Conservation

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Rats Eating Matches not a Cause of Fire

Elaborate Experiments Prove They Would Rather Starve than Eat Match Heads

In the lengthy category of reasons and excuses for fires, that of friction due to the gnawing of match heads by rats and mice has had to bear its full share. When all else could prove an alibi the rats were blamed. The increasing number of fires attributed to this cause emphasized the necessity of establishing the possibility of it being bona fide.

The Underwriters' Laboratories, Inc., of Chicago, after careful and prolonged experiments by its fire prevention engineers, has reached the definite conclusion that rats would rather starve to death than eat the modern match heads.

This conclusion was arrived at through a series of elaborate tests, covering a period of eight months and more, in which numbers of rats were placed in enclosures with boxes of matches arranged so that they could reach them. The first test was made without feeding or watering the rats; in the second they were given water, but no food; and in the third they were given food and water for two weeks and then starved, but supplied with water until they died. Occasionally the strawboard boxes were gnawed and the boxes broken open and matches scattered all around, but although frequently the rats ate one another, in no case were the match heads gnawed nor was there any apparent danger of ignition.

With this positive evidence in their possession, investigators of fires will view with greater suspicion a fire which can be attributed to no other cause than that of rats gnawing matches.

The value of Canada's fish production in 1919 was $56,485,579 of which $40,473,536 was the product of British Columbia and Nova Scotia, British Columbia canned salmon representing $13,842,140.

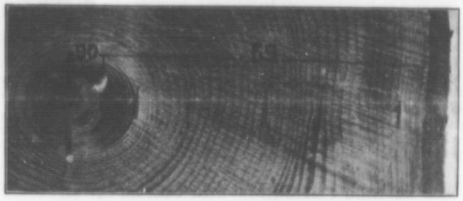
The Laurentide Pulp and Paper Company is cutting a thousand cords of hardwood to be used in the manufacture of ground woodpulp. The species being cut are poplar, white birch, yellow birch and maple. The two first will be floated and the two latter will be transported to the mill on barges.

Conserving Time in Growth of Forests

Application of Forest Practice to Expedite Production of Pulpwood Species

The illustration herewith represents a transverse section, 14·3 inches in diameter, cut from the stump of a balsam one foot from the ground, which grew in the forests of Quebec near Grand'mère. It was found in the mixed type of forest, mostly yellow birch, and conifers, both balsam and spruce.

The annual growth rings, counted from the centre and marked off in 10-year intervals, show that the tree is 149 years old from stump height. It took 90 years to grow the first inch in diameter, while the remaining 13·3 inches were made in 59 years.



PORTION OF A SECTION OF BALSAM TREE 149 YEARS OLD.
Note suppressed growth of 90 years and rapid growth when released.

Here is where the forester, with his knowledge of nature's methods, is able to assist her in shortening the time consumed in the production of forests.

In this case the growth suppression in the centre was caused by the dense shade of a large yellow birch, under which this tree struggled against great odds for ninety years. It probably was the hardiest of a large group of conifers, all of which, save this one, were finally killed in the struggle for light. Sixty years ago some agency, probably wind, removed the yellow birch, which was and still is of only secondary importance on our pulpwood lands. This allowed the stunted balsam to make rapid growth and take its place in the crown cover. Luckily, the suppression had not continued long enough to completely kill the conifer's power of recovery. This fortuitous act of the wind can be emulated by the forester with his axe over a large part of this mixed type.

In many places, groups of young conifers under huge hardwoods are struggling to keep alive until opportunity will enable them to take their place in the crown cover and produce mechantable material. This period of waiting can be reduced by the removal of mature timber. In the case of the tree in the illustration, ninety years could have been saved in its growth period.

Mature timber, whether conifers or hardwoods, is not an active asset to the country. It is a mere hoard, drawing no interest and of no present benefit. In the yearly windthrow or decay from old age in the mature forest we are neglecting a very valuable source of income.

It is of prime importance, in the conservation of forest resources, that both a method of transportation and a profitable market for our mature hardwoods be rapidly developed.—*G. A. Mulloy.*

City Rest Rooms

Calgary retail merchants have subscribed to a fund to open a rest room in that city. It is felt by the merchants that a rest room will be of benefit to their trade, as country visitors can make it a rendezvous, and leave their parcels, etc., while shopping in the city. The rest room will also encourage farmers to have their wives accompany them when attending the market, as they will be assured of comfortable quarters. Rest rooms are a valuable addition to the social service which cities may render to the neighbouring farmers, and the cost will no doubt be amply repaid by the increased number induced to visit the city to trade.

In 1918 there were 253 plants in Canada preserving, canning and evaporating fruits and vegetables.

Forest Conservation Affects the Reader

Information on Forest Conditions being Supplied by Commission of Conservation

Where future supplies of pulpwood may be obtained is a problem very prominently in the forefront with the pulp and paper interests. With the tremendously increased demand for newsprint, the price has soared to a point where publishers are obliged to pass the additional cost on to the newspaper readers, and the public is commencing to appreciate how intimately associated are the forests with its daily life.

New capital is constantly being sought and new developments planned to overcome the newsprint shortage; this is creating a demand for information as to what areas of pulpwood are available, and their proximity to possible water-power sites.

The Commission of Conservation, as a result of its forest survey of British Columbia, has published, in a report "Forests of British Columbia," details of available supplies of pulpwood and saw timber in that province. This information has proven of much value to operators and investors, and the demand for copies of the report has been heavy.

Supplies of pulpwood in British Columbia are estimated at 386,000,000 cords, of which 358,000,000 cords consist of spruce, balsam and western hemlock, and 28,000,000 cords of jack pine, lodgepole pine, poplar and cottonwood. Of this amount 185,000,000 cords is at present available.

Two large newsprint mills are in operation in British Columbia, one at Powell River and the other at Salmon Arm, while a building paper plant is established at Sidney, Vancouver Island. Intensive development of the pulpwood areas is forecasted in the number of reported projects under way for the establishment of pulp and paper mills.

Copies of the report on British Columbia forests and of that on "Waterpowers of British Columbia," are available to those interested in these natural resources, and may be obtained from the Commission of Conservation.

The baking and confectionery industry in Canada in 1918 consumed 2,707,014 barrels of flour.