

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established 1868.

Vol. XLIII.

LONDON, ONTARIO, JUNE 11, 1908.

No. 820.

EDITORIAL

NOVA SCOTIA'S SUMMER COURSE FOR TEACHERS.

"Educational systems must adapt themselves to the spirit and needs of the age, else they will fail to profit as they might, and, on the other hand, fail to fully enlist the support of those they are intended to serve. The present is an age of industrial activity, and the vast majority of public-school pupils are interested in and will devote themselves to the so-called practical pursuits. Applied science ought, therefore, to occupy a prominent place in every school curriculum. The problem is how to secure a class of teachers who can present the various subjects of the school curriculum in such a way as to relate them to the practical pursuits of life—a problem more easily stated than solved. Nevertheless, there are teachers who, realizing the problem, are seeking means by which they themselves can learn more of those things which go to make up the environment in which their pupils' activities will be spent."

Thus, briefly and pointedly, does the preamble of the initial announcement explain the need and purpose of the annual midsummer school for teachers, which has been inaugurated at Truro, Nova Scotia, at the affiliated College of Agriculture and Provincial Normal School. The course this summer will last a month, commencing July 14th and running to August 13th, comprehending field excursions, laboratory work and lectures in nature study, school-gardening, agriculture, horticulture, biology, agricultural physics and chemistry, geology and manual training. In addition, teachers in attendance will have an opportunity to take a special course under an efficient instructor in physical drill, qualifying them for a diploma of efficiency in teaching this subject. Should attendance warrant, classes in music and photography may also be provided, and facilities will be afforded for special or advanced students wishing to pursue any definite line of biological or chemical study.

By attendance at this summer school, Nova Scotia teachers may qualify themselves to receive what is designated the "Rural Science Diploma," entitling the holder to an extra Provincial grant. In order to minimize the expenses of attendance, the Nova Scotia Government will pay transportation charges of all Nova Scotia teachers who complete the course satisfactorily; and, furthermore, under Regulation 138 of the School Law, an additional week or two of vacation may be obtained. Tuition to all students will be free, the only necessary expenses being for board, which may be secured at \$3.00 to \$3.50 per week. While the course is arranged primarily for the teachers in Nova Scotia schools, anyone from any of the Maritime Provinces who is interested in natural science may enroll.

The personnel of the faculty is ample guarantee of success. Principal M. Cumming, of the Agricultural College, as Director, is to be assisted by able members of the College and Normal School staffs, as well as by Mr. John Dearness, Vice-Principal of the Normal School, London, Ont., who is to lecture in Biology and Nature Study. The Director is to be particularly congratulated on securing the services of Mr. Dearness, who is a man of rare pedagogical experience and efficiency, as well as a pioneer champion of nature study and natural science, in the adaptation of which, a more inspiring suggestive and helpful instructor is probably not to be found.

The inauguration of this summer course marks another splendid forward step in Nova Scotia's

educational policy. As the twig is bent, so is the tree inclined. Without interesting the public-school children in agriculture and rural life, all efforts at agricultural-college and collegiate education can produce but a modicum of result. The root of the rural-education problem lies in the training of the teachers, and Nova Scotia, in common with Ontario, Massachusetts, and other enterprising Provinces and States, is going about it in the right way.

THE PROCESSES IN THE SOIL.

The country is frantically busy producing a crop. Not merely are men and horses at work, but the soil itself is in the throes of myriads of busy forms of animal and bacteriological life, assisted by chemical processes. Organized compounds, such as are contained in the soil, and manures, are being attacked and resolved into their original elements, or united with some other elements to feed the growing crops. The soil, if we could see it with the naked eye, would reveal, during these warm days of summer sunshine and rains, a busier factory than any raised above the surface, utilizing a greater amount of horsepower energy than is employed, and accomplishing a greater amount of creative work than is produced in all the factories of man's creation.

To feel this, to understand the conditions that make for the favorable progress of these activities, and to adjust sowing, plowing, cultivating and cropping, so as to get the most out of those processes, is to be a scientific and successful farmer.

AN IMPROVED CROP OUTLOOK.

The central portion of Western Ontario, with London as a center, may be taken as a good representative of the best farming districts of Eastern Canada. As yet, most of the farms are devoted to general agriculture, with an increasing tendency to specialties, such as fruit, milk and cream, near cities and towns with a growing population, canning factories, and establishments for the output of condensed milk and other special milk products. But the cheese and butter factories are still the great stand-by, with their adjunct of hog and cattle rearing. This naturally implies the growing of grain and fodder crops for feeding purposes, the residuary product of stable manure going to the enrichment of the soil for the future. Winter-wheat-growing is still one of the features of Western Ontario farming. Silos are rapidly on the increase, and, profiting by the experience of the past and previous years, a greatly increased area of the great food-producer, corn, has been planted. The fields where the plants are already above ground present a most promising appearance, though we hear reports of some defective seed, to the production of which, greater attention must still be paid, in order to obtain more certain and reliable supplies.

Winter wheat survived the period of snow and frost fairly well, though with a scant top, characteristic of recent years, but a few weeks of extremely cold nights, with drying winds, told severely upon it; and this, with the general lateness of the spring and backwardness of the seeding generally, had a most depressing effect. A couple of fortnights ago the outlook was decidedly gloomy, and people were becoming haunted with dreams of more crop failures and food shortages. But all this is now changed. Through the magic influences of frequent showers, sunshine and warmth—bounties from the hand of a Beneficent Providence—a more marvellous transformation in the wheat fields has never been witnessed than during the past three weeks. The oats, barley and other spring grains sprouted and

carpeted the ground with unexampled rapidity, while the improvement in pasturage was simply amazing, coming to the immediate and welcome relief of thousands of head of live stock, some of which had been facing all but empty fodder mows. In a few fields of spring grain, on poor knolls, the grain shows a yellow tinge, evidence of insect depredations in the roots or stalks. The new clover presents a splendid appearance, and the old timothy fields show an excellent stand, the bottom being already so thick as almost to preclude the possibility of failure.

The changed outlook has been most inspiring, especially in conjunction with the good prices that have prevailed for live stock and most farm products. Compared with the general report of the Ontario Bureau of Industries, published last week, the Western Ontario situation appears to be rather especially favorable; but in other districts, corresponding improvement may be quickly brought about with favoring weather conditions.

Nor is the good news of Ontario alone. From the extreme eastern Province of Nova Scotia comes recent word that the outlook in that region was never so fine as right now. "I never saw such clover," writes Principal Cumming, of the Agricultural College. "Came through the winter splendidly. We also have some good reports of alfalfa, though poor ones, too. The season for seeding has been unsurpassed. Now, I'm hoping for a continuance of the favorable weather, and then we'll tell you what can be done down by the sea."

EVERY MAN'S DUTY.

At a conference of eminent men, representing all walks of life, convened in Washington, D. C., lately, to consider ways and means of preserving the national wealth, James J. Hill offered the following observations, which, although the situation in Canada is less acute than in the States, are already of ominous portent to us. The gospel of economizing national resources needs preaching everywhere:

"Within the last forty years, a great part of the richest land in the country has been brought under cultivation. We should, therefore, in the same time, have raised proportionately the yield of our principal crops per acre; because the yield of old lands, if properly treated, tends to increase rather than diminish. The year 1906 was one of large crops, and can scarcely be taken as a standard. But the average yield per acre was less than in 1872. We are barely keeping the acre product stationary. The average wheat crop for the country now ranges from 12½ in ordinary years, to 15 bushels per acre in the best seasons. And so it is on down the line.

"We are robbing the soil in an effort to get the largest cash returns from each acre of ground in the shortest possible time, and with the least possible labor.

"I have endeavored to outline some of the principal issues at stake in the better conservation of our national resources, and especially that one about which all the others revolve, and by whose fortunes we shall eventually stand or fall—the land itself. They are for us, quite literally, the issues of national existence. The era of unlimited expansion on every side, of having but to reach out and seize any desired good ready provided for us by the hand that laid the foundations of the earth, is drawing to a close.

"The first task, it seems to me, must be to force home the facts of the situation into the public consciousness; to make men realize their duty toward coming generations exactly as a father feels it a duty to see that his children do not