

chief insect carriers of disease dwell on were the common house-fly and one class of mosquitoes.

The house-fly carries disease chiefly on its feet, which have numerous little hair-like structures on them to which infected matter clings, and is deposited wherever the fly alights. For instance, if the excrement from typhoid patients is exposed in any way to these flies they will feed upon it, and then entering our homes and getting on the table will deposit the germs on whatever food they have access to there; consequently, it is no wonder that the members of the family eating this food get the disease. Hence the importance of screen doors and wire netting on windows to keep out the flies, and also of exposing no infectious matter where they can have access to it.

To combat flies, however, the best way is to strike at their source. They breed in horse manure alone, and if this is not exposed to them they cannot reproduce. It is in war that flies do the chief harm. The presence of numerous horses affords the desirable opportunities for reproducing themselves; the food of the soldiers is exposed to their attacks, it being often said by soldiers in such wars as the Boer and Spanish-American, that the food was almost black with flies; hence, typhoid having once broken out, these flies would readily spread the contagion. In the war between the United States and Spain, 5,000 Americans died of fever, while only 200 were killed by bullets. In the Boer war the proportion of deaths from disease to those from bullets was about the same. In neither of these wars were proper precautions taken against flies carrying germs. In the Japanese-Russian war, on the contrary, the Japs took every precaution against flies and other insects, and out of their enormous force of nearly 1,000,000 soldiers, less than 200 men died of typhoid.

Mosquitoes have been responsible for the spread of yellow fever and of malaria; not that these insects originate the disease themselves, but by biting some infected person they absorb the poison in their body, and when they attack another person this poison is inserted, and so spreads the disease. Very interesting examples were given by Dr. Skinner and Dr. Fletcher of the wonderful way in which yellow fever had been wiped out in Havana and New Orleans, simply by taking precautions against mosquitoes. The coast of Sierra Leone, in Africa, once known as the White Man's Grave, is now, through the destruction of the mosquito, a health resort. In Italy the railroad company formerly paid \$1,000,000 for quinine to be used by their workmen in the Campagna to ward off malaria, but now that it has been found that mosquitoes are the real carriers of this disease, it only costs the company a few hundred dollars for printed instructions to the men how to guard against mosquitoes, and for gloves and veils and netting to be used on the shelter-houses, where they wait for the trains to take them to their homes in the evenings. Mosquitoes breed in stagnant water wherever it is found, even in cans or other vessels, hence the best remedy is to drain swamps and pools, and leave no stagnant water around our buildings; and in case of an outbreak of disease, keep all insects from the sick person, or any contagious substance connected with him. Dr. Skinner also mentioned the terrible disease in Africa, called the "Sleeping Sickness," was due to insects, as was also elephantiasis in the islands of the far East.

ANIMAL INSTINCT.

The last address of the evening session was given by Mr. Nash on "Instinct vs. Education." The speaker claimed that such a thing as conscious parental instruction or education of young animals was unknown. It was instead an inherited instinct that taught the young themselves how to do the right thing to secure protection and food. A good example of this instinct was seen in bird migration, especially in the case of such birds as the humming bird, where, instead of going in flocks, each bird, even the young, goes by itself.

Friday, July 5th, was spent by the members of the society and the nature study teachers at Puslinch Lake, where collections of plants and insects were made, and afterwards discussed in common.

ESSEX AGRICULTURAL HIGH-SCHOOL CLASS.

The idea of an agricultural class in connection with the Essex High School has been especially well received by the farmers of the county. The County Council, which is composed chiefly of representatives from the rural districts, came forward and assisted the Board of Education with a very liberal grant of \$500. This will be used towards providing the initial equipment, laboratories, experimental plots, etc. Not only are farmers taking up the idea, but the citizens of the town and the Board of Education are giving it their very enthusiastic support, and the outlook for the success of the work in this county is indeed very encouraging. This class is to be in charge of A. McKenney, who is now busily engaged in making the preliminary arrangements.

GERMAN GOVERNMENT FARM IN KENTUCKY.

It is announced that the German Government have acquired a large stock farm in Kentucky, and that the Berlin authorities will at once ship German stallions to America, to be bred to Kentucky mares for the production of cavalry horses for the German army. Several thousand young horses have, it is said, been purchased, which German army officers will immediately begin to train at the large training quarters to be established in connection with the breeding farm, and at the end of three years the officers will begin to train the products of the stud.

THE AGRICULTURAL COURSE AT PERTH.

In the town of Perth, Lanark Co., Ont., the agricultural high-school course, with its many associated features, is steadily growing in public favor as the idea becomes more thoroughly understood. Perth is an agricultural town, and, lying in the center of a rich farming district, its people are heartily in sympathy with any movement which makes for the betterment of rural conditions. By means of the local newspapers, by personal interviews, and in public meetings, the people of the adjacent townships have during the past month been rapidly acquainted with the objects of the course and its advantages. In a district so characteristically Scotch, it is not to be expected that the innovation will receive enthusiastic endorsement until its practicability is demonstrated, but everywhere there is indicated a willingness to co-operate with the Government and with the instructor, Mr. R. S. Hamer, to insure its ultimate success. The County Inspector is actively co-operating in the matter of giving publicity to the course throughout the county, and arrangements are being made with the Agricultural Society to give it prominence, both by free advertising in the prize-list and dodgers, and by allowing space for an attractive exhibit. The school board are determined to give the scheme adequate financial support, and having commenced alterations in one of the class-rooms to afford temporary accommodation, are prepared to make a liberal appropriation for equipment, and have acquired land for experimental purposes. A town office, excellently situated for the purpose, is in view, and will probably be opened in September.

EXECUTIVE MEETING OF CANADIAN SEED-GROWERS' ASSOCIATION.

A special meeting of the Executive Council of the Canadian Seed-growers' Association was held on July 5th, 1907, at Macdonald College, Ste. Anne de Bellevue, Que., for the purpose of transacting the business of the annual meeting for the association year, ending June 30th, 1907.

Heretofore the annual meeting of the association has been held at Ottawa during the month of June, but this year it was decided to change the date for holding this meeting to some time earlier in the year, when Parliament would be in session, and when for various other good reasons it would be more desirable to convene. The next regular meeting will, therefore, be held some time in January or February.

The members of the executive who were present were the President, Dr. Jas. W. Robertson; the Secretary, L. H. Newman; Prof. C. A. Zavitz, and L. S. Klinck, and Messrs. G. A. Gigault and W. L. Davidson. The Seed Commissioner, Mr. G. H. Clark, and Messrs. J. C. Cote and T. G. Raynor, of the Seed Branch, were also present, as were also several members of the college staff.

The President, in welcoming the officers of the association to Macdonald College and to Ste. Anne's, expressed the hope that the association and the College would co-operate, as far as possible, in the future in promoting the interests of good seed.

The report of the Secretary, as presented before this meeting, was a comprehensive treatise, dealing with the work in each of the six districts into which the Dominion has for convenience been divided.

The report gave the following summary of those affiliated with the association at the present time as follows, viz:

Total number of applicants	461
Number of old members reporting satisfactory	57
Number of old members failing to report	15
Number of applicants reporting satisfactory	24
Total number of members in full standing....	96
Total number now affiliated with the Ass'n....	557

While the above list is a substantial one, yet it was explained that the list does not give an adequate idea of the actual place which the work of the association is taking in the rural districts of Canada; as many farmers are carrying out the work themselves, independent of direct affiliation with the organization.

Reference was made to the general awakening of thought and practice along the lines which the association sought to encourage, and the various agencies which were responsible for this were designated.

During the year the principles of plant improvement have been applied under the direction of the association, in connection with practically all cultivated crops and in all Provinces. The results which have been realized from the system, and which have been given in the report in question, are noteworthy. While this report will be published in bulletin form, yet the matter contained therein was considered worthy of publication by the press. It was, therefore, resolved that extracts dealing with certain portions of the report which are of special interest be offered the public through the press from time to time during the summer.

Many important matters were discussed at the meeting, and a progressive policy was adopted for the ensuing year. The matter of field competitions and the utility of such in creating a greater interest in better crops was discussed, and the following resolution was passed, viz: That the council approves of the principle of holding field competitions of crops, and commends

the action of those agricultural societies which have arranged for such competitions as being one of the excellent means for encouraging the improvement of crops. It was also decided to prepare a collection of special selections, to be placed on exhibition at the Dominion Exhibition, to be held at Sherbrooke, Que., between September 2nd and 14th, 1907.

NEWS, INSTRUCTION, AND PRAISE.

Editor "The Farmer's Advocate":

We have just had a heavy rain, which was very welcome, as the grass and hay crops were making very slow growth, and, consequently, the hay crop will be short of last year. Many farmers are sowing corn, millet and Hungarian grass to supplement the hay crop. Where fall wheat was sown it is looking very promising. Spring wheat and oats are a good color, but rather backward. Barley and peas are doing remarkably well. Some early-planted corn had to be replanted, owing to the cold weather during May and first week of June, but later planting is growing very fast. Potatoes and mangels promise well. The prospect for apples is good, and these will no doubt be a full crop; while the crop of pears already set is very large. Plums and cherries are also well set, although some of the Japan varieties were badly winter-killed in the branches, especially Abundance and Burbank. Grapes are late coming into bloom. Strawberries, where not properly covered, winter-killed. Some varieties of raspberries also killed back, but are growing rapidly since the warm weather started.

Farm labor is still scarce, and any good laborer that is not afraid of doing too much work can get \$1.50 per day. More attention is being paid to intensive farming than ever before. The excursions to the O. A. C. are giving both men and women new ideas of making the farm pay, and with the practical lessons obtained from "The Farmer's Advocate," cannot but be of much benefit to every Canadian farmer who reads it, as all should. There is scarcely any work on the farm or home but is discussed through your columns. More power to your pen, say I.

The picture of my dear friend, R. Hamilton, in your issue of June 13th, was very true to life; also the brief notice of his career, as a fit representative to foreign posts of importance, shows him to be what he really was, a sterling honest man, and should stimulate the farmer boys of to-day to exert themselves to greater efforts to obtain like honors and esteem, by strict integrity in every sphere where they may be placed.

Orchard spraying has been in full blast for some time, and will be renewed again as soon as the blossoms fall. Many trees were seriously damaged through neglect of spraying last year, and the fruit-growers are trying to eradicate the bark-louse, which has proved so injurious the past year. It is hoped that the remedies applied, viz., lime, sulphur and salt, will prove successful, and that Ontario County can produce as good apples as any in the world.

R. L. HUGGARD,

Ontario Co., Ont.

THE AGRICULTURAL HIGH SCHOOL AT MORRISBURG.

The School Board at Morrisburg is to be congratulated for the enthusiasm manifested in the way they have taken hold of establishing agricultural education work in connection with their Collegiate Institute. They have purchased the old exhibition grounds, which consist of approximately fourteen acres. These are to be laid out into campus, walks and experimental plots, and the ingenuity of the agriculture teacher will be exercised to its limit in endeavoring to make them the most attractive educational grounds anywhere. The old gymnasium is given over for classwork in agriculture, and the teacher has the moral support of the whole town.

But the farmers, whom the institution is intended most to serve, are scarcely so enthusiastic. This may, in part, be due to the fact that the plan has not yet been properly brought before their notice, and it is hoped that when they come to realize what it really means, they will avail themselves of the opportunities which it affords, and give it their most hearty support.

The County Council was approached for a grant at its last meeting, and gave two hundred and twenty-five dollars. This is not very large, but when one considers that a council is a deliberative body at all times, that these men had never heard the plan set forth until the time they were approached for a grant, and that Morrisburg is at one end of three united counties that are on none too friendly terms at present, it is very satisfactory to learn that any support was given at all. A circular letter, sent out to the teachers, calling for names of prospective students, has been fairly well responded to, and it is hoped that with the assistance of the press and the public platform, the plan will be so well known within a short time that a good class will be on hand for the opening of the term in September.

J. W. Decker, Professor of Dairying in the Ohio State University and author of several valuable works on dairying, died recently of pneumonia, brought on, it is believed, by overwork.

Mr. A. J. Reynolds, of Scarboro, Ont., Secretary, was authorized by a local committee meeting in Toronto last week to correspond with other organizations anent the proposed Winter Dairy Show in 1908 or 1909. Another meeting may be held during the Toronto Fair.