



GOOD SEED PAYS

Corn grown on a Commission of Conservation Illustration farm in Dundas County, Ont.

Good Seed to Increase Crops

What good seed means to Canada was very clearly shown by a few figures submitted by Mr. I. H. Newman, Secretary of the Canadian Seed Growers' Association, at the Conference on Soil Fertility and Soil Fibre, held at Winnipeg by the Commission of Conservation.

Each spring Canada requires approximately 65,000,000 bushels of seed grain and 9,000,000 bushels of seed potatoes, or about 8 per cent of her annual average production.

About 41,000,000 acres are annually planted to these crops in Canada. An increase of but one bushel per acre of this area would add approximately \$80,000,000 to the wealth of the country. One of the chief methods of increasing production is by the more general use of seed of better breeding and of varieties better suited to the districts where sown.

Utilization is Conservation

The tree that comes to maturity in the forest, decays, and falls to the ground, only furnishes food for insect pests and fungi which destroy other trees; the fruit that ripens, falls to the ground and rots benefits no one; the surplus fish that is utilized by man serves no useful purpose; but the utilization of the tree, the fruit, and the fish is pure conservation. On the other hand, to transport to lake Superior—as we did in 1918—3,250,000 bushels of weed seeds which occupied space in cars equivalent to a train over 20 miles in length, is not conservation in any shape or form.

Metallic arsenic, running \$200 in value to the ton, has been discovered on the Queen Charlotte islands.

Crop Rotation

Dr. Grisdale Emphasizes This Necessary Factor of Permanency in Prosperous Agriculture

"The maintaining of the farm in a condition free from weeds and keeping the moisture-holding power of the land as high as possible are factors that are of prime importance. A crop rotation, therefore, that is satisfactory makes preparations both by getting the soil in right shape and by cultural methods to hold that moisture as well as it possibly can be held, by storing all the moisture that comes along.

"Another advantage in crop rotation is the conservation of the fertility and the maintenance, if not the increasing, of the fibre content of the soil.

"Nearly all farmers are following rotations. They get into the habit of following some kind of a system, and if you are handling some land year after year you are bound to have some kind of a scheme worked out. Unfortunately we have too many farmers with a bad scheme—a bad rotation. What we want to get introduced on every farm is a good rotation, and what is a good rotation on one farm is not necessarily the best rotation on another. That we appreciate this is shown by the fact that we have on trial on our experimental farms some twenty-odd rotations in the West.

"I think the most important step in progression to be made on these prairies is the introduction of a better rotation. We have a rotation now, but it is a bad one. What we want to do is to change it and put a better one in, and that is what we are trying to reach at this Conservation meeting. If we could get that change—if we could get the farmers of this country thinking along that line, the change from that three-year rotation in the West or four-year in the eastern part of these prairies, including a summer-fallow in each case, and considering all the possibility of our hood or cultivated crop, we shall have done more for agriculture in these provinces than any other convention or meeting of men has ever done in the history of the Prairies."—From address of Dr. J. H. Grisdale, at Conference on Soil Fertility of the Commission of Conservation at Winnipeg.

Fox Breeders' Association

Important Step to Promote Welfare of Canadian Silver-Fox Ranching Industry

In February last the Commission of Conservation called a conference in Montreal of all interested in the fur trade. As one result, a Dominion charter has recently been granted to the Canadian Silver Fox Breeders' Association. The formation of this association, which has been organized by leaders in the Prince Edward Island fox-ranching industry, is an important step in advancing

the welfare of commercial fur-farming throughout the Dominion. The production of valuable pelts in captivity has become a scientific and well-established industry and should become an increasingly valuable one, not only in Prince Edward Island, but in all the other provinces where a substantial start has already been made. Perhaps the most immediate benefit which the association can bestow on the industry is the establishment of a proper standard of registration, such as is maintained for every other branch of live-stock breeding.

The objects of the new body are as follows:—

The Association shall have for its object the encouragement, development and regulation among its members of the raising of pure-bred silver foxes in Canada.

(a) By keeping a record of the breeding and origin of all foxes held in captivity by members of the Association, and by collecting, preserving and publishing data and documents relating to the same.

(b) By establishing standards of breeding and by carrying out a system of registration for its members.

(c) By adopting means from time to time for the protection of its members engaged in propagation and breeding of pure-bred silver foxes in compliance with the Live Stock Pedigree Act or any regulations or by-laws thereunder.

(d) By maintaining an efficient inspection among members of the Association to prevent, detect and punish fraud.

(e) By compiling statistics of the industry and furnishing official and authentic information in regard thereto.

Wasting of Coal During Carry

Shortening Periods of Use and Efficient Operation of Furnaces to Offset Shortage of Coal

Eastern Canada is facing a serious coal shortage. Due to labour troubles, the output is below the average, while railway companies are handicapped by shortage of cars. Hon. Frank Carvell, Chairman of the Railway Commission, which is now in control of the fuel situation, has stated that we will be fortunate to get coal, regardless of price. Every effort must be made to reduce the consumption, and to secure the greatest heat efficiency possible from the supply available.

Much coal is wasted by the too early starting of furnaces. The first chilly weather brings the furnace into use. This fall in temperature is almost invariably followed by a warm period. If, by the use of other heating appliances, such as kerosene or electric heaters, or by burning wood in the furnace, the period for consumption of coal could be shortened, a considerable saving of coal could be effected. During 1919, Canada

imported 4,758,419 tons of anthracite coal in chestnut, stove and egg sizes. Our heating season is approximately seven months, a portion of which at the beginning and end is comparatively mild. By an average lessening of the coal-burning period of 20 days say, five per cent of this anthracite would be saved, or 238,000 tons. With coal selling at an average price of \$15 per ton, this saving would represent upwards of \$3,500,000. All of this coal has to be hauled by rail. To move this 238,000 tons requires 4,760 cars of 50 tons each.

Economy in furnace operation would also considerably reduce the coal consumption. Much unconsumed carbon is discarded with the ashes, and much of the heating efficiency of the coal is also wasted through carelessness in firing or in defective installation.

The Mines Branch of the Federal Department of Mines has issued a bulletin, No. 28, "The Economic Use of Coal for Steam Raising and House Heating," by John Blizard, B.Sc., which gives valuable information regarding the economic and efficient operation of steam boilers and heating furnaces.

Every care should be exercised in the use of coal. With the limited supply available, the extravagance of some means that others will suffer.

Exhibition of Live Fur-bearers

As a result of the Fur Trade Conference called by the Commission of Conservation in February last, an exhibition of live silver foxes and other fur-bearers will be held in Montreal the latter part of October or early in November. Details have not as yet been completed, but further announcement will be made in October Conservation.



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