

seeding. Dr. C. A. Zavitz and Professor A. Leitch of the Ontario Agriculture College, thought, from observation, that the thick-sown would out-yield in weight per acre the hill-planted, which it did. W. J. W. Lennox and E. D. Eddy, of the Dominion Seed Branch both pronounced the field the evenest crop they had seen this year, and both thought that the thick-sown would out-yield the hill-planted. We invited these men to see the field and to give their unbiased judgment on it.

We noticed, this year, that the thick-sown had a tendency to throw out more nubbins and small cobs than was the case in 1915. These, when husked, appeared to be in about the same stage as corn husked from the hill-planted stalks. No doubt the difference in season was responsible for this.

We wish again to emphasize the fact that this thick-sown corn was matured. We would not for one moment advise anyone to sow corn thickly and ensile in an immature condition. We would also emphasize good seed and clean cultivation. We would not care to risk very much thick-sown corn on light, poor land, because there is no doubt but that hill-planting is the best method on poor, and dirty soil. With regard to weeds, however, we have found that drill-sowing permits of cleaning the land almost if not quite as well as hill-planting. The corn is planted so thickly that it does not matter if an occasional stalk is cut out by the cultivator. This permits of setting the cultivator

close to the row. Once the thick-sown corn gets a start, weeds have no chance in the rows and the cultivator, used frequently, easily handles them between the rows. If corn is sown thickly, give as many days as possible to mature and cultivate every five or six days during the growing season.

Underdrainage should be mentioned here. The field upon which this crop was grown was fairly thoroughly under-drained last year. Had it not been for the drains there would have been no crop. A small, shallow hollow near the centre of the field was believed to have been drained; if so, the old drain was not working, and in this small patch, only a few square rods in extent, no corn grew, so that we have pretty good proof that three things: under-drainage, good seed, and cultivation made the crop. We should say here that the crop was grown from specially-selected seed.

We are not sure that fifty pounds per acre is the best thickness for seeding. We believe that it is thick enough and would not advise increasing it. It may be that thirty pounds per acre in rows will give a bigger yield; this should be tried. We are reasonably certain that, by shortening the distance the rows were apart in the hill-planted corn, and by increasing the number of stalks per hill, we got a heavier yield this year. It would also be a good experiment to try out the hill-planted with different numbers of stalks per hill. One thing we do know, that in a fair test com-

prising several acres of a large field, the thick-sown corn at the rate of fifty pounds per acre in rows three feet apart out-yielded the hill-planted, in rows three feet apart and forty-two inches apart in the row, with an average of 5.72 stalks per hill.

The experiment has been tried in two extreme years—wet and dry. The thick-sown proved the heavier crop in both. It was not so much heavier than the hill-planted in the dry year, but it still out-yielded the hill-planted sufficiently to be worth while, provided the analysis shows it to be of equal feeding value. Samples have already been sent to Professor Harcourt, of the Ontario Agricultural College for analysis; results of which will be published when complete. In sowing corn according to the thick-sown method, do not forget these points: Buy good seed; sow as early as possible, in a thoroughly prepared seed-bed; sow on good soil; cultivate frequently and well; leave until well matured before harvesting. These conditions, complied with, should ensure at least a slightly heavier crop than hill-planted corn. If all goes well the experiment will be carried on again next year, and possibly elaborated upon to take in other different rates of seeding. From the sixteen acres of corn in the field in which this experiment was carried out and from six acres later planted, and which we estimated at eight tons per acre, our two silos are full of good feed for this winter. Thick-sown or hill-planted, corn requires cultivation.

Canada's Young Farmers and Future Leaders.

What Young Men's Organizations are Doing.

The young men in different parts of the Province are organizing into what is known as Junior Farmers' Improvement Associations. To be eligible for membership a young man must attend the short courses conducted by the District Representatives. These classes are attracting many of the best and brightest men of the farms, and are giving them a knowledge of the why and wherefore of the work in which they are engaged. Consequently, the members of this new association may well be considered a little above the average in knowledge of their occupation and in ability to manage their business. These young men can be a potent factor in arousing the tillers of the soil to united effort to promote the interests of agriculture. With a total membership of over two thousand, and the number increasing each year, this organization is becoming an influencing factor for better farming in Ontario. Members conduct experiments with various crops and with different systems of cultivation, in order to determine the best for their particular district. Cost of feeding hogs and raising baby beef is kept track of, and some are finding that they can raise better stock at a greater profit than can their fathers. This is as it should be. Every generation should be better than the previous one, and the present age is one of golden opportunities. Some associations hold monthly meetings the year around to discuss matters of interest, and to keep in touch with each other. While the summer meetings are mainly to transact business, literary and social entertainment is worked into the winter meetings. They are proving to be the training schools for platform speakers and debaters. The agricultural interests need men to champion their cause, and, if we are not mistaken, future leaders of Ontario farmers are now receiving their training for leadership in Junior Farmers' Organizations.

There are many lines of work, requiring united effort, which these young men may follow. The mention of what several associations are doing may give ideas to others. Some are aiming at establishing breeding centers in order to aid in improving the quality of live stock in their community. Others are planning to build up pure-bred herds; the members starting with one breed with the object of, in time, making their district noted for a certain breed. One or two associations have done a little buying and selling for the members with satisfactory results. Several have secured representation on the local fair boards, and the new blood is a factor in improving the fair. New classes have been added to prize lists; stock judging competitions have been arranged for on fair day, and money has been set aside for special exhibits put up by junior farmers. These things show that the young men are alive; that they have ideas and are capable of working them out to the benefit of the whole community.

During the winter of 1915 twenty-four young men attended the Short Course held in Aylmer, conducted by the District Representative for Elgin County. At the close of the course a Junior Farmers' Association was formed, and plans laid for carrying on a definite line of work. Competitions were entered, and valuable information gleaned relative to feeding stock, methods of cultivation, and varieties of grain. Considerable seed corn is grown in the district, and the boys decided to hold a Corn Show in January

of 1916. They believed by so doing they would learn considerable about the crop, and also might interest growers in producing and curing high-quality corn. Through the Show the type and quality of corn would be brought to the attention of purchasers of seed corn, and would tend to advertise the district. Grain, seeds, poultry and ladies' work were also included with the corn in the prize list, so that at the fair there was something to interest everyone.

The Association elected its officers and appointed committees to look after the different departments of the fair. Preparation was commenced early in the season; many of the members making a special effort to grow products that would compare favorably in competition with that grown by old hands. They had something to work for during the entire season.

It was necessary to arrange for a building for the show, to collect money for prizes, to prepare a prize list, and to secure judges. Committees were appointed to look after each item, and, in working up the fair, the boys were brought in touch with business men, township councils, etc. Sometimes they encountered difficulties, but, nothing daunted, they worked to make their first big venture a success, and in so doing derived an education and an insight into business they could get in no other way.

The council of the town of Aylmer was approached for assistance, and the town hall was secured in which to hold the fair. Light and heat were provided. Thus, one obstacle was satisfactorily overcome. Securing money for prizes did not prove quite so easy, but representatives of the class met the County Council and Township Councils and explained the object they had in view, and pointed out the benefit it would be to that end of the county. Their efforts were rewarded by \$300 being secured from the Councils. The local Farmers' Institute and many private individuals assisted, consequently, enough money was secured to award liberal prizes for the various classes. Different firms were solicited for advertising, and sufficient was secured to practically pay for printing a twenty-four-page prize list. When the copy was finally prepared, the printing was let by tender.

In order to acquaint growers with the standards of varieties of corn, as selected by the Executive of the Ontario Corn Growers' Association, appointed to standardize the varieties suitable for silage and seed-growing districts of Ontario, the names of varieties selected and Standards decided on were printed in the fore-part of the prize list. The Dent varieties are, Wisconsin No. 7, Bailey, White Cap Yellow Dent, Golden Glow, Flints are, Longfellow, Salzer's North Dakota, and Compton's Early. The standard gave the exhibitors an idea of the size and kind of ears to show. A note was also enclosed giving full directions for preparing the exhibits and shipping them to Aylmer. The prize list contained classes for the different varieties of corn, grain and seeds, and for the various breeds of poultry. It was a two-days' fair, and was a decided success. The judges, supplied by the Department of Agriculture, gave reasons for their placings, and addressed a meeting held in connection with the fair. In this way exhibitors and visitors secured information about the various crops and how to prepare them for showing. It was pointed out where entries were deficient, and many exhibitors will be in a position to show their products to better advantage this year.

The fair proved a good thing for the district. Not only did the young men gain valuable information, relative to managing a fair, but visitors learned what really choice seed corn should be like. Many had been growing seed corn for years and had the impression that it was pretty good corn. However, their eyes were opened when they saw the selection of other growers, and heard the judge comment on the good and bad points of the various entries. The

same was true with the grain, seeds and potatoes shown.

The members of Aylmer Junior Farmers' Association proved that they were capable of doing things, and of doing them well. During the year some have gone West, one or two to Guelph College, and one member is fighting for his country. Those at home have conducted experiments and have endeavored to improve on old methods of farming during the past year. They are contemplating holding a fair again this coming winter. Many of these young men are recognized leaders in their community, and are receiving an education and executive and business training that should make big men of them. Young men all over the Province are demonstrating their ability to hold the reins when their time comes to guide the affairs of the country. Managing the affairs of such things as a local winter fair is the training ground for larger things.

What this Association has done may suggest a definite line of work for other associations to engage in. While considerable attention is given to live stock and judging competitions at fall fairs, grain and seeds receive very little consideration. Even at the large fairs entries are small and too frequently they are placed where they cannot easily be seen. Without grain, and the various legumes and grasses, live stock could not exist. These crops are very important, and every farmer should aim at securing clean seed of the varieties best suited to his soil. Many noxious weeds are introduced to the farm through the seeds sown. It is important that one be able to identify the different weed seeds commonly found in a sample of clover or grass seed. A day or two could be profitably spent this coming winter in becoming familiar with the weed seeds, and in studying the strong and weak points of the varieties of grain. All cannot go to an Agricultural College to study these things, but the information can be secured right in the community. If a meeting is arranged, experts can be secured to discuss the weed and seed grain problem. This is a line of work Junior Farmer Associations might profitably take up this winter. In only a few districts can a Corn Show be held, but in practically every district a good showing of grain and seeds could be made. Prizes need not be large, and by having a number of samples of the different varieties the public are given an opportunity to see the kind and quality of products which are grown in the community. The judge who makes the awards could give reasons for his placings and show wherein various entries were deficient. There may be weed seeds in the grain with which the owner is not familiar. These could be pointed out, and, no doubt, greater care would then be taken in preparing the seed for the following spring. In one community recently visited, wild oats and sow thistle were unknown weeds; the farmers not being familiar with either the plant or the seed, and yet within one-and-a-half or two miles from these farms samples of both weeds could be found. It is advisable to make a study of the noxious weeds in the country, so that if a plant should appear in a crop its character would be known and it could be destroyed before it seeds. If the first weed seen on many farms had been destroyed considerable work would have been saved. There are new weeds making their appearance all the time. Some are annuals and do not give much trouble, but others are perennials and once they become established are difficult to eradicate. One or two days each winter, could profitably be spent in studying the nature of the various weeds and in learning to identify both the plants and the seed. Junior Farmer Associations would be doing good work in arranging for such instruction being given in their communities. This is but a suggestion, and there are numerous other lines of work which the associations might engage in this coming winter.

Average weight per acre

9.58 tons

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1.24 tons

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