

# Conservation

A monthly bulletin published by the  
Commission of Conservation, Ottawa, Canada.

VOL. IV

JUNE, 1915

NO. 6

## Fish Culture in Canada

### Artificial Propagation Necessary for Re-stocking Our Inland Lakes

Artificial fish culture is a necessity in connection with some of Canada's best food and game fishes. This is due in the first place to over-fishing. Then many of the feeding and spawning grounds in the lakes and rivers have been ruined by the careless deposition of industrial and other wastes. These conditions apply with especial force to such lake species as the whitefish, one of the finest of the food fishes. In 1915, approximately 281 million whitefish fry were distributed in the Great Lakes. During the present season three new hatcheries are in operation. One of these, situated near Kenora, Ontario, was designed for the propagation of whitefish and has a capacity of 70 million eggs. A second, at Thurlow, near Belleville, Ontario, replaces a smaller one that had been in operation in former years at Newcastle. It will accommodate eight million salmon trout and over 60 million whitefish, and the third, in Qu'Appelle park, has a capacity of 50 million eggs. The Kenora hatchery however, will be used for pickerel as well as whitefish, although the latter will be the fish chiefly handled, the fry being used in stocking the waters in the Lake of the Woods district.

The Government is so materially commended for assisting so materially in the maintenance of Canada's fresh water fisheries. These have an annual value of about \$4,000,000 and, if wisely conserved, are capable of great expansion. Besides, in districts such as the Lake of the Woods region, keeping the waters stocked with game and food fish will serve to further enhance their value as tourist resorts. Canada is certain to be visited by an ever-increasing number of tourists within the next few years, and her fame as a "sportsman's paradise" will do much to increase the number.—A. D.

Without the co-operation of employees, guards and safety devices on machinery are of little use.

### CANADA IS DEPENDENT ON FORESTRY

The proper interpretation of forestry, and what it actually means to Canada, cannot be stated too frequently. The future of this country depends upon our making every acre productive. Broadly speaking, the earth's surface can be made productive in two ways only, by producing agricultural or timber crops. South of the 60th parallel, about 69 per cent of the area of Canada is unsuited for agricultural crops. A very large proportion of this non-agricultural land is suitable for the production



of merchantable timber. The production of forest products has been and will always be one of our chief industries. At the present time forest industries supply 12 per cent of our foreign trade, 16 per cent of our railroad traffic, and equal in value our annual wheat crop. We have a choice to make. Shall we let these valuable industries perish for want of raw material or shall we perpetuate them by protection of our present mature timber from fire, by protection of the young forests of our non-agricultural lands, and by the logging of our forests in such a manner as to encourage the reproduction of valuable forests? The perpetuation of these industries and their source of raw material by the investment of such expenditure as the anticipated crop will warrant is forestry.—H. R. MacM.

There is no such thing as a necessary accident.

## After Clean-up Day, What?

### The Cultivation of Civic Pride a Necessary Factor to the Clean City

In many cities and towns of Canada, the annual clean-up day has been observed. Refuse and litter have been removed. Yards have been tidied up and made presentable. This result has been secured through the active agita-

### THE ECONOMIC VALUE OF BIRDS

The insects that destroy our fruit crops attack every portion of the tree and its fruit. The woolly aphid attacks the roots; the trunk and limbs are preyed upon by millions of plant-lice, scale-insects and borers; the leaves are devastated by the all-devouring leaf-worms, canker-worms and tent-caterpillars, while the fruit itself is attacked by the curculio, codling-moth and apple-maggot. By the annual expenditure of about \$8,000,000 in cash in the spraying of apple-trees, the destructiveness of the codling-moth and curculio have been greatly reduced; but of course that great sum must be set down as a total loss to the farmers and consumers, in addition to a shrinkage of \$12,000,000 in the annual crop from insect ravages that could not be prevented.

Now, in view of the foregoing, is it, or is it not, worth while for serious-minded men to do their very utmost, continuously, to protect from foolish and brutal slaughter man's only allies in the insect war, the insect-eating birds?—William T. Hornaday in "Wild Life Conservation."

### FOR CAMPERS

Forest fires can be prevented by:  
Never leaving a camp fire until it is out.  
Never making a camp fire in leaves, rotten wood, or against a log.  
Never tossing away burning matches or tobacco.  
Never burning brush, grass, or slashings during a dry season.

and in every way possible to preserve and beautify their homes.

Each householder can add a beauty spot to his town. True, this space may not be large, but there are very few homes without sufficient space for a flower-bed or a piece of well-kept lawn. The illustration herewith shows what can be done in the way of improving the appearance of the home. This plot has been beautified almost entirely at the expense of labour, the monetary outlay being negligible. The cottage is that of a working-man, but the surroundings, the pride of ownership, have succeeded in creating that place of all places, home.

tion of public bodies and private individuals interested in the sanitary and clean-city movement.

But why should this laudable effort be restricted to annual clean-up days?

In Canada, owing to the covering mantle of snow which hinders the complete removal of garbage and other refuse, there is some slight excuse for the untidy conditions found in the spring. As this excuse is not applicable, however, during at least eight months of the year, there is no reason why, after the spring clean-up, the improved conditions should not be continued.

The cultivation of civic pride is a necessary factor in the clean-city objective. The officers of municipalities, and especially the newspapers, have it in their power to create and foster this spirit of pride. With the incentive of respect for the home town, it becomes a duty of first importance on the part of its residents to see that its roads, sidewalks and open spaces are kept clean, to protect its trees,