

to grow clover on the prepared land. If the land is not prepared it is injudicious to sow wheat.

Clover properly grown is a valuable forage and pasture crop. As a hay crop its value largely depends upon its being properly grown to develop full strength. As corn is more valuable feed when grown to proper maturity than immature corn, so is clover. There is a tendency on the part of farmers in most parts of Canada to adapt their methods to the changing condition of their lands, instead of attending to the condition of the land. They are constantly devising new plans of harvesting clover, corn and roots before they are properly in a condition to harvest, because if they let them go full time the digestibility of the feed is impaired. In this way we find great diversity of opinion among them as to methods of procedure. They are all looking at it from the altering conditions of their soil and the varying conditions of climate, which latter, of course, is mostly beyond control. In the matter of clover they are forced to cut it too young because if they don't do so it becomes tough, herbaceous, indigestible stuff. If the clover is grown with minerals only, the basis of lime and potash being present with the important acid, phosphoric, in plentiful supply, a sure crop of digestible clover hay may be harvested having two or three times the feeding value of clover usually grown on our farms. In most parts of Canada where clover is grown, only one season's hay crop can usually be harvested, but there are yet parts where hay can be cut two seasons from a seeding, besides carrying it one season in a grain crop. With rational methods of manuring and handling, the better condition may be continued and the poorer condition may be improved. A grass meadow may be kept in sward indefinitely without plowing, and alternating with clover at regular intervals by the intelligent application of phosphate and potash, and the heaviest possible crops of the finest feeding grasses annually harvested. Pastures may be kept up indefinitely by the use of phosphate only.



### Nova Scotia Fruit-Growers' Convention

(Specially reported for FARMING by J. J. FERGUSON, B.S.A.)

The thirty-fifth annual gathering of the fruit men of Nova Scotia took place at Wolfville, February 20-22nd, with a splendid attendance of interested intelligent farmers from different parts of the country. The fruit-growers of Ontario do not realize the immense factor which Nova Scotia is soon to become in the apple trade with England. Wolfville, the seat of the Nova Scotia School of Horticulture, is in the very heart of that garden of gardens, the far-famed Annapolis valley. Even at the present unfavorable season the visitor cannot help but see that this district is most wonderfully adapted for and supplied with all the natural conditions requisite for success in this business. The valley is about 100 miles long and four to seven miles wide, protected on the north by a high mountain range.

Last year there were grown in the province 300,000 bbls. of apples of fine quality, netting for the growers about \$800,000. From 20,000 to 30,000 bushels of plums were grown; these also were of fine quality, but prices barely paid expenses. President Bigelow, in his annual address, referred with much pride to the fact that he had sent to the Omaha fair a barrel of Nova Scotia Gravensteins, which there drew much attention, receiving a diploma and gold medal. The president briefly referred to the successful work being done by the Wolfville School of Horticulture, which is under the able direction of Prof. Sears. The past season saw sixty five students in attendance, representing nearly every county in the province.

A number of excellent addresses were delivered on practical topics by local men and some of the members of the Dominion Experimental Farm staff. Prof. F. G. Shutt delivered a most interesting talk on "Fertilizers for Orchards." He emphasized the great importance of giving the ground thorough cultivation and manuring before planting out the

young trees. In the Annapolis valley barnyard manure is a scarce article so that the farmers must resort to artificial fertilizers. The effects of the different constituents were explained. Nitrogen promotes leaf growth and growth of wood generally. Potash is a great essential, it forms fifty per cent. of the ash of the apple. Phosphoric acid is requisite to hasten the ripening of the fruit. For the ordinary orchard, Prof. Shutt recommended an annual dressing of ten tons of farm-yard manure, with one hundred and fifty pounds of kainit per acre; where hard-wood ashes could be had, 40-50 bushels per acre would give splendid returns. The manure should, preferably, be applied in the fall. In answer to a request for a general formula for a mixed fertilizer for ordinary orchards, the following was given—per acre:

Bone meal.....	100
Superphosphate.....	100
Muriate of potash.....	75
Or kainit.....	400

Mr. W. T. Macoun, Horticulturist of the C.E.F., delivered a very interesting address on fruit topics in general. At the Ottawa Farm there are 653 varieties of apples under test, 200 being Russian. There are also under test 69 varieties of plums and 169 varieties of grapes.

"Horticulture in the Maritime Provinces" was very ably treated by Saxby Blair, Horticulturist of the Nappan farm. He dealt specially with apples. As to varieties, he mentioned that Northern Spy, Ben Davis, and Bishop's Pippin had all been shipped from New Brunswick and Nova Scotia with splendid results. Plums can be successfully grown in Southern New Brunswick and in Prince Edward Island. Pears and peaches do well in sections of the Annapolis valley. Small fruits can be grown almost anywhere in these provinces.

Hon. Sydney Fisher delivered a very helpful address, referring chiefly to the great question of transportation. Our ocean rates are higher than those from United States ports, because our business is smaller and competition among steamship lines is therefore less. Last season it cost \$238,000 more to ship butter from Montreal than if it had gone from an American port. Speaking of the advantage of cold storage for fruit shipments early in the season, Mr. Fisher said that on some apple shipments from Western Ontario it had meant an increase in profit to the shipper of twenty-five per cent. For late shipments there was, of course, no advantage. Mr. Fisher had a splendid reception at the different missions; the fact of his being a thoroughly practical man secures for him a warm place in the hearts of the farmers.

Dr. Borden, Minister of Militia, expressed himself as being entirely opposed to the bonusing of steamship companies from Canadian ports; withdraw the subsidy, and competition among the different lines will bring the needed reduction in rates, was his solution of the matter.

A large number of local men discussed matters of local interest. Prof. Sears, of the School of Horticulture, gave some very valuable suggestions along the line of "Recent developments in spraying." Up to the present there has been no uniformity in regard to the size of the barrel used in apple shipments from Nova Scotia to Great Britain. The fruit-growers are trying to remedy this, and now call for the adoption, on the standard of a barrel of the following dimensions, 27 inches between the heads, 17 inches in diameter at the head, and 19 inches in the centre. The general adoption of this standard would mean better prices in England where uniformity in quality and package is at a premium.

At the different sessions "Agricultural Education" was a live topic. The farmers of this province are keenly alive to the urgent necessity of establishing a first-class agricultural college. While the schools at Wolfville and Truro have undoubtedly done good work, they do not meet the advancing requirements of this progressive province. At present students who wish advanced instruction along this line are forced to go to the Ontario Agricultural College to receive it. What is wanted is an agricultural college, pure and simple, where practical work can be done. Some