

will also undoubtedly require large quantities of our food-stuffs.

While it is gratifying to note that the government, by appointing two commissions, one to investigate abroad and the other to co-operate at home, is at last taking definite steps to assist in developing the export trade, yet very little of a permanent character can be accomplished in the desired direction unless the manufacturers of the country, individually and collectively, take an active interest in the movement. It is important, in the interest of the Dominion as a whole, as well as in that of their own, that aggressive steps should be taken to develop the export trade of the country to the greatest possible limit.

Prior to the outbreak of the war Canada had an enormous adverse trade balance. In 1913 it was over \$293,000,000. That was a serious thing, and was in part due to the relatively little attention which Canadian manufacturers gave to the export trade. At the close of the last fiscal year the trade balance was in our favor to the extent of over six hundred million dollars. While, with the resumption of normal import conditions, it is altogether unlikely that a favorable trade balance to this extent can be maintained, yet it must be remembered, on the other hand, that the restoration of normal ocean shipping facilities will be greatly beneficial to the export trade, and particularly when we consider the Government fleet of steamers now being constructed which will be available for the purpose.

### ALBERTA AGRICULTURE IN 1918

Grain Crops Not Good, but Stock Has Been Preserved—Mixed Farming Is Growing—Increase in Values

By Duncan Marshall.

A consideration of agricultural conditions in the Province of Alberta for the year 1918 must take account of a series of rather irregular occurrences which have been unfavorable to individual areas and which have affected total results as far as a large surplus of bread grain is concerned. Naturally the wheat supply is of the greatest possible interest and the considerable reduction of the wheat supply of the province has been made widely known. On the other hand, the wheat crop result in the province or the reduction of the wheat yield in the south is not representative of crop returns as a whole or of the province as a whole. The outstanding feature of the operations as seen at the end of the past year is the great recuperative and adjustive capacity of the industry due to the stable interest of live stock in Alberta and to the effective effort on the part of governments, railways and individuals to requisition the total unclaimed feed resources of the province to supplement the light crop secured on cultivation. The year that started bad has turned out not so bad or almost good.

#### Aim at Greater Production.

During the past three years there has been carried on by both the Federal and Provincial Governments a vigorous campaign in favor of greater production, and the years 1916 and 1917 were highly favorable years in the interest of the farmer—in 1916 chiefly on account of the very heavy yield and good prices and in 1917 on account of a satisfactory yield with still higher prices. At the beginning of 1918 farmers were in a position to make an effective effort to increase production during the year 1918. This effort related chiefly to our primal production, wheat. The part of the province which has devoted itself most exclusively to wheat growing, that is, southern Alberta, at the opening of spring had a large area ready for crop. Not only was the area greater than in any previous year on account of new breaking, but a considerable part of the old land had been carefully summer-fallowed and the appearance of the country indicated that in no previous year was the land so well worked down and prepared for production as it was last year. In addition to the prospective expansion of wheat production in the south, the central and northern sections of the province were likewise sowing a greater proportion than usual of wheat instead of oats and other feed grains.

The results, as far as making a desirable contribution to world bread stuffs is concerned, were not good. The area seeded to wheat in 1917 was 2,897,300 and in 1918 3,892,489, an increase of nearly 35 per cent. Notwithstanding this the total yield is estimated at 23,862,100 in 1918 as against 52,992,100 in 1917, approximately only 40 per cent. of the previous year.

#### Bad Weather the Cause.

The shrinkage was due to unfavorable weather conditions in the occurrence of drought in the southern part of the province and frost in the central and northern parts. The grain of southern Alberta germinated strongly and well and the crop at the time of coming through the ground looked well. There were, however, in some areas very heavy winds which dried out the ground, totally checked the growth of the crop, and in some places were so violent as to blow the seed out of the ground. Following the period of germination there was no effective moisture in the southern part of the province until about the time of the wheat harvest. The moisture did not come soon enough to redeem the wheat crop in the southern part of the province though it helped to fill some of the grain that had survived the drought on summer-fallowed land. There were some instances in which yields of from twenty-three to twenty-five bushels per acre were secured. This was limited wholly to summer-fallowed land. Stubble land was a failure as far as grain production was concerned.

#### Cutworms, Hail and Frost.

In certain limited areas as is usually the case in dry years the cutworms did some damage. This, however, was not widespread. The Innisfail district was perhaps the worst with this trouble and some fields were seeded two or three times. There was practically no injury at all from hail in the province last year.

The northern part of the province had its share of misfortune. On July 23rd frost occurred which injured or destroyed a large proportion of the wheat. The frost was the heaviest that has occurred over a period of twenty years. It occurred in the northern and central parts of the province as far south as Hobbema on the Calgary and Edmonton Railway but bending rather farther south than this, east of the Calgary and Edmonton and continuing to the eastern boundaries of the province. The frost affected the wheat crop chiefly and the oats and barley to a much less extent. The very early oats that were in head at the time that the frost occurred were hurt but the majority of the oat crop was not this far on and was not injured except for a slight checking of growth. No doubt the frost affected to some extent the yield and quality of both oats and barley and the drought was not entirely confined to southern Alberta. With an increase of four or five per cent. in area devoted to oats, which was 2,651,548 acres in 1918 as against 2,537,900 acres in 1917, and our average yield estimated at 23.75 in 1918 as against 34 in 1917, our total yield was 62,947,300 as against 86,288,600, a reduction of about 27 per cent. in our total returns in oats. Barley shows a similar decrease, being 8,641,200 last year as against 10,386,200 in 1917.

The occurrence of drought and frost explains the reduction of the grain surplus in the province. At the same time the total output seems to be rather favorable in the light of what was expected in the circumstances of the excessive drought in the southern part of the province. The holding up of returns to a fairly satisfactory basis is due to the occurrence of late rains which brought on some of the wheat which was already in head and helped to fill it. In the central and northern parts of the province likewise, as is usually the case where frost occurs, the injury was not absolute. There was a great deal of wheat that yielded no grain at all, but on the other hand there is in the country a good deal of grain of fair milling quality. In the case of oats more particularly the injury from frost did not relate to the quality of grain so much as to the quantity. The crop was set back somewhat by the frost but subsequent rain brought on a second growth. Late oats more particularly were a good crop. Subsequent to the frost in July there was no early frost to injure ripening grain.

#### Hay Crops Mostly Poor.

The other great crop of the country, that is, forage, consisting of tame hay, alfalfa, wild hay and green feed, naturally suffered through the same causes as the grain crop. Timothy was relatively a failure. Alfalfa was not as good as 1917 and necessarily the area sown to green feed would yield smaller weight and volume per acre than usual. On the other hand, the occurrence of the late rains already spoken of, while they did not redeem the grain crop, conserved a good deal of the crop for forage purposes. Thousands of acres of grain, chiefly wheat, which did not turn out as expected, took on a second growth and yielded a good deal of rough hay and also good pasture. The oat crop was a standard forage crop in Alberta and the usual area was seeded last year for fodder purposes or green feed as it is called. This was not as heavy as usual, and owing to the