

Commission of Conservation CANADA

HON. W. C. EDWARDS

Acting Chairman

JAMES WHITE

Assistant to Chairman and Deputy
Head

CONSERVATION is published monthly. Its object is the dissemination of information relative to the natural resources of Canada, their development and proper conservation, and the publication of timely articles on housing and townplanning. The newspaper edition is printed on one side of the paper only, for convenience in clipping for reproduction.

OTTAWA APRIL, 1920

FUNCTIONS OF THE COMMISSION

It cannot be too often repeated that it is not the duty of the Commission of Conservation to act in an executive capacity or to exercise the functions of any department of government, Provincial or Dominion. Our duty is to investigate, enquire, advise and inform. While, in so doing, it will occasionally become necessary for us to do things which might be regarded as possibly falling within the function of a government department, we should never carry this work to a greater length than is necessary to arouse interest in it, to point a way to improvement, and, in some cases, to collect the information necessary to the formation of intelligent judgment. While in each particular case that arises, there must be an exercise of judgment on our part, the above are the general lines upon which we must act.—*Sir Clifford Sifton.*

DAYLIGHT AND INDUSTRY

Light is an essential working condition in all industrial establishments, and is of paramount influence in the preservation of the health of the workers. A prominent investigator, who had extensive opportunities to study industrial establishments in Europe as well as America, states: "I have seen so many mills and other works miserably lighted, that bad light is the most conspicuous and general defect of American factory premises. My own investigations for the New York State Factory Commission support this view. In these investigations it was found that 37 per cent of the laundries inspected, 49 per cent of the candy factories, 48 per cent of the printing places, 50 per cent of the chemical establishments were inadequately lighted. There was hardly a trade investigated without finding a large number of inadequately lighted establishments."

Such conditions are entirely opposed to the laws of health, sanitation and efficiency. Wherever poor lighting conditions prevail, there must be a corresponding loss of efficiency and output both in quality and in quantity. In-

dustry is not using nearly enough daylight and sunlight in its buildings. Every endeavour should be made to use as much as possible of daylight for lighting purposes. It is necessary that the rays of daylight and sunlight enter the interior of the buildings as freely as possible, with the important modification that the direct rays of the sun must be properly diffused to prevent glare and eyestrain.

In the presence of poor lighting, men cannot be expected to work with the same enthusiasm as when a well lighted working place has been provided. The physical surroundings have a deep effect upon employees, and where bad working conditions are allowed to prevail, there is invariably a lessening of morale and satisfaction. Neglecting to utilize daylight, so bounteously provided by nature, and so essential to industrial efficiency, is inexcusable wastefulness.

MUSKRAT FARMING

The rising prices for muskrat fur have aroused considerable interest as to the feasibility of breeding this animal in captivity. Though prices may have reached the peak, it is altogether likely that this fur will command an attractive figure for many years to come. The farming of muskrat ought, therefore, to be a profitable business.

Present experience goes to show that the muskrat is not a difficult animal to raise. It is necessary to own or lease a stretch of suitable marsh, lake or quiet stream, which one could fence, if necessary. If there are already muskrats in the area, all they need is protection; if not, breeding stock must be bought from trappers. The rate of increase is fast; observers state that the muskrat brings forth three litters in a season, and from six to nine in a litter.

Clear water is preferable and it must be deep enough never to freeze to the bottom. The food consists mostly of the roots and stalks of aquatic plants, such as wild rice, flags, water-lilies, reeds and cat-tails. Muskrats will sometimes partake of clams, fish and insects. If the food supply is not sufficient they can be fed garden vegetables.

The muskrat appears to be somewhat like the cat in sticking closely to its home, and, so long as there is an adequate amount of food, is unlikely to migrate. Its principal natural enemies are the owl, hawk and mink.

In Maryland, which is a great centre for raising muskrats, the marshes often yield a better income per acre than adjoining cultivated land. One raiser is said to take 2,500 muskrats each year from a 50-acre marsh and yet leave enough for re-stocking.

Even as long ago as 1909, when skins were very cheap, the leasing of marshes was profitable, and the value of muskrat marshes was estimated by an American expert at \$40 an acre. As this fur has quintupled in price it is a fair assumption that these lands are worth at least \$200 per acre to-day.

Protection of Fish and Game

Quebec Association Splendidly Supports Enforcement Provincial Game Laws

Seventy-one years ago four Montreal sportsmen met in what was known as "Dolly's Chophouse," and decided to form a club for the protection and preservation of fish and game in Lower Canada. Since the organization of the Association, its members have done their utmost to see that the fish and game of the Province of Quebec were protected and, today, its membership includes about 600 prominent Montreal sportsmen.

The laws of the province of Quebec are ample for the protection of game but it is a difficult matter to enforce them. In one year, the Association prosecuted 200 poachers; this was the result of the splendid support received at an annual banquet held at the Windsor Hotel when \$4,600 was subscribed, enabling the Association to send out men all over the country. This association keeps in touch with all the clubs of the province and receives complaints from all its members. Immediately on receipt of a complaint, officers are sent out from Montreal to investigate, and it has become respected and feared by poachers throughout the province. In one district, 31 poachers were arrested and fined. The best of laws are useless without the enthusiastic support of the people.

Most of the work of the Association is confined to the protection of moose, deer, caribou, game birds and game fish, but the officers on every occasion endeavour to prevent the taking of fur-bearing animals during the closed season.

Poaching can be stopped, in a great measure, if only the press will, from time to time, publish the game laws, and if posters are distributed to the railway stations and post offices throughout the province. This year, the Association will print several thousand in English and French; these they will post in every club house and railway station, and thus endeavour to educate the people to protect the game of the country.

It is in their own interest to respect the fish and game laws, as it ensures the expenditure of thousands and thousands of dollars by tourists and others. The clergy have from time to time been asked to address the people and to inform them that poaching is an occupation entirely opposed to their best interests.

The Association has no favourites and, while many of the poachers prosecuted are poor men, yet some of the most prominent people in the province are included.

If the sportsmen in other provinces would organize themselves into similar associations and honestly work for the best interests of wild life conservation, the enforcement of laws for the preservation of fish and game would become much more effective than it is to-day.—*J. R. Innes.*

A CATTLE FOOD FROM SEAWEED

The exigencies of war have caused a number of attempts, more or less successful, to utilize Denmark's natural resources, and among the inventions reported is a process for producing a cattle food from seaweed. Several methods have already been proposed for producing such a food, more especially from sea wrack, *fucus vesiculosus*. This plant is abundant all over the world, but it has until now been impossible to transform it to a digestible state, and it also contains certain mineral substances which spoil the taste.

The present process is described as follows:

The plant is thoroughly washed to get rid of the salt, then it is treated with steam, preferably under rather high pressure, which causes the cells to burst and allows the protoplasm to come out. This mass is placed under high pressure and formed into cakes, which are dried in a vacuum and ground into a coarse powder. The juice of the mass is boiled in a vacuum to a high grade of concentration, which causes the salts to crystallize, and they are separated from the juice by means of a centrifugal separator. The juice is then mixed with the powder, and the mixture is pressed into pieces of suitable size. The analysis of the food is as follows: Water, 5 per cent; protein, 13-12 per cent; fat, 1-07 per cent; digestible carbonic hydrate-66-76 per cent; cellulose, 9 per cent; mineral salts, 5-03 per cent.

The analysis would seem to show this food to be nourishing, and the cattle are said to eat it very willingly. It can be mixed with oilcake.—*U.S. Consular Report.*

BRISK MARKET FOR RABBIT SKINS

Regarding rabbit skins, the market report of a prominent London firm of hide and skin brokers states: "After an interval of 10 weeks, public auctions were held on the 3rd December; 1,385 bales were offered and 1,326 sold. There was a record attendance of buyers, and keen competition was in evidence throughout the sales, and practically the whole offering was disposed of. Furriers' best and medium grades appreciated an average of 10 per cent. Butchers' were more readily absorbed by dressers than hitherto at an advance of 50 per cent for winters and fairly seasoned skins. The lowest price quoted for Australian and New Zealand rabbit skins was 3s. 4d. per pound and much higher figures than this were paid.

The growth of the condensed-milk and milk-powder industries during the war period has been a most notable feature of Canadian dairy production. It is estimated that for 1919 the total output of condensed and evaporated milk was nearly 110,000,000 pounds, valued at approximately \$20,000,000. The total quantity of milk powder produced during the year amounted to 5,323,537 pounds, valued at \$1,662,352.