

## Commission of Conservation CANADA

HON. W. C. EDWARDS  
Acting Chairman  
JAMES WHITE  
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.

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The Commission of Conservation was created in 1900, by Act of Parliament, to promote the economic use of Canada's natural resources. Authentic information respecting the character and extent of such resources, and with reference to the problems associated with their efficient development and their conservation, is freely available on request to the Commission.

OTTAWA, MARCH, 1921

## Canada's Trade in Forest Products

Its Importance Emphasizes Necessity  
of Greater Protection of Forests  
to Ensure Continuance

What Canada's forests represent in her foreign trade is emphasized by contrast with the conditions in New South Wales, where, during the year ending June 30 last, the imports of timber exceeded the exports by nearly six and one-half million dollars. The imports were principally softwoods for building purposes, while the exports were hardwood.

To overcome the extreme shortage of softwoods the New South Wales Forestry Commission is energetically undertaking a policy of converting the hardwood forests into conifers, having in hand at the present time areas totalling 60,000 acres. It is hoped to be able more fully to supply the home requirements for the softwoods and thus overcome the adverse balance in the timber trade of that country.

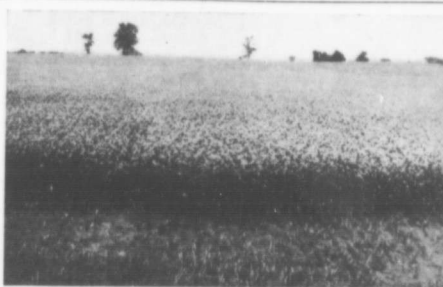
For the year ending December 31 last, Canada's imports of wood, wood products and paper amounted to \$56,783,361, as against exports to the value of \$295,715,852. With such an immense forest products trade balance in favour of Canada, every section of the business community in the Dominion should be intensely interested in the protection and most efficient utilization of the forests of this country. Whereas New South Wales must take aggressive action to overcome a trade balance of approximately six and one-half million dollars, Canada must, by the exercise of scientific forestry methods in cutting and the enforcement, without fear or favour, of adequate fire protection measures, provide, as far as is humanly possible, for the continuance in perpetuity of her large trade advantage in forest products.

A wallboard made of sawdust and calcined magnesite with a binder, that is fireproof and moisture proof, and that can be painted and kalsomed, has been produced by a British Columbia roofing plant.

## Fight Weeds with Profitable Crops

One Farmer's Success in Cleaning  
Field shows what can be done

Why should human labour be wasted in fighting weeds? With an ordinary single-furrow walking plough, turning a 12 inch furrow, a man will walk over 10 miles in ploughing an acre once over. Add to this the walking necessary for harrowing, cross harrowing and cultivating, and then calculate how much has been wasted when the yield is only half or two-thirds as large as it would have been had it not been choked by weeds. This will give some idea of the cost of weeds to the farmer. Many weeds are able to survive the ordinary cultivation given in preparing the seed bed. These veteran weeds



A BUCKWHEAT CROP THAT KILLED THE WEEDS.

are among the worst enemies the farmer has to fight. Quack or couch grass stands out very prominently in this class.

Weeds of this kind should be fought with profitable crops. This has been done on many of the farms in Dundas county where the Commission of Conservation is conducting illustration work. One field of seven acres which was badly infested by quack grass was ploughed in the autumn of 1919 and in the spring of 1920 was thoroughly cultivated frequently to keep it from showing green until well into June, when it was sown to buckwheat at about double the amount per acre as is sown on clean land when a grain crop is the sole end in view. The farmer conducting this work reports his results as follows: "The buckwheat grew so rank and heavy that we had to let it get dead ripe before we could cut it with the binder. We threshed 40 bushels to the acre in spite of the fact that some shelled on the ground. There is not a spear of quack to be seen this fall. The soil is very mellow and we have cultivated it two or three times since harvest. We intend to sow grain on it in the spring and seed it to alfalfa as the field is naturally well drained and is now in good condition."—F. C. Nunnick.

In order to uncover an area 1,000 by 1,300 feet of asbestos-bearing ground, 600,000 cubic yards of overburden has to be removed at the King Mine, Thetford, Quebec.

## Power Conditions Require Close Study

There is now under way in the United States a power survey covering the mechanical, electrical and other forms of energy used in the area situated roughly between Washington and Boston, and extending some 150 miles inland.

The great necessity of giving closer study to power problems has been fully demonstrated by the results already obtained. The conditions revealed, which are doubtless no worse than would be found in many portions of Canada, demonstrate that the money spent in the investigations has been well worth while. The figures given out are somewhat startling. The total amount of power required in the territory under study is esti-

over one acre or less. Merchantable timber destroyed included 3,160 acres; young growth, 1,570 acres, and previously burned and slash land burned over included 9,789 acres, or a total of 14,519 acres burned over. Fires occurred in May, June, August and September only, the greater number being in June; heavy rains in July accounted for absence of fires in that month.

A classification of causes of fires places responsibility for the greater number of those occurring from known causes upon the settlers, with lumbering operations second, and railways third, with 10.5 per cent.

This report emphasizes in a striking manner the effectiveness of forest fire protection. It is an old axiom that "all fires are the same size at the start," and it is only lack of opportunity that prevents each becoming a large one; the fact that over fifty per cent of the fires were confined to one acre or less demonstrates the efficiency of the Protective Patrol. Credit is given by Mr. R. L. Seaborne, the efficient manager of the association, to the clergy of the district for valuable co-operation in impressing upon their church members the importance of exercising the greatest care with fire in the woods.

## Attacking the Gopher

How to reduce the number of gophers is a problem that seems near solution in Saskatchewan. The Department of Agriculture of that province, in 1920, conducted a gopher contest in the schools, with the result that 1,798 schools entered, and 2,019,233 gophers were destroyed, at a cost to the department of \$3,159.75, or .156 cent each. What this reduction in the number of gophers means in the saving of foodstuffs is hard to estimate, but it would be very great, as an analysis of the pouches of one pocket gopher showed 357 kernels of whole oats.

## Large Taking of Whitefish Eggs

The Dominion Fisheries Branch reports that upwards of 50,000 whitefish eggs have been placed in the Smoke Island hatchery, lake Winnipegosis. These eggs were collected at the mouth of the Waterhen river, which carries the discharge of lake Winnipegosis to Waterhen lake, thence to lake Manitoba. With lake Winnipegosis freezing early in November, the greatest difficulty was experienced in securing the eggs, the tug and outfit finding it necessary to winter at the egg-collecting camp. The collection of 1920 is treble the quantity collected the previous year.

A plant for the manufacture of wood alcohol, acetate of lime, charcoal, creosote and other wood-tar products has been established at South Westminster, B.C. It will use alder wood that will be obtained from the reaches of the Fraser and Pitt rivers.

## Effective Forest Protection

A review of the annual report of the Laurentian Forest Protective Association shows some interesting features. The area covered by the protection staff was 7,795,507 acres, at a cost for patrol of .006 cents per acre. There was a total of 105 fires, 53 of which burned