

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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### Winnipeg Exhibition Dates.

It has been decided to hold the Winnipeg Industrial Exhibition this year a week later than last, and July 29, 30, 31 and August 1 and 2 are the dates fixed upon. It was thought that a little more time might be required by the live-stock exhibitors this year in order to get their stock into proper fix, owing to the scarcity of good fodder in many districts.

In view of the probable establishment of one or two large Territorial fairs this year, at Calgary or Regina, or both, to come into the circuit with Winnipeg and Brandon, it is desirable that dates be so arranged that the live-stock exhibitors can attend any or all of them. Once an exhibitor has his stock fitted and on the road, the little extra trouble and expense of attending two or three fairs is easily made up, if there are liberal prize lists and an assurance of a good attendance of the class of people with whom he may do business.

The live-stock breeders of this Province desire to secure a larger share of the trade of the Territories, and while it is perfectly true that the Winnipeg Industrial receives a very large patronage from all parts of the Territories, still there is no doubt but that a good exhibit of Manitoba's best stock at the principal fairs in the Territories would greatly assist in diverting more of this trade, especially in bulls of the beef breeds, from the Provinces east of Lake Superior to Manitoba, and the nearer the exhibitions can come to harvest time the more assured their success, as they then come in between haying and harvest.

### The Northwest Entomological Society.

The second annual meeting of this Society has been convened for Wednesday, the 16th January, 1901, at 8 p. m., at the town schoolhouse, Lacombe, Alberta, (1) to review the past work of the Society, (2) to devise means for extension of the work, and (3) to elect officers for 1901.

The President will give an interesting address to the farmers on the injurious and beneficial insects of 1900. PERCY B. GREGSON, Secretary.

### Lessons of the Past Year.

[A paper read at Institute meetings by S. A. Bedford, Superintendent Experimental Farm, Brandon.]

The past season has been a very unsatisfactory one from an agricultural point of view; but even our misfortunes may prove useful if we take the lessons to heart and profit by them in future years.

**Drought and Drifting Soil.**—Our first trouble was from drifting soil. The snowfall being light, the soil was not packed and the surface was ready to move off with the first strong wind, carrying the seed grain with it. This same loose, dry soil also prevented a uniform germination of seed, and a portion of the crop grew at once and shelled early, while the balance did not germinate until after the June rains and matured very late. We learned from actual experience that injury from both drifting soil and poor germination can be greatly lessened by deep sowing, but the only perfect remedy is obtained by filling the soil with vegetable fiber. Newly-broken grass-sod answers the purpose admirably—either Brome, Western rye or timothy will do for the purpose, but the first named has given the best sod on the Experimental Farm.

**Preparation of Soil.**—We also found that the amount of moisture in the soil was influenced largely by the system of cultivation practiced. Land that had been continually cropped for a number of years in succession gave a very poor return, averaging about six bushels of wheat per acre, while summer-fallow plowed in June and surface-cultivated for the rest of the summer yielded from twenty to twenty-five bushels per acre of excellent grain. One of the best fields of wheat was plowed in the fall of 1898 and cultivated on the surface during the summer of 1899. The soil of this field was packed very solidly and the crop received no check whatever from the drought of early summer.

**Stooking.**—Although the rainfall up to the end of June was unusually light, it was more than made up by the heavy rains later in the season. Cutting had only fairly started when a downpour occurred which scarcely let up for more than a few days at a time until the fields insufficiently drained or where the surface ditches had been filled in were soon flooded and badly-stooked grain became so thoroughly saturated as not to dry out again for weeks. It was noticed that although long, open stooks dried out quickly, they were more liable to blow down. While large round stooks stood up well, they were slow to dry out and were generally badly sprouted. The best were composed of from eight to ten sheaves grouped about midway between a round and a long stook.

**Stacking.**—On a few farms the grain was stacked directly after the first light showers, and as these sheaves were only wet on the outside, they received no injury from stacking in that condition, and some of our best wheat is from these stacks; but when the remaining sheaves, which had become wet to the heart, were stacked before becoming thoroughly dry, they heated badly and the grain was completely spoiled. The same grain would have given a sound sample if allowed to dry out before stacking.

**Summer-fallow.**—Owing to the catchy season, the necessity of keeping well forward with this important branch of farm work was emphasized. Where the work was backward, weeds and volunteer grain were so stimulated by the abundant rainfall that they soon obtained full possession, and many fields of fallow have gone into the winter covered with a rank growth. This will make them difficult to seed without a spring plowing, thus greatly retarding spring work.

**Mixed Farming as a Safeguard Against Failure.**—The small average returns from exclusive grain-growing this year should still further direct attention to the advantage of diversified farming. From all accounts, the only class of farmers in the Province with a balance to the good are those who have stock or dairy products to dispose of.

**Pasture.**—During spring and early summer natural pasture was very short and the yield of milk small; beef cattle also made slow progress. From this it is evident that uncultivated pasture cannot be depended on for many years: the grass plants are quickly destroyed by close feeding and tramping, and their place taken by useless weeds. If this land was broken up and seeded with grass it would support four or five times as many cattle per acre. We find it impossible to obtain a good catch of grass on the native sod without breaking and backsetting it as we would for a grain crop. Even a thorough cutting up with a disk harrow does not destroy the perennial weeds and they soon choke out the grass. Brome grass is decidedly the best pasture grass for Western Manitoba, and if generally used would enable our stockmen to largely increase their herds and flocks.

**Annual Fodder Plants.**—Owing to the poor yield of hay in some of the marshes and loss from flooding in others, the supply of good hay is exceedingly small, and many farmers have found it necessary to sell their stock on this account. Had they sown some supplementary fodder plants, such as corn or millets, they could have provided ample food for their stock even during a season of drought. Fodder corn is one of the most useful annual fodders. Only early-ripening varieties, however, should be used, and the field selected should slope to the south or south-east. The variety of millet known as Hungarian grass is one of the best for this Province. As it is important that germination should be rapid, it

should only be sown on newly-plowed land or on moist summer-fallow. It will then get well started before the weeds get possession of the soil, and the return will be from two to four tons per acre. To make the most of the fodder on hand, it should be run through a cutting box.

In conclusion, I would warn the farmers against burning any straw this fall, as it will all be required to winter over the stock now in the Province.

With the oats so light, and in many instances badly saved, they are pretty sure to prove deficient in germinating power and should be tested before sowing. If a small sample is sent to the Central Experimental Farm at Ottawa, they will be carefully tested. There is no charge for this work and the postage is free to the Central Experimental Farm.

### Manitoba Crop Report.

Estimated wheat yield of 8.9 bushels per acre:

District.	WHEAT.		
	Area harvested, Acres.	Average yield, Bushels.	Total yield, Bushels.
N. W.	163,250	11.1	1,811,650
S. W.	407,120	7.9	3,216,348
N. Central	293,980	11.	3,233,780
S. Central	337,126	7.6	2,562,157
Eastern	143,940	10.7	1,540,158
Province	1,457,386	8.9	13,025,252

District.	OATS.		
	Area harvested, Acres.	Average yield, Bushels.	Total yield, Bushels.
N. W.	102,300	22.3	2,281,290
S. W.	110,948	15.9	1,764,073
N. Central	63,200	21.1	1,333,120
S. Central	90,010	20.1	1,809,201
Eastern	62,650	22.5	1,409,625
Province	429,108	20.5	8,814,312

District.	OTHER GRAINS.		
	Area in crop, Acres.	Yield per acre, Bushels.	Total yield, Bushels.
Barley	155,111	18.9	2,939,477
Flax	20,437	8.04	164,313
Rye	2,180	10.1	22,022
Peas	750	11.6	8,700

The total grain crop of the Province is 21,788,144 bushels, against 56,000,000 bushels in 1899, the average yields of that year being: Wheat, 17.13; oats, 38.80; barley, 20.4; and flax, 14.

The estimated returns of potatoes and roots also show a falling off in acreage and yield from the previous year. The potato crop this year is put at an average of 132 bushels, with a total of 2,058,210, against 3,226,385 in 1899. Roots, total, 1,452,780, against 2,670,108 in 1899.

The poultry statistics do not show any very marked increase over the previous year:

	Turkeys.	Geese.	Chickens.
1899	65,845	25,155	246,205
1900	61,762	29,165	270,905

It is estimated that \$1,351,000 have been invested in new farm buildings, about equally divided among the five crop districts.

Nearly a million acres of fall plowing is reported, and half a million of summer-fallow, with 153,000 acres of breaking, making in all about 67,000 acres more land ready for seed next spring than there was last. After summarizing the peculiarly unfavorable conditions during both growing season and harvesting, the average of nearly 9 bushels per acre is considered remarkably good, and it is pointed out that, notwithstanding all the drawbacks, it is to be noted that in all districts of the Province, fields that were well prepared, summer-fallowed in 1899, and having a solid seed-bed, yielded much more than the average yield of 8.9 bushels per acre. The Dauphin district shows a yield of from 15 to 20 bushels per acre, and individual yields in many parts of the Province are reported as high as 25 and even as high as 40 bushels to the acre.

The quality of all grains is reported poor, and no estimate is made of the amount of wheat available for export. The hay and fodder crop is also reported poor in yield and quality. In many districts straw will have to be the main feed, and as that is of extremely poor quality, stock can not be expected to winter very well, unless given extra care.

The live-stock report shows up well: 16,500 beef cattle exported, 25,000 stockers shipped West to the ranges, and 3,000 to the United States. It is certainly a more healthy sign that the stocker trade has been diverted from the States to our own Territories, where there is ample room for all the stockers this Province can produce. The swine industry is thus summarized: During the winter of 1899-1900 at least 10,000 hogs were imported from Western Ontario by Winnipeg packers, but during the summer of 1900 more Manitoba hogs were supplied to the packers than during any single season in the past. The receipts for the month of November past were in marked contrast with those of November, 1899. It is estimated that the farmers of Manitoba supplied for all purposes during the year at least 25,000 hogs. Winnipeg, for packers' use and fresh-meat trade, can readily take at least 100,000 hogs each year, and if to this is added the ever-increasing requirements of the British Columbia fresh-meat trade, the number will be much increased. If the packers in Winnipeg could secure a sufficient number of hogs to run their houses to their full capacity, so as to supply the British Columbia market with cured meats, it would be a question of a short time only until the number of