

Notes from Ottawa.

(Special correspondence.)

A visit to the Central Experimental Farm finds the crops in excellent condition. The outlook is for a bountiful harvest, especially in oats, wheat and barley. Peas have not at present the encouraging appearance of the other grain crops, and the corn crop is the most backward of all. During the past week corn has made rapid advancement, and if the weather continues favorable there will be a fairly good crop.

Prof. Wm. Saunders, Director of the Dominion Experimental Farms, is on a tour of inspection of the farms, Maritime and Western, and will not be back before the latter part of September.

Dr. Fletcher, Entomologist, returned from the Northwest, where he spent the past six months on a mission to educate the farmers on preventive methods in dealing with insect pests. He states that the crops are promising well, and that an abundant yield of wheat is expected. Another important work of the officials at this time of the year is the reception of visitors and excursionists. On the 18th inst. the pupils of the McDonald Manual Training School, Ottawa, accompanied by Prof. Robertson, visited the Farm. They were addressed by Prof. Shutt and Prof. Macoun.

At the Poultry Department, in all about three hundred chickens were hatched this season, but during the cold and wet weather a great many died. Many of the survivors will be sold off for breeding purposes to farmers this fall. The earliest hatching was on the 27th of March, and the lot came through fairly well. Mr. Gilbert says that it is just as bad to hatch too early as too late, and he considers that the middle of May is the best time. The young chickens are being fed on stale bread and milk with corn meal. After a week they receive the ordinary rations of corn meal, shorts, ground barley and ground oats.

FOREST TREE CULTURE.

The beautiful trees that surround the farm are an attractive feature, and they are now at their best. The forest belts extend along the northern and western boundaries of the farm. The belt on the western boundary is 185 feet wide, and that on the northern boundary 65 feet, their total length being 1½ miles. The number of trees growing in these belts, including those in an evergreen clump, is about 23,300. The forest belts were planted for several objects, one of the principal being to gain information regarding the growth of the best timber trees on different kinds of soil, and at different distances apart. The distances chosen at first were five by five feet and ten by ten feet apart. Another object was to ascertain how the growth of trees planted in blocks of single species compared with that of trees grown in mixed plantations. The planting was also done to learn what influence the forest belts would have on the crops in the adjoining fields as regards the shelter afforded by them. The planting was also done with a view to improvement of the landscape, and the various species were arranged so that good effect would be produced. In addition to all this, it was intended that as much other data as possible should be gathered, and that the forest belts would prove object lessons to those who were interested in tree growth. It is now thirteen years since the first trees were planted in the belts referred to, and the growth already made is a useful object lesson and should encourage the more extensive planting of timber trees. The soil in which the trees were planted was in many instances poor, and while a number of species appear to succeed almost as well on poor as on good land, yet some kinds require good soil in order to grow successfully. As to the distance apart at which it is desirable that trees should be planted, those which were put five by five feet apart are making, in most cases, the best trees for timber purposes, as the lower limbs are dying, leaving the trunks clean, which will make the body of the trees freer from knots than those planted ten by ten feet apart, as at those distances there are as yet few instances where the lower limbs have died. The trees planted five by five feet apart are also a little taller, as a rule, than where wider planting was adopted, but the diameter of the trunk is not so great. The closely-planted trees are more protected from storms and there are fewer broken tops and crooked stems. The desirability of close planting was also very apparent until quite recently in the condition of the surface of the ground where trees were planted ten feet apart, which, in a number of cases, still required cultivation, as it was necessary, in order to keep the sod from forming and checking the growth of the trees, to cultivate the soil; whereas, in most instances where the trees are planted five by five feet apart the surface soil was kept shaded and moist and sod did not form. As the conditions of soil are different in the belts where the trees are planted in clumps of a single species and where the several kinds are mixed together, a fair comparison of these two methods of planting cannot be made, but the advantages derived from mixing the leafy sorts of trees with those which are not very leafy are already apparent. Where thin-foliage trees had been planted five by five feet apart and had had eight years' growth, the sod formed very readily unless the soil was kept cultivated, thus showing that sufficient shade was not afforded to prevent the growth of grass and weeds. In 1899 some plantations were commenced with trees and shrubs set 2½ feet apart each way in order to

get the ground shaded soon. Most of these have made good growth and the experiment promises to be very interesting, as different kinds of trees and shrubs were used for undergrowth. These plantations were cultivated this year and in 1900.

BLACK KNOT.

Mr. Alex. McNeill, Dominion Fruit Inspector, states that a few years ago the black knot was very bad in Western Ontario, especially in the County of Essex. Inspectors were appointed with power to compel fruit-growers to treat all trees affected with the disease as recommended by the Department of Agriculture, and Mr. McNeill states that at the present time the disease has been practically eliminated and public sentiment created to such an extent that all fruit-growers in that district are guarding carefully against its reappearance. In the section surrounding London, Ont., he reports that the black knot is very bad, largely as a result of carelessness, and further states that when he visited Nova Scotia last winter he found the disease thriving in its worst stages. "Even in the college orchard at Wolfville," says Mr. McNeill, "I found the trees literally covered with black knot." Mr. McNeill states emphatically that farmers and fruit-growers should use every means available to wipe out the two great diseases that are hindering the fruit industry, namely, apple scab and black knot.

Exhibition Dates.

CANADA.

Winnipeg, Man.	July 21 to July 25
Brandon, Man.	July 29 to Aug. 1
Ottawa	Aug. 22 to " 30
Kingston	" 25 to " 29
Morrisburg	" 27 to " 29
Sherbrooke, Que.	" 30 to Sept. 6
St. John, N. B.	" 30 to " 6
Toronto	Sept. 1 to " 13
Peterboro	" 9 to " 11
Halifax, N. S.	" 12 to " 20
London	" 16 and " 17
Wellesley	" 16 and " 17
Napanee	" 16 and " 17
Metcalfe	" 16 to " 18
Guelph	" 16 to " 18
Owen Sound	" 16 to " 18
Hamilton	" 17 and " 18
Stayner	" 18 to " 20
Orillia	" 22 to " 24
Richmond	" 23 and " 24
Drumbo	" 23 and " 24
Cayuga	" 23 and " 24
Paisley	" 23 to " 25
Prescott	" 23 to " 25
Aylmer	" 23 to " 25
Newmarket	" 23 to " 25
Collingwood	" 23 to " 25
Charlottetown, P. E. I.	" 24 and " 25
Merrickville	" 24 to " 26
Strathroy	" 25 and " 26
Paris	" 25 and " 26
Milverton	" 25 and " 26
Woodstock	" 25 to " 27
Lindsay	" 30 to Oct. 1
Tilsonburg	" 30 to " 3
Royal Agr. & Ind. New West-	" 30 to " 3
minster, B. C.	Oct. 2 and " 4
Beaumont	" 3 and " 8
Otterville	" 7 and " 8
Rockton	" 7 and " 8
Blyth	" 7 and " 8
Beaverton	" 7 to " 10
Victoria, B. C. (Provincial)	" 9 and " 10
Caledonia	" 14 to " 16
Simcoe	" 15 and " 16
Woodbridge	" 8 to Dec. 12
Ontario Winter Fair, Guelph	Dec. 8 to Dec. 12

UNITED STATES.

Missouri-Sedalia, Mo.	Aug. 18 to Aug. 23
Iowa-Des Moines	" 22 to " 30
N. Y. State Fair-Syracuse	" 25 to " 30
Ohio-Columbus	Sept. 1 to Sept. 5
Minnesota-Hamline	" 8 to " 12
South Dakota-Yankton	" 8 to " 13
Wisconsin-Milwaukee	" 15 to " 19
Indiana-Indianapolis	" 22 to " 26
Michigan State-Pontiac	" 29 to Oct. 4
Illinois State-Springfield	" 29 to " 4
St. Louis Fair, St. Louis, Mo.	Oct. 6 to " 11
Kansas City	" 20 to " 25
International-Chicago	Dec. 1 to Dec. 6

Farm Laborers Scarce.

Rain in unlimited quantities has fallen here during the past six weeks, bringing farm work to a complete standstill and doing serious damage to crops on low-lying or poorly drained lands. On no less than 26 days in June we were favored with rains, either warm or cold or both, and in one storm alone over 18,000 tons of water fell per acre. The result was that when the clouds cleared away the early part of July we found ourselves confronted with one of the heaviest crops of hay on record, a large acreage of corn and beans, which in most cases had been untouched by either hoe or cultivator; within a week of wheat harvest, and that crop ripening rapidly, and a help almost unobtainable, except at such extravagant prices as \$1.75 and \$2.00 per day. Rather than pay the high wages asked, a great number are buying more and improved machinery of every kind: two-horse cultivators, six-foot mowers, tedders, hay-loaders, etc., and should the weather continue favorable they will rapidly catch up with their work.

Beans have, apparently, suffered most from the heavy rains. Poor reports of this crop are heard from every direction. Corn is badly injured also in some places, but in our immediate vicinity is looking grandly. Wheat will give a good average yield. Barley and oats are very heavy, and pasture is excellent. The prospects for a heavy crop of all sorts of fruit are very bright, so much so that our canning factories are preparing to can varieties of fruit never before attempted by them, going particularly strong into the canning of peaches.

Kent Co., Ont.

W. A. McGEACHY.

The Macdonald Educational Movement.

At Truro, N. S., Prof. Jas. W. Robertson, the Dominion Agricultural Commissioner, attended the closing of the Normal School, and witnessed the presentation of diplomas to nine teachers, who had attended a special class for educating instructors in manual training, and passed the necessary examinations. Six ladies were also granted diplomas for proficiency in household science. The movement for manual training is making great progress in Nova Scotia, and at least eight new places in the Province will adopt it as part of their course when the schools reopen in September. The teachers employed will be those who have been trained as instructors. The Provincial Government has provided for a grant of \$600 to any School Board that will give a full course in manual training or household science to not less than 100 pupils, or a grant of \$300 where the number is not less than 50. At a meeting of the Educational Institute of New Brunswick, at Fredericton, Prof. Robertson delivered an address upon the plan for the improvement of rural schools. In this Province also the manual training movement is going ahead, and the Government has arranged to present a bonus of \$50 to any teacher who gives instruction on the subject in his school. The New Brunswick Government has also offered to pay half the cost of carrying children to a centralized or consolidated school. At Quebec, Prof. Robertson had a conference with Mr. Parmelee, Secretary of the Council of Public Instruction, regarding the choice of places for the establishment of consolidated schools under the Macdonald rural school fund. Prof. Robertson will visit each of the three Provinces at a later date and inspect particular localities, accompanied by the Superintendent of Education.

Western Fair Prospects.

The enquiries that are pouring in for prize lists and space at the Western Fair, to be held in London, Ont., Sept. 12th to 20th, give promise that this year's show will be a record-breaker in several respects. An American manufacturer has just pre-empted space in the machinery hall for a magnificent display of implements. This year a new departure will be made that will be welcomed by all lovers of good horses, and will greatly enhance the educational value of the fair. Separate judging rings with seating accommodations are being prepared outside the speeding ring altogether, in which all the draft and other horse classes of that sort will be judged. Heretofore the general public had no opportunity whatever to view the work of the judges in these most important classes, which, to horsemen, young and old, are of the very greatest concern. The Western Fair directorate is to be congratulated upon this move, which we trust stockmen will take full advantage of at the approaching show. As in the past, the Western Fair officials will do all in their power to facilitate the work of press representatives in seeing and reviewing the various exhibits. A big and successful show at London is assured.

Crop and Live-stock Conditions in Nova Scotia.

In this district grain, fruit and roots all look very well just now. Turnips, at first, failed to take. In live stock much improvement has taken place of late years, but there is still great need for a change. Good breeding stock is largely imported from Ontario. The stock-raising industry may be said to occupy second place in importance in this country, fruit-raising coming first, and dairying, market gardening and poultry-raising following in the order named. The Government are, we think, doing much to help the farmer, but an improvement in our cold-storage facilities would be appreciated. More information, however, might be disseminated about the Province in places where immigration could be encouraged.

Halifax, N. S.

J. NAYLOR.

Damage to Fall Wheat.

As we go to press reports reach us from several Ontario quarters that not only is winter wheat in the shock sprouting, through excessive wet and warm weather, but even the standing grain has begun to suffer similarly. Mr. Richard Gibson, the well-known farmer and breeder, advised us that after several careful examinations, he had come to the conclusion that in a field of his winter wheat that would averaged over forty bushels per acre he probably would not have a bushel of salable grain.

British Columbia Show.

The Royal Agricultural and Industrial Society of B. C. hold a Provincial exhibition at New Westminster, from Sept. 30th to Oct. 3rd, inclusive. Prospects are for a larger and better exhibition than in any previous year. The British Columbia Agricultural and Industrial Association hold a Provincial exhibition at Victoria, Oct. 7th to 10th, inclusive. This also promises to be better and larger than last year, particularly in industrial and mining features, in addition to those strictly agricultural.

Early Wheat Cutting.

Probably the earliest cut fall wheat in Ontario this season was about July 10th, at Harrow, Essex County.