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"Permanently Wasteful but Immediately Profitable": Prairie Agriculture and the Great War

It is deceptively easy to dismiss the years of the Great War as a period of prosperous expansion for Western agriculture and to enquire no further. Commenting on the high farm incomes of the early years of the war, an outraged Stephen Leacock described the Canadian farmer as a "war drone" able to use the profits of inflated grain prices for "pianos, victrolas, trotting buggies, books, moving pictures, pleasure cars and so on."[1] Leacock could no doubt have pointed to agricultural statistics as proof of the war's beneficial effects for the Prairie farmer. Wheat, the West's staple crop, was absorbed by Britain in whatever quantities it could be produced and the harvest of 1915 was the largest in the short history of the three Prairie Provinces. Acreage seeded and total amounts of wheat exported doubled between 1914 and 1919, and in 1917 its price was fixed at $2.21 a bushel, three times its pre-war level.

The Dominion census illustrates the agricultural expansion which occurred during the decade dominated by the Great War. Between 1911 and 1921 the rural population of Manitoba, Saskatchewan and Alberta increased from 858,000 to 1.25 million, keeping pace with the population increase in urban areas. The total number of farms increased by 28 percent, total farm acreage by 52.5 percent and total improved farm acreage by an astounding 95.3 percent. The high prices of wartime and of the immediate postwar years were an important cause of this expansion. Coming as it did after two years of drought and recession, it is not difficult to understand why one Manitoban referred to the war as "a God send and a Blessing to this Western Country."[2]

But the war years had deeper implications for the long-term development of western Canadian agriculture, and to appreciate these fully, it is necessary to consider briefly the nature of western agriculture before the Great War began. Unlike farming in most of central Canada and the Maritime Provinces, prairie agriculture was of the type described by agricultural economists as "monoculture of cereals" or more simply, "cash grain farming".[3] In many parts of the Prairies, farmers devoted their land almost exclusively to the cultivation of wheat. In a typical year about fifty-five percent of all land seeded to field crops was planted to wheat. Another thirty percent of acreage in Manitoba, Saskatchewan and Alberta was seeded to oats, which were grown to provide feed for the horsepower needed to produce the wheat crop. Barley, flax and hay grasses covered all but a tiny percentage of remaining field crop acreage.[4]

The market for the western wheat crop was thousands of miles to the east, in central Canada or in Britain. Wheat had become the fourth in the succession of staple products which so heavily influenced Canadian economic development. It had the disadvantages of any other staple product, in that it created an economy in western Canada that was highly specialized, unable to convert to any other form of production, and at the mercy of the vagaries of an international market. Unlike Canada's other great staples of fur, fish, and timber, wheat production depended on variable climatic conditions. For a prairie farmer, the differences between a good crop, a poor crop, or no crop at all could be determined by a few inches of rainfall.

The recession of 1913-1914 provides an example of what could happen to the Prairie wheat economy when unfavourable circumstances worked in combination. In those years, as during the depression of the 1930's, low international prices for wheat coincided with drought in southern Alberta and southwestern Saskatchewan and the farmer was caught in the jaws of a vise of reduced yields and prices lower than the cost of production. By the summer of 1914, some quarter-section farmers faced starvation. A member of the Alberta legislature reported to the Dominion Minister of Agriculture of "families existing on soup, the ingredients of which are gophers, Russian thistles, and a little salt."[5]

Obviously not every Prairie farm family faced this situation, but the two consecutive disasterous years underscored a point which provincial Ministries of Agriculture had been trying to make clear for several years, that escape from the over-reliance on staple wheat production could come only by diversification into mixed farming and livestock raising. There is considerable evidence that in 1914, the year in which the Great War began, prairie farmers were at last beginning to listen to this argument. Most apparent was the reduction in acreage sown to wheat of seven percent, over 700,000 acres, and a similar reduction in oats acreage. The acreage devoted to fodder corn, alfalfa, turnips and potatoes showed slight increases and the numbers of milch cows, beef cattle, sheep and particularly of hogs on western farms increased.[6] The Saskatchewan Department of Agriculture joyously interpreted this as the sign that "farmers now realize that it is economically essential to have something more than grain to depend upon."[7] Dean W.J. Rutherford of the Saskatchewan College of Agriculture confidently predicted that "extensive wheat farming is only a passing stage . . . wheat growing, like the bison, in the course of a few years will have to be protected and safeguarded in order to prevent its becoming extinct."[8]

The Great War quickly made a mockery of Rutherford's prediction. The demand of the Allies was primarily for wheat, since bread was felt to be "the only diet which sufficed in isolation and therefore indispensable."[9] The western farmer rushed to meet this demand. Grain farming was the path of least resistance for a prairie farmer, and an expansion of grain acreage could be accomplished more quickly and more easily than a similar expansion of livestock production. Wheat acreage in Manitoba, Saskatchewan and Alberta increased from 9.3 million acres in 1914 to 16.1 million in 1918. In 1916 wheat and oats, its

support crop, covered 90.3 percent of prairie field crop acreage. Even before the price of wheat was fixed at $2.21 in 1917, the urge to expand production was irresistible. Farmers' sons established their own farms, city dwellers moved on to the land. Almost 40,000 new farms were created in the West betweeen 1916 and 1921.[10] Agriculture students at the University of Saskatchewan laughed at "the number of former real estate men that were in attendance at the Short Course (in Agriculture)", and the editor of the University newspaper predicted correctly that "high grain prices will give a greater impulse to the back to the land movement than any propaganda could."[11] Despite the fact that immigration was ended by the war, there were 92,465 homestead entries during the war years.[12]

Farmers who were already established improved more acreage, purchased more land, or rented land from those who enlisted. The percentage of improved acreage on prairie farms increased from 40 percent in 1911 to 46.8 percent in 1916 and 51 percent in 1921.[13] The "land sales barometer" revealed an increase in sales of available railway land grants.[14] The Canadian Pacific sold almost 600,000 acres of farmland in 1918, as compared to less than 160,000 in 1915.[15] Those who could not afford to buy, or who could not find land available which was suitably located, rented from farmers who went to war. Rented land increased between 1911 and 1921 from 11.1 percent to 19.1 percent of all land farmed.[16] Most of this rented land was farmed by an "owner-tenant," who had a farm of his own in addition to the land he rented. Herbert Warren, whose farming experiences have been described in *Seventy South Alberta Years*, is typical of many farmers during the Great War. A quarter-section farmer when the war began, he purchased his second quarter after harvesting the bumper crop of 1915. In 1916 Warren planted 90 additional acres "on shares", and then purchased a third quarter-section in 1918.[17]

The expansion of 1915 to 1919 took place during a period in which the price of land increased along with the price of wheat. The same land which brought the C.P.R. an average of $13.55 per acre in 1915 was worth $21.53 in 1917.[18] In a study based on the Vulcan and Lomond districts of Alberta, southeast of Calgary, John Proskie similarly concludes that the price of land declined slightly between 1910 and 1914, and then peaked in both areas between 1915 and 1919.[19]

As with land, the cost of other factors of production increased during the Great War. The wages of agricultural labourers more than doubled between the beginning and the end of the war, and the problem of an adequate labour supply remained a difficult one for the prairie farmer.[20] In cereal monoculture more so than in other types of farming, labour needs are concentrated at certain periods, particularly in August and September during harvesting. The Prairie farmer whose operation was large enough to require hired help solved this problem by importing harvest labour from eastern Canada or by hiring a smaller farmer who needed to supplement his income, thus eliminating the need to pay a full season's wages to a man who was needed for only a few weeks of work. The wartime demand for both soldiers and factory workers gradually shut off the West's first source of cheap labour, while high wheat prices kept small farmers home to run their own farms.

During 1915 and 1916 high unemployment in western cities and the granting of sowing and harvest leave to soldiers training in the West prevented serious labour shortages, but by 1917 labour was expensive and in short supply. Monthly wages paid to male farm workers inceased by 50 percent between 1916 and 1917 and a further 35 percent the following year. There was also a deterioration in the quality of help available and farmers complained bitterly about paying "top dollar" to "a Bohonk or a teenboy (sic)."[21] It became impossible to get help for short periods, and labour costs were further increased by the necessity of keeping a hand all summer to be sure of having him available for the harvest.

The labour shortage of 1917 and 1918 did not prevent prairie farmers from increasing the total acreage of field crops during each of the war years, despite their vocal protests about the unavailability of agricultural workers. But the increased cost of farm labour raised the cost of production and eroded the benefits of increased prices. More important in the long run, the shortage of cheap labour meant that the land was less intensively cultivated and that important farm tasks were left undone.

If labour and land costs failed to absorb a farmer's profit margin, the cost of investment in machinery remained to consume it. At implement dealers, farmers were called upon to pay a price inflated both by war and by the protective tariff. As one farmer complained to C.A. Dunning in 1918, "a disc harrow that cost 110.00 last Spring is now 156.00, a plough that was 80.00 last Spring is now 148.00."[22] But despite such complaints, high prices did not deter a wave of wartime purchases. Massey-Harris, Canada's largest implement company, increased its domestic sales by 55 percent in 1915 and in 1917 sales reached record heights.[23] In November, 1917 the *Swift Current Sun* reported that "farm machinery companies in Saskatchewan are now experiencing the biggest boom for farm machinery recorded in this province for many years", and that "the increased prices for the machinery does (sic) not deter (the farmers) from buying the stock."[24] These purchases did not involve adoption of particularly significant technological advances but usually meant the replacement of old equipment with new, or the supplementing of a drag harrow with a disc. Although some innovative farmers used the war period to try new machinery, cultivators and packers do not seem to have been adopted in large numbers.[25]

Despite the labour shortage and the high cost of feed, only a few prairie farmers replaced their horses with the gasoline tractors which were available. The Canada Food Board and the Dominion Department of Agriculture tried to promote the adoption of tractor power, but power farming did not begin seriously until the mid 1920's and was not general until after the Second World War. Despite the removal of the tariff on tractors valued at less than $1,400.00 in 1918, tractors sold very slowly. In 1926, with 119,451 farms, the province of Saskatchewan had only 26,700 tractors, some of which were large outfits belonging to professional threshers and breakers.[26] The insignificant impact of the tractor on the prairie farmer during this period is demonstrated by the doubling of the number of farm horses in Manitoba, Saskatchewan and Alberta between

1911 and 1921. The ratio between acres cultivated and the number of farm horses is almost identical for both 1913 and 1919.[27]

The reluctance to abandon the horse was not because farmers lacked interest in tractors, nor was it because they did not recognize the potential applications of tractor power to grain farming. There simply were no suitable light tractors available at prices farmers were willing to pay. An abundance of competing designs, from the Bates Steel Mule to the Waterloo Boy Kerosene tractor, clamoured for the farmer's dollar, but most of them were not far past the experimental stage. Prices ranged from $800 to $1,200, for which the farmer could purchase five to seven work horses, while a tractor could do the work of only four.[28] Horses could be fed by home grown oats and did not consume gasoline, then rising rapidly in price. Farmers knew how to care for horses but little about the care and feeding of a traction engine, and hiring a man to operate a tractor, if such a man were available, made little economic sense.[29] Western farmers recognized that power farming was the way of the future but also that the future had not yet arrived. "It is all very well to experiment with gasoline tractors," wrote a Manitoba farmer in 1918, "but we know from experience what horse teams can do."[30]

Twentieth century technology did make an impact on the rural West during the Great War but it was in the form of the automobile, not of the tractor. Farmers who ignored the Fordson lined up to buy the Ford Model T, the Chevrolet 490, and the Maxwell Roadster. An open touring car cost between $500 and $700, and wartime increases could not dissuade many farmers from purchasing a machine that could so dramatically improve the quality of their lives. "The day you buy an automobile it will pick your farm right up and drop it two-thirds nearer the religious, social and market centres," was the *Farm and Ranch Review*'s opinion. The auto could be used to improve net profits and "no qualms of conscience will be felt because the horses ought to be resting in stable or pasture, instead of being out on the road."[31] A large number of western farmers agreed. The number of automobiles registered in Manitoba, Saskatchewan, and Alberta increased five-fold between 1914 and 1918. Between 1916 and 1917 alone there was an increase of 85 percent in the number of autos in the West, an increase greater than that in any other region.[32]

These automobiles, like the new land and the new equipment with which to farm, were purchased during a period of inflation at a time when the cost of the credit on which most of these purchases were made was also increasing. Most of the profits from high wartime prices were used to finance further expansion rather than to reduce the existing burden of debt.[33] Western farmers trying to establish themselves had always had difficulty obtaining bank credit. During wartime, agriculture had to compete with the financial needs of the concurrent industrial expansion and the results were higher interest rates for those farmers who could obtain money through bank loans.[34] Many could not and therefore financed auto and machinery purchases through implement dealers at still higher rates of interest. The *Farmer's Advocate* looked with alarm at the number of

men who were mortgaging small farms to gain capital for expansion and warned that chances were one in two that these farms would be sold to pay those mortgages. "There is a difference," warned the *Advocate*, "between speculation and progressiveness." Many farmers ignored such advice and the result was "a mountainous burden of debt" which had to be paid after wheat prices had returned to normal levels.[35]

I

This increased level of debt was not the only unwanted legacy of the Great War for the agriculture of the prairie West. In their scramble to take advantage of sudden high prices, farmers traded the long term productivity of their land for short term profits. No area of western Canada can count on more than 25 inches of annual rainfall; some areas must produce crops with only 15 inches. To make this possible, every drop of precious moisture must be conserved. To that end, two techniques were generally adopted, summerfallowing and fall plowing.

In Western Canadian dry farming, summerfallowing is more than simple crop rotation as employed elsewhere. Wheat and oats are exhaustive crops and land sown to them must be occasionally "rested" to prevent loss of its productive capacity. But on the prairies summerfallowing is also an important means of utilizing the limited moisture available, and of bringing weeds under control. In 1914, proper dry farming practice recommended that one-third of all improved acreage be left as summerfallow. This fallow was not planted to a restorative "trash crop" such as clover or alfalfa, but was left to weeds which were plowed down and harrowed before they could consume much moisture. This technique allowed the farmer to "store" an extra year's moisture in his summerfallow, and to use it to produce two grain crops, before again leaving the field fallow.[36]

The large increases in field crop acreage between 1915 and 1919 were accomplished in part by neglect of the proper techniques of summerfallowing. The editors of agricultural weeklies all warned that "When you get around to that field that should be summerfallowed *quit seeding*. Get out the cultivator and give it a loose top."[37] These warnings were largely ignored and hundreds of thousands of acres were seeded which should have been left fallow. Equally serious was the fact that because of the shortage of labour and the increased attention paid to grain crops, those acres that were left fallow were not tilled as thoroughly as they should have been.

The second dry farming technique abandoned by farmers in a hurry to make profits was fall plowing. By plowing under stubble in the fall, the land was better able to absorb moisture from the winter snowfall, and thus better prepared for seeding in the spring. To save time, labour costs, and exhausting work for themselves and their horses after the gruelling harvest period, farmers avoided fall plowing by sprinkling kerosene in their fields and simply burning off the stubble. This not only robbed the land of needed moisture but also destroyed necessary

organic matter and nitrogen, thus contributing to depletion of the soil and to soil drifting.

Two additional factors which militated against proper agricultural technique became more pronounced during wartime. The first was the increased amount of land farmed by tenants, who agricultural economists contend seldom have sufficient interest in their land to employ tillage methods which are most productive in the long term.[38] The second was the increase in average farm size, from 289.4 acres in 1911 to 335.4 in 1921. Half section farms became the norm and three-quarter section farms were no longer unusual.[39] The large farm complicated many of the problems caused by monoculture of wheat. As the *Farmer's Advocate* complained, larger farms did not necessarily mean better farms because

> they require too much hired labour, too large a proportion of the farm sown to grain crops, and what is perhaps of most importance, they put farm homes to far apart . . . By this system of large farms we have developed weeds to the extent that they are a very important factor . . . We have cultivated our land in such a manner that soil drifting has become a very serious problem.[40]

But the trend toward larger and larger holdings could not be held back by editorials.

Nor could the warnings of farm weeklies and provincial Departments of Agriculture forced farmers to give up techniques like stubble-burning, which were "immediately profitable but permanently wasteful."[41] Farmers were urged to "play safe", and to "increase our production not by more farming but by better farming", but these admonitions were largely unheeded.[42] One reason for this was that the warnings of the provinces were undermined by the bulletins and advertisements of the Dominion Department of Agriculture, which encouraged the prairie farmer to follow the lead of his own cupidity, suggesting that "every effort should be made to produce wheat" and officially discouraging beef cattle production and the raising of breeding stock.[43] The Department's "production and thrift" campaign of 1916 actually suggested planting fallow and stubble burning as methods of rapidly increasing production to meet the wartime emergency. This brought an angry rejoinder from W.R. Motherwell, Minister of Agriculture of Saskatchewan, who described the suggestions as "little short of madness." Motherwell was forced to admit sadly that because the advice came from "so eminent a source," thousands of Western farmers were accepting it.[44]

For whatever reasons, Western farmers neglected proper agricultural techniques during the Great War — and quickly paid the price. Failure to summerfallow and insufficient tillage contributed to an outbreak of stemrust which damaged western crops in 1916, the first such outbreak since 1904. Starting in 1916, there began a steady reduction in yields per acre for wheat, oats, and barley. After a spectacular crop in 1915, yields dropped until 1919 when the yield was 9.7 bushels per acre, the lowest in Western Canada's history and 5.7 bushels per acre less that of 1914. This downward movement of yields reduced the profit

that the western farmer would have been able to get from high prices. The huge crop of 1915, when the average wheat yield was 29.3 bushels per acre, was sold at prices averaging 80 cents a bushel. In 1917 and 1918 when prices had been fixed at $2.21 a bushel, average yields were less than half those of 1915. Thus the huge 1915 crop was worth only $325 million, while the much smaller crop of 1917 was worth $405.7 million.[45] Dry weather in 1918 made the results of the neglect of proper dry-farming techniques more serious than they might have been otherwise, but as Seager Wheeler warned western farmers at the conclusion of the war, low yields were caused not simply by weather, but by "the abuse and ill treatment of the soil by the many slack methods in force today."[46]

II

The wartime situation induced prairie farmers to expand at high cost and made them poorer grain farmers. But it also retarded the diversification into stock raising that had seemed well underway in 1914. Although hog and cattle prices increased as rapidly as the price of wheat, western farmers were no more attracted to animal husbandry than they had been in the years before the recession of 1913-14. It took three years to raise cattle to market weight using the techniques general in 1914, while an increase in grain production could show a profit in three months. Livestock raising required special skills, and large amounts of labour. As the Western Canada Livestock Union pointed out, it was possible to make use of inexperienced help in harvesting grain, "but when it comes to the breeding and feeding of livestock, some experience is necessary," and little such labour was available at any price.[47] Not only was labour more expensive, but the price of barley and other feed grains doubled between 1914 and 1917. These high prices did not match the increase in the price of wheat, however, and farmers concentrated on wheat rather than feed grains. A shortage of feed caused stock to be sold prematurely and deterred other farmers from attempting to raise hogs or cattle. Some farmers sold grain they should have retained for feed, hoping to keep stock alive on pasturage in November and April. Only in 1916 did this work, as the West enjoyed a mild winter. In the other war years stock had to be slaughtered — often necessary breeding stock.[48]

Another impediment to diversification away from grain farming was the situation with regard to farm credit. Credit for stock raising was more difficult to obtain than credit for expansion of grain production. Stock raising meant that fences and sheds had to be constructed, feed grown or purchased, and feeder and breeding stock obtained; this large initial outlay would not show returns for a year in the case of hogs, three years in the case of cattle. The Dominion Government made two half-hearted attempts to make credit more easily available to farmers by amending the Bank Act in 1915 and again in 1916 to permit loans against stored unsold grain and against stock already on the farm. Neither change meant much to the prairie farmer's ability to venture into stock raising, and both were described by the agricultural press as "just so much more armchair bunk."[49] Even if local bank managers were prepared to back attempts to

change from grain to livestock, they found themselves "fettered by head office red tape" and by a wartime policy even more negative to long-term loans than that of peacetime.[50] The *Farmer's Advocate* felt that the greatest single contribution the government could make toward prairie diversification into stock would be the creation of a system of "rural credit banks, government or co-operative," but the Dominion Government was unwilling to undertake such an experiment.[51]

Those farmers who surmounted credit difficulties and labour and feed shortages to raise hogs or cattle found that poorly developed marketing facilities made it difficult or impossible for them to sell their stock at a profit. In a report presented in 1916, a Saskatchewan Livestock Commission denounced the "absurdly illogical system" by which the Western stock raiser was "compelled to lose the just reward of his labour," and nothing which happened later in the war years improved that system.[52] Western Canada was without extensive cold storage facilities which would have permitted the shipment of refrigerated carcasses. The West's livestock producers had to pay high transportation charges to ship live animals to Calgary, Winnipeg, or the United States. The railway rates, already regarded as high by producers, were supplemented by a "car cleaning charge" imposed on all stock shipments. Producers were paid for their stock according to its "off car" weight, before the animals had been fed or watered after days in boxcars.[53]

For all these reasons the prairie farmer remained a "wheat miner," and was more committed to growing grain for export in 1919 than he had been in 1914. As early as January 1915 the *Farm and Ranch Review* expressed shock at "the disregard with which many men are letting go of their breeding hogs and cattle" and at the decline in an already weak western dairy industry.[54] Farmers sold beef cattle for veal to invest in new land. The *Farmer's Advocate*'s correspondents reported that on farms throughout the West "the livestock have gone and all is staked on a couple of crops of wheat."[55] Even the Western Section of the Canadian Bankers' Association, despite the reluctance of the banks to lend money to support stock raising, moved to protest the casual sale of valuable breeding stock which it felt had "assumed serious proportions."[56] The total number of dairy cattle, beef cattle, sheep and hogs on prairie farms increased between 1914 and 1919, but the rate of increase did not match that of field crop acreage. Between the census years of 1916 and 1921, the average value of livestock on a prairie farm declined from $1,864 to $1,602, although the average value of land, buildings and machinery all increased over this period.[57]

An important part of the livestock industry in Western Canada was horse breeding, since large numbers of horses were required to provide power for wheat growing. At the outset of the war, Western breeders had expected that they would be able to share in the bonanza of military purchasing, since horsepower was the basic means of transportation employed by the C.E.F. and the other Allied armies. As with military purchasing in general, however, attempts to procure horses in western Canada did more to create political problems for the government than to stimulate the horse breeding industry.

Horse purchasing for the Canadian and British governments was handled by the Dominion Remount Commission, chaired by Sir Adam Beck, and western operations were directed by Lt. Col. A.D. McRae of Winnipeg and George Hoadley, a Conservative Member of the Alberta legislature. Both with its general policy and its purchasing practices, the Remount Commission antagonized horse breeders of western Canada. McRae and his assistants arranged purchasing dates in the winter of 1914-15 but sometimes failed to honour them.[58] When buyers did appear prices paid for horses were low and only a small number of horses were actually purchased.[59] Western breeders felt they were being discriminated against, and bitterly contrasted their situation with that of "Canadian producers and manufacturers of goods of practically every other kind (who) are benefiting largely from the high prices due to the war."[60]

One of the problems was the type of horse western breeders produced, a large draft animal of more than 2,000 pounds best suited for farm work. The Army wanted "gunners" medium-sized horses of 1,200 - 1,500 pounds, and thus the buyers of the Remount Commission seemed fussy and arbitrary in their choices.[61] But western complaints were directed at general purchasing policy, not just at the behaviour of buyers. To eliminate competition for horses and thus depress prices, the Remount Commission refused to allow horse buyers representing other Allied governments into Canada, and placed an embargo on shipment of Canadian horses to the United States for sale. This made western breeders "very sore indeed" and they petitioned Ottawa for a change.[62]

The controls placed on horse purchasing were seen as yet another example of the disregard of western interests by the Dominion Government, and the *Swift Current Sun* estimated that the "Beck Monopoly" had cost breeders from Saskatchewan and Alberta $3 million during the first half of 1915. What made breeders angrier was the revelation of misappropriation of funds to make purchases of "twenty and thirty year old broken down stuff" in more favoured Nova Scotia.[63] In January 1916, when most horse purchasing had been completed, the Remount Commission at last granted permission to French and Russian buyers to enter Canada.

III

The inability of western horse breeders to exploit the wartime situation is representative of the difficulties faced by western agriculture in general. The war's high prices brought temporary prosperity to Prairie agriculture, but the scramble for short-term profits led to increased levels of debt, costly damage to the land, and continued over-dependence on wheat to the detriment of a more balanced agricultural development. Western agriculture became concentrated even more heavily on the production of one staple crop for export to an unstable world market. In 1919 Western farmers were further from self-sufficiency than they had been in 1914. The three Prairie Provinces grew enough wheat to feed the British Isles, but they did not grow enough potatoes or produce enough mutton to feed their own populations.

Westerners blamed their problems on the development policies of the Dominion Government, dominated by the malevolent greed of central Canada's "big interests", and to an extent their accusations were justified. The Dominion Department of Agriculture sometimes encouraged the prairie farmer in his reckless course toward self-destruction between 1915 and 1919, and the transportation and tariff policies of the Dominion Government were not altered in any meaningful way to ease his spiraling costs of production. As farmers bitterly observed, they were the only producers to have the price of their product fixed in a period of rampant inflation. A comparison of the "Farmer's Platforms" endorsed by the Grain Growers and the United Farmers of Alberta reveals the same complaints about the tariff, credit difficulties, and transportation problems in 1916, 1919, and 1921.[64] As John W. Dafoe noted in October, 1916, "at present they are obscured by the war, but they will re-emerge when peace returns."[65]

Dafoe was of course correct, as the election of farmer's governments in Manitoba and Alberta and the dramatic success of the Progressives later demonstrated. The illusory prosperity of wartime was an important factor in creating this post-war political reaction.

NOTES

[1]Stephen Leacock, "Our Organization for War", in J.O. Miller, ed. *The New Era in Canada* (Toronto, 1917), p. 413.

[2]The phrase is from a letter written by a Winnipegger to a friend in the Army. Public Archives of Canada (P.A.C.), Woodside Papers (MG 30I, 11), Fred Boyd to Woodside, July 22, 1916, vol. 10.

[3]Margaret Capstick, *The Economics of Agriculture* (London, 1970), p. 15; S.C. Hudson et. al., *Types of Farming in Canada* (Ottawa, 1949), p. 43.

[4]My calculations are based on figures from the *Canada Year Book*, 1910-1921.

[5]P.A.C., Sir Robert L. Borden Papers (MG26H), George Hoadley to Martin Burrell, August 13, 1914, p. 103957.

[6]My calculations are based on figures from the *Canada Year Book,* 1913-1914. For a more complete compilation of these figures, see John Herd Thompson, "The Harvests of War: The Prairie West 1914-1918" (unpublished PhD thesis, Queen's University, 1975), Appendix A.

[7]Saskatchewan Department of Agriculture, *Acreage and Yields of Grain Crops, 1913*, Bulletin 38, 1914, p. 11.

[8]University of Saskatchewan Archives (U.S.A.), College of Agriculture Collection, Dean W.J. Rutherford, "Articles and Addresses", 1914.

[9]Mitchell Sharp, "Allied Wheat Buying in Relationship to Canadian Marketing Policy, 1914-18", *Canadian Journal of Economics and Political Science*, vol. 6, August 1940, p. 372.

[10]*Census of Canada*, 1921, vol. IV, pp. 4-5.

[11]U.S.A., *The Sheaf,* vol. 3, no. 4, February 1915.

[12]*Canada Year Book*, 1920, p. 657.

[13]*Census of Canada*, 1921, vol. IV, p. 4.

[14]This phrase is the title of an article about Western land sales in the *Journal of the Canadian Banker's Association*, vol. XXV no. 2, January 1918, p. 91.

[15]Glenbow Foundation Archives (Glenbow), C.P.R. Collection, Land Sales, Box 40 f.465.

[16]R.W. Murchie, *Agricultural Progress on the Prairie Frontier* (Toronto, 1936), p. 103.

[17]S.E. Warren, *Seventy South Alberta Years* (Devon, 1960), p. 125.

[18]These calculations are based on Glenbow, C.P.R. Collection, Land Sales, Box 40 f.465.

[19]John Proskie, "Financial Progress of Settlers with Special Reference to the Vulcan-Lomond Area" (unpublished M.A. thesis, University of Alberta, 1937), p. 138.

[20]Information on wages paid to agricultural workers is from the *Canada Year Book* 1914-1921. A complete table can be found in Thompson, *op. cit.*, p. 378.

[21]Queen's University Archives (Q.U.A.), T.A. Crerar Papers, J.M. Carson to Crerar, March 3, 1918.

[22]Q.U.A., C.A. Dunning Papers, John Wick to C.A. Dunning, February 28, 1918, pp. 42118-9.

[23]See Merrill Denison, *Harvest Triumphant: The Story of Massey-Harris* (Toronto, 1948), pp. 214-21.

[24]*Swift Current Sun*, November 23, 1917.

[25]In his book *Profitable Grain Growing*, published by the *Grain Grower's Guide* in 1919, Seager Wheeler lamented the unwillingness of Prairie farmers to purchase and use packers and predicted that "the day of the cultivator is coming." Wheeler, *op.cit.*, pp. 177-190.

[26]Saskatchewan, *Royal Commission on Agriculture and Rural Life* (Regina, 1955), vol. II, *Mechanization and Farm Costs* pp. 1, 16-17.

[27]Because the tractor received so much attention from agricultural periodicals during this period, there is a natural tendency for historians to over emphasize its importance, as Dr. Grant MacEwan does in *Power for Prairie Plows* (Saskatoon, 1971), pp. 71-83. The best way to measure the actual effect on the use of horse power is to compare the acreage of field crops with the number of horses. Such a comparison gives a figure of 13.73 acres/horse in 1913 and 13.74 acres/horse in 1919! See Thompson, *op.cit.*, pp. 121-123.

[28]This information was gathered from tractor advertisements in the *Farm and Ranch Review*, the *Farmer's Advocate*, and the *Swift Current Sun*. Specific articles which are useful are *Farm and Ranch Review*, "The Place of the Small Tractor", September 6, 1915 and *Swift Current Sun*, "The Place of the Horse", May 26, 1915.

[29]For complaints about the difficulty of operating tractors and the expense of hiring operators see *Calgary Herald*, "Tractor Instruction", January 24, 1918; and U.S.A., Walter Murray Papers, Murray to A.K. MacLean, April 24, 1918, A-42. Even the inventive genius of Henry Ford was unable to devise a light tractor capable of replacing the horse during the Great War. His Fordson tractor, which was made available at cost in limited numbers by the Dominion Government in 1918, proved to be as limited in effectiveness as other models. See R.M. Wik, *Henry Ford and Grass-Roots America* (Ann Arbor, 1972), chapter 5, *passim*.

[30]J. McKirdy to editor, *Swift Current Sun*, February 26, 1918.

[31]*Farm and Ranch Review*, "The Day You Buy an Auto", September 20, 1915.

[32]*Canada Year Book*, 1921, p. 552.

[33]*Farmer's Advocate*, April 12, 1916.

[34]*Journal of the Canadian Banker's Association,* vol. XXIV no. 2, January 1917, p. 162.

[35]*Farmer's Advocate*, June 14, 1916. See also John Proskie, "Financial Progress . . ." pp. 95-6; and F.W. Anderson, "Some Political Aspects of the Grain Growers' Movement 1915-35" (unpublished M.A. thesis, University of Saskatchewan, 1949), pp. 19-21.

[36]For descriptions of summerfallowing as practiced during this period, see Saskat-

chewan, *Royal Commission on Agriculture and Rural Life*, vol. II, pp. 35-7; T.J. Harrison, "The Science of Crop Rotation", *Farmer's Advocate*, March 15, 1916; and John Bracken, "Crop Rotation and Fertilizers", *ibid.*, August 1, 1917. Districts with an annual rainfall less than 16 inches like south western Saskatchewan and parts of southern Alberta, require a summerfallow of fifty percent of field crop acreage.

[37]*Farmer's Advocate*, May 10, 1916.

[38]Murchie, *Agricultural Progress . . .*, pp. 92-9.

[39]*Census of Canada*, 1921, vol. IV, pp. 4-5. A "section" is 640 acres and the basic homestead unit defined by the Dominion Lands Act (1872) is the quarter section, 160 acres.

[40]*Farmer's Advocate*, "The Smaller Farm", May 31, 1916.

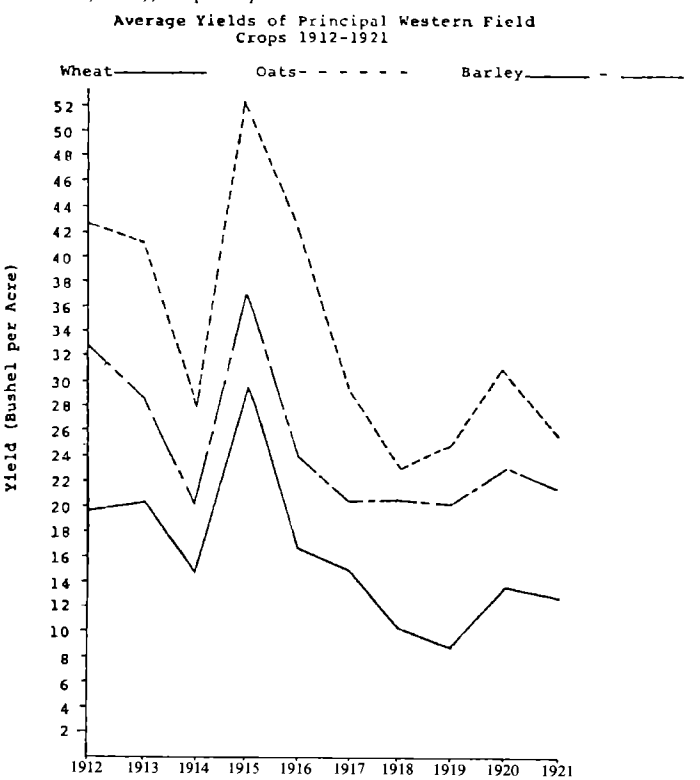
[41]John Bracken, *Tillage of Stubble Land*, (Regina, 1917), pp. 7-8.

[42]U.S.A., College of Agriculture Collection, Dean W.J. Rutherford, "Articles and Addresses", 1916.

[43]Q.U.A., Dunning Papers, "Farm Production War Policy", February 26, 1918, pp. 42070-5. In 1915 and 1916 the Dominion Department of Agriculture published *Agriculture War Books*, which contained advice of mixed quality. Sir Thomas White was the worst offender, and his speeches — reprinted in these books — urged that "every man with a plot of land should plant it", since wheat exports would ease potential balance of payments problems.

[44]*Farmer's Advocate*, May 10, 1916. See also A.R. Turner, "W.R. Motherwell and Agricultural Development in Saskatchewan, 1905-1918" (unpublished M.A. thesis, University of Saskatchewan, 1958), chapter 7 *passim*.

[45]



Source: Statistics of yields and acreage are taken from the *Canada Yearbook*.

My calculations are based upon statistics reported in the *Canada Year Book*. At the prices which prevailed in 1917, the crop of 1915 would have been worth $695 million. Market fluctuations would not have reduced this amount since the price of wheat was fixed before the 1917 crop was harvested. Had this not been done, market factors would have carried the price even higher.

[46]Seager Wheeler, *Profitable Grain Growing* (Winnipeg, 1919), p. 102.

[47]*Manitoba Free Press*, November 21, 1917.

[48]*Farmer's Advocate*, March 22, 1916 and December 26, 1917.

[49]Saskatchewan, *Report of the Live Stock Commission* (Regina, 1917), p. 47; and *Farm and Ranch Review*, October 5, 1915.

[50]*Journal of the Canadian Banker's Association*, vol. XXIV no. 1, October 1916, p. 62; *Live Stock Commission*, pp. 44-7; and *Farmer's Advocate*, March 15, 1916.

[51]*Farmer's Advocate*, April 5, 1916. During 1918 and 1919 Manitoba, Saskatchewan and Alberta attempted to solve this credit problem with provincial legislation, but with little success.

[52]*Ibid.*, March 22, 1916.

[53]Saskatchewan, *Live Stock Commission, passim.*

[54]*Farm and Ranch Review*, January 20, 1915.

[55]*Farmer's Advocate*, "The Ways of Men", June 14, 1916.

[56]*Journal of the Canadian Banker's Association,* vol. XXIV no. 2. January, 1917, p. 183.

[57]Murchie, *Agricultural Progress . . .*, p. 94.

[58]Glenbow, United Farmers of Alberta Collection, Executive Minutes, February 24-4, 1915; and *Swift Current Sun,* "Remount Officer Did Not Appear", January 8, 1915.

[59]P.A.C., Borden Papers, R.B. Bennett to Borden, February 23, 1915, pp. 104992-4; and Robert Rogers to Borden, January 13, 1915, pp. 1042930.

[60]Alberta Horse Breeders Association to Borden, published in the *Farm and Ranch Review*, February 11, 1915.

[61]P.A.C., Borden Paper, Martin Burrell to Borden, August 24, 1917, pp. 125069-72.

[62]Canada, House of Commons, *Debates*, 1915, Vol. III, pp. 2095-2102; P.A.C., Borden Papers, J.D. Wylie to Borden, June 12, 1915. p. 105033; and C. Sifton Papers (MG 27II, 045), Duncan Marshall to Sifton, February 24, 1915, p. 160352.

[63]*Swift Current Sun*, August 20, 1915.

[64]These platforms are reprinted as an appendix to W.L. Morton's *The Progressive Party in Canada* (Toronto, 1950), pp. 297-305. See also Paul F. Sharp, *The Agrarian Revolt in Western Canada* (St. Paul, 1948), p. 116.

[65]P.A.C., John W. Dafoe Papers, (MG30D, 17) Dafoe to G.M. Wrong, October 16, 1916.