which will modify and nullify the hazard to which all farming is subject. In the final analysis, that is the only permanent solution. We have been practicing a type of agriculture based on an abundance of rainfall, and what must be done is to adjust our agricultural practices to the annual rainfall of the state.

Some ten years ago in this city I made the following statement. Speaking of the long-grass portion of eastern North Dakota, I said: "The long-grass region of North Dakota is destined to be one of the richest and wealthiest farming regions in the whole world. There is more wealth in this soil than in the gold mines of South Africa. Mines become exhausted but under a permanent system of agriculture this soil will produce forever. Never have I seen a statement that does justice to the wonderful possibility of agriculture in this region. Nowhere is it possible to find a soil in which a good seed bed can be prepared with so little labor and expense. The lay of the land was made for the large use of power machinery, which has a place on every farm of proper size. These advantages will make it possible to excel in the economic production of crops. No other section can compete with us in this respect. Here we have a natural small grain country in which, without liming or inoculation, alfalfa, sweet clover

and grasses grow as if native to the soil.

"Throughout this long-grass region there is everything needed for making a balanced ration for livestock which can be raised right on the farm. In the dead of winter



A sky view of a Pacific Northwest orchard in the spring, profuse with bloom and all cleaned up and cultivated for the new season. This is a commercial orchard. There are many others like it in that area.

my dairy cows do better on a ration of silage, sweet clover, alfalfa and grain mixture than on the best pastures in the fly time of July and August. All the feed needed for making a prime steer out of the little calf can be produced economically on our cheap lands. The same thing is true for hogs and sheep and there is the added advantage that this country is comparatively free from the destructive animal diseases that affect the more southern stock-raising districts and will long be immune because of the favorable climatic conditions that lend strength and vigor to livestock."

This statement may sound extravagant today in the light of the past eight years. If we of North Dakota will but take the proper action to control those things which are actually within our power to control, I still believe that my statement will stand.

PAID OFF HIS DEBT

Emil Youngquist, whose herd's top record in 1938 among all Holstein herds in the U. S. milked twice daily was announced in the February "Northwest," started dairying 20 years ago with his brother, Iver, in Skagit county,

western Washington. When these brothers started out they had the idea of producing farm crops economically and marketing them through milk cows that would make more butterfat per pound of feed than average cattle.

Cost records for 1938 on the Youngquist herd show that the gross income per cow was \$197.40. The feed, including silage, hay, roots and pasture as well as purchased rations, amounted to \$63 per cow, leaving \$134.40 for labor, overhead and investment return. In 1927 Emil Youngquist borrowed \$10,000 on a farm he had purchased a few years before for \$20,000. Eleven years later he had bought and paid for two other farms and reduced his loan to \$4,000.

FARM AND HOME OPPORTUNITIES

(Continued from page 7)

O-131.7—80 acres, 3 miles from town, in Linn county, western Oregon, 65 acres cultivated, balance open pasture. Small house, fair barn, good soil, creek. One-third of crop goes with place if taken before harvest. A bargain at \$35 per acre. Half cash will handle.

BUSINESS OPENINGS:

Beautiful inn and summer resort with about 160 acres of timbered land, on Hood canal, at foot of Olympic mountain range, in western Washington. Inn, 100x24, and kitchen, 16x28, built in 1936 after old inn burned, upstairs unfinished due to death of owner. Dining room, lobby, recreation room and nearly all bedrooms face the water with fine view of Mt. Rainier in distance. Outside cottages and cabins, salmon fishing in Hood canal. Resort has more than one mile of water front and is located on fine, scenic highway and in heart of summer tourist territory. Good possibilities for developing acreage. Will sell reasonably.

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