

Even Light Burning Injures Pine Forests

The effect of light surface fires on pine timber is to kill or damage more than half of the mature trees, according to findings just announced by the U.S. Forest Service.

The studies were made on the Wallowa and Whitman national forests in the Blue Mountains of eastern Oregon. Several typical stands of western yellow pine, where surface fires had recently burned, were selected. The region had been periodically run over by such fires for a long time. The most recently burned areas were carefully surveyed and all the trees individually studied to find the effect of the fire.

As a result of this survey the following facts were verified: a surface fire falls from one to three merchantable trees per acre, by eating out basal fire scars; it makes fire scars at the base of 42 per cent, or nearly one-half, of all the merchantable yellow pines; it actually burns to death more than 3 per cent of the trees—that is, they are killed by the heat of the surface fire at their bases. In short, of the mature trees, more than one-half of the total stand suffer more or less damage.

The stands were selected to insure results representative of the region, according to the Forest Service investigators, who draw the conclusion that deliberate light burning in such localities to remove brush and undergrowth is distinctly uneconomical, particularly since successive surface burnings only heighten the injury to the trees and make it cumulative.

Forestry Progress Depends on Public

Educational Devices Employed by Forest Fire Protective Associations

"Progress in forestry depends more upon what the public permits than upon what foresters and lumbermen perform." This is a conclusion of the Forestry Committee, as expressed at the Conservation Congress held at Washington, D.C., November 17th to 20th.

"As a consequence," the committee goes on to say, "public education is of prime importance, and the best methods of educating the public demand special study. Since no one else has the interest, or the requisite forestry knowledge, foresters and lumbermen must learn this trade or profession in addition to their own. It is not forests, but the use of forests, which we seek to perpetuate and therefore, to be sound and convincing, education must include a knowledge of the lumber business."

In presenting some of the educational devices the committee commended particularly the booklets prepared by various forest fire

Attitude of Railways Towards Forest Fires

Vice-President of Canadian Pacific Expresses His Views on Situation—Policy of Construction, not Destruction, Must be Pursued

"While it is not possible to agree fully with the statement as to the prevailing attitude of railway companies in the past on the forest fire situation, the following extracts from an address by Mr. George Bury, Vice-President of the Canadian Pacific Railway, at the Winnipeg Convention of the Canadian Forestry Association, are of great interest since they bring out very clearly some features of the general situation to which nothing like adequate attention has been given in the past. The extracts are as follows:—

"Taking the transportation of a country as one of the greatest of its assets, it cannot be charged that the setting of fires by locomotives is due to carelessness, for that would be burning up one of the greatest sources of revenue. Not so, however, the fires started in unprotected slashings left by road builders, others left by settlers, fires left unquenched by prospectors. A trip over roads built by provincial governments in recent years has shown that no precaution was taken to dispose of the slashings, but that they were simply left where cut and every incident offered to running fires.

"But both Provincial and Federal governments must go further than either has yet done. The open burner of the sawmill must be abolished; prospectors who leave unquenched fires must be followed and punished; government road-building gangs and umbermen must be made to put out their camp fires and effectively dispose of the debris of the camp as well as burn the slashings; sawmills must be made to set closer watch on their camps as well as institute better patrol of the timber limits and in the vicinity of the mills. While great advancement has been made in these lines in the past few years, even greater must be made. The logging railways must also be brought under better supervision. On lines of these railways they seldom clear the right of way; the accumulation in yards adjacent to mills must be disposed of instead of being a direct connection for fire between the burner and the forest. An investigation held by standard lines disclosed that the logging roads, the very ones that should protect forests, are responsible for a much

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"A better system of patrolling must also be instituted. At present the way of doing the patrolling is not steady enough nor done by men who are capable of taking the initiative in times of stress. All of these deficiencies are matters that this Association must press still harder upon the governments responsible for such action as will not only stop the spreading of fires, but will get to the root of the evil—carelessness.

"It has been estimated that the revenue derived by a railway from the production of one acre of heavily timbered land is equal to the accumulated traffic of an acre of agricultural land for 80 years. You will thus see what the preservation of forest adjacent to its lines means to a railroad. The opening of timber tracts by a railway is followed by an influx of trappers, prospectors, surveyors and settlers, each intent upon his own interest and without the restraint of organized authority. Prospectors impatient to follow up their discoveries, loggers cutting the virgin timber and homesteaders clearing land for the plow, have all been responsible for the starting of fires. But long before railways, prospectors or surveyors traversed the country, fires were set by natives to drive out the game. Modern thought and a policy of construction instead of destruction has supplanted the native's idea and also the primitive lumberman's that the lumber areas would last as long as people now living demanded it, and that nature would supply an alternative. Man must assist nature in supplying the alternative, and this is being done by forest preservation.

"I would now call your attention to what we are doing for the protection of our own timber lands in British Columbia. In the Cranbrook District we have some 543,486 acres in twelve Fire Reserves. On these reserves, mounted patrols have been established; on three of them trails are being cut out to make them easier of access; and on four of them telephone communication is being established. I might also mention that on the largest of these reserves the operation of burning the logging slash was carried out with great success during the month of May."

box legend which points out that, while a match has a head it cannot think for itself, but is dependent on the thought of the user to keep it from doing harm in the woods.

Fox Farming in Yukon

Animals Dying in Captivity—Shipments to Eastern Dealers

The enthusiasm concerning fox catching and farming in Yukon has materially waned during the past few weeks, owing to the fact that the price of foxes has decreased nearly 50 per cent since last summer and that hundreds of foxes held in captivity have died from some unknown cause. Many of these foxes were black, and, in some cases, as high as \$1,500 to \$2,000 had been paid for them. One dealer who, it is said, could have sold his stock of foxes in July for \$65,000, sold two weeks ago for less than \$35,000, the latter price being, to some extent, due to the decline in prices, but, also, to the fact that many of the animals had died in the meantime. One young black fox, for which \$1,600 had been paid, died five days after being placed in the corral.

Owing to the decline in price, fully 150 young foxes, all of the red variety, held in captivity in southern Yukon, have been turned out to return to their native haunts in the wilds. Previous to sickness developing among foxes in captivity here, upwards of 200 young ones had been shipped from Whitehorse alone, to fox ranches in New Brunswick, Prince Edward Island, and to dealers near Boston, Mass. At present there are not over 50 held in this locality.

A number are experimenting with mink farming, but great difficulty is experienced in keeping them, wire corrals offering little resistance when they seek their freedom.

Owners of black and silver gray foxes are not discouraged over the slump in prices, but contend that they will be more valuable than ever within a few months.—U. S. Consular Reports.

PHYSICAL EXAMINATION FOR WORKING CHILDREN

Upon the recommendation of a special commission in New York State, the legislature has enacted that, before a working certificate is issued, a thorough physical examination of every child shall be made by a medical officer of the Department of Health, and that a duplicate record of the results of such physical examination shall be transmitted to the Department of Labour. During six months, this law in New York city alone, prevented 324 physically unfit children from going to work in factories.

It would be well also that the definition of labour be amplified, as brain work is more exacting upon the physical strength than muscular work, and under present conditions the environment during working hours of the average skilled mechanic is infinitely more sanitary than are most of our offices and stores.—C.A.H.