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HALIFAX CONVENTION INDEFINITELY POSTPONED

Owing to the disturbed situation caused by the war, it has been decided by the President and Directors of the Canadian Forestry Association to cancel the arrangements for the Forestry Convention, which was to be held in Halifax, Nova Scotia, Sept. 1 to 4, and to postpone the meeting till further notice.

Two things among others are necessary to the success of a forestry convention. One is the attendance of a large number of delegates, and the other is the reading of the reports of the papers and discussions by the people who are not able to attend.

It was felt that it would be impossible to secure either of these factors under conditions bound to prevail for some time in Canada.

Members are urged to take note of this change and to let it be known that all railway arrangements for the Convention are now cancelled, and that anyone going to Halifax on

the dates previously advertised with the expectation of being a delegate will have to pay full return fare.

In the meantime, it may be said that much of the work done in preparation for the Convention, such as the Secretary's lecture trip and distribution of literature, will not be lost, and also that whatever is done in regard to this or other future meetings the members and the public will be duly notified.

Meetings in Nova Scotia.

Carrying out a plan formed last winter, a series of meetings was held throughout Nova Scotia to explain the objects of the Convention. At these meetings addresses illustrated by stereopticon views were delivered on forest conservation, particularly as it affects Nova Scotia. At the close of each meeting discussion was invited upon the subject.

While the convention is not now to be held as originally planned, much information was spread throughout the province and much interest aroused which will bear fruit later.

The Secretary devoted from June 18 to July 18 to this work. He first visited Prince Edward Island and interviewed the Premier, Hon. J. A. Matheson, and Hon. M. McKinnon, Minister of Agriculture, in regard to the representation of the Province at the Convention. The first lecture was delivered at New Glasgow, and the others, in order, were held at Sydney, Antigonish, Liverpool, Shelburne, Yarmouth, Weymouth, Bear River, Annapolis, Middleton, Bridgewater and Kentville. A second visit was also made to Liverpool to address the Annual Meeting of the Licensed Guides of Nova Scotia. A brief visit was also paid to Windsor.

In Halifax the Secretary, along with Mr. F. C. Whitman, Vice-President, consulted Hon. G. H. Murray,

Prime Minister of Nova Scotia; Hon. O. T. Daniels, Commissioner of Lands, and other members of the Government, and met a number of prominent citizens.

During most of this trip the Secretary was assisted by Mr. B. R. Morton, B. Sc., F. of the Dominion Forestry Branch, who is conducting an investigation into certain forest features of Nova Scotia. Mr. J. B. Whitman, Deputy Commissioner of Crown Lands for Nova Scotia, was also present at several of the meetings.

On his way to and from Nova Scotia, the Secretary was in consultation with the President, Mr. William Power, M.P., at Quebec, and throughout the trip he was in constant touch with Mr. F. C. Whitman, of Annapolis Royal, who drew up the plan of the meetings and assisted in every possible way.

The meetings were of particular interest in the lumbering districts, and the newspapers throughout the Province gave very full reports. The discussions showed that the owners of wood lots are becoming alive to the necessity of properly cutting their timber in order to keep up a continual supply from their lots.

New Head of Forest Laboratories.

Mr. John S. Bates has been appointed Superintendent of the Dominion Forest Products Laboratories in connection with McGill University, to take the place of Mr. A. G. McIntyre, who resigned to take charge of a new paper mill at Bathurst, New Brunswick.

Mr. Bates was born at Woodstock, Ont., and is a graduate of Acadia University in arts and science. After leaving Acadia he went to Columbia University, New York, and graduated in chemical engineering, specializing in pulp and paper. He made a study of the utilization of Southern pine waste while at Columbia, and since the conclusion of a brilliant course there has had practical experience with the Union Bag and Paper Co., of New York, and Arthur D. Little, Inc., chemists, of Boston. Mr. Bates has begun his new duties with the most favorable prospects.

The Late Overton Price.

Foresters and forest conservationists throughout America learnt with very deep regret of the recent lamentable death of Mr. Overton W. Price. Mr. Price, while only thirty-nine years old at the time of his death, had been connected with forestry work for about twenty years, and his reputation was international. During Dr. Gifford Pinchot's term as United States Forester, Mr. Price was his assistant. He resigned shortly after Dr. Pinchot left the service, and since that had been practising as a consulting forester. He was also Vice-President of the National Conservation Association. He visited Canada on many occasions, and at the time of his death was consulting forester to British Columbia. Mr. H. R. McMillan, Chief Forester of British Columbia, sends the following appreciative note on Mr. Price's work:—

'Canadian forestry will long feel the loss of Overton W. Price. Mr. Price's first services to Canadian conservation were indirect. Under his influence, working in association with Mr. Pinchot, the educational effect of the United States Forest Service knew no international boundary.

'The crystallization of forest sentiment in Canada, the springing into life of Canadian forest organizations can be traced directly to the international forest leaders of the United States, of whom Mr. Price was one.

'Mr. Price's direct services to Canadian forestry began in 1906 when, as representative of the United States Forest Service, he attended the Canadian Forestry Association Convention in Vancouver. His greatest service to Canada was rendered while acting as consulting forester to the Province of British Columbia during the two and a half years previous to his death.

'The Royal Commission on Forestry, with Mr. M. Allerdale Grainger as secretary, had shown the necessity for a Provincial Forest Service, and had outlined an organization, but the work from the ground up remained to be done. The credit of the organization belongs to Mr. Price. His breadth of vision conceived it, his zeal carried it through, his counsel guided it, his standards are and will be its inspiration. His memory will live long with foresters in British Columbia.'

Strength of Hickory.

Hickory is the strongest Canadian wood. When properly seasoned a hickory column will support a weight of twelve tons per square inch cross-section, which is considerably more than what could be borne by a pillar of cast iron or steel of the same length and weight.

Forest Fires.

The reports received from east and west indicate that this was in some respects the worst season for forest fires since an organized attempt has been made to fight these conflagrations. In most parts the snowfall was unusually light. It was hoped that copious spring rains would make up for this, but, on the contrary, spring opened very dry and cold, with the result that by the middle of June vegetation was scarcely more advanced than ordinarily it is in the early part of May. The result was that the very dangerous period extended at least a whole month longer than usual. More effort to discover and fight fire was put forth than ever before, with the result that in spite of the bad season losses were kept down a much below what was feared. Such a season as this indicates that under ordinary conditions thorough organization of the fire fighting forces can almost completely eliminate forest fires.

Protect Young Timber.

Mr. Clyde Leavitt, chief fire inspector of the Railway Commission, stated, in an interview, that the railways were doing everything in their power to prevent bush fires near the railway tracks from spreading. 'It seems to me,' said Mr. Leavitt, 'that there is too little attention paid to the fires in the cut over areas, and too much protection concentrated on the merchantable timber limits. If more effort were devoted to protecting the young timber it would give it a chance and prevent the fire from spreading to the limits where the trees are large enough for merchantable use.'

MAKE IT KNOWN.

Many people first have their attention directed to forest conservation by conventions. They join the Association just before or at the Convention, and consequently the literature sent out to those already members may not reach them. Members are, therefore, requested to make known to any who may be interested the fact that the Halifax Convention, Sept. 1 to 4, has been postponed indefinitely, and that all railway and other arrangements are cancelled.

Prince Edward County Sand Dunes.

One of the noted features of Prince Edward County, Ontario, is the five mile stretch of sand dunes which lie between Lake Ontario and West Lake. These dunes lie along the Lake Ontario shore in undulating hills some of which rise to the height of 150 feet.

For years past they have formed a great attraction to the tourist, but the nearby farmers, while just as much interested are not as enthusiastic. The fact is that these shifting hills of sand constantly moving under the action of the wind, are a menace to agriculture.

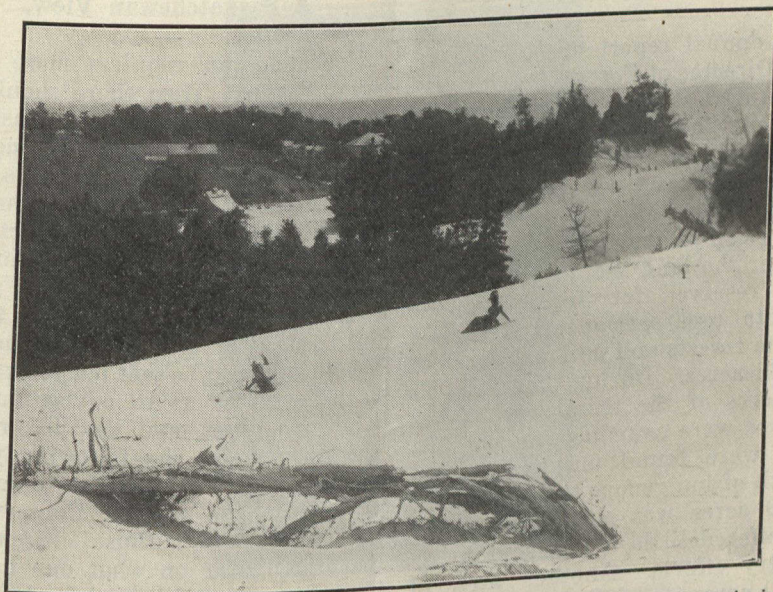
Like all other sand areas the evil is that they will not stay in their original position, but are constantly advancing on the fertile lands causing serious loss. Even the summer resort feature which would seem to

be a permanent industry on the dunes suffers from the shifting character of their snowlike particles. One summer hotel has already been moved twice, and another was recently sold for a ridiculously small price because the three acres of fertile land on which it originally stood has been completely covered by a spur of one of these hills.

Reforestation would doubtless fix the sand and turn what is now a menace into a profit producing and beautiful area. It has been done in France and other countries, and all that seems to be necessary is that it be undertaken on a sufficiently large scale. It is to be hoped that when we have had more experience in dealing with sand lands in Ontario and Quebec the work of reforesting this part of Ontario will not be long delayed.



Evergreen House, Which Has Been Moved on Account of Sand Encroachment.



Sand Dunes 150 Feet High—Looking towards West Lake, with Lake Ontario in the background.



Tobogganing on the Sand Dunes.

Queensland Forests.

The annual report of Mr. N. W. Jolly, Director of Forests for Queensland, Australia, shows that there, as elsewhere, the amount of timber in the forests has been much over-estimated. There are now in temporary reserves 3,211,855 acres, so held until they can be examined to ascertain whether the land should be permanently reserved for forest growth. The total area permanently reserved in state forests and national parks is 881,682 acres. During the year 98,950 acres of the temporary timber reserves were examined, and of this 7,600 were found unsuited to the growth of indigenous timbers. About 30,000 acres was entirely cut over and offered little inducement to re-forestry efforts. Another area of 15,150 acres was estimated to carry 40,000,000 superficial feet of hardwood, of which 30 per cent. was fit for milling purposes. Of the remainder 30,000 acres contained pine and 14,500 were grasslands, the retention of which was necessary in order to provide grass for teams engaged in hauling. The remaining 26,000 acres was estimated to contain 170,000,000 feet of timber of milling size, with probably 50 per cent. more of knotty unsalable timber and considerable young growth. The timber revenue for the year was \$317,230, and the expenditure \$26,980. A nursery has been started in which to propagate suitable indigenous and exotic trees. Efforts are also being made to secure better utilization of pine tops. A pulp company to utilize pine waste has also been started.

A member in the United States writes: 'The *Journal* is very interesting. It is snappy and alive. I am sure we will continue the subscription.'

Professor Wallace P. Cohoe of Toronto University has invented a sausage casing which is made from wood pulp.

A Saskatchewan View.

Saskatchewan requires more Forestry Farms. Then there should be at least two lecturers continuously on the road to hold meetings, giving lectures on forestry, shelter-belts, etc. The gospel of tree-planting should be brought to farmers. These lecturers could take the names and locations of farmers who are anxious and ready to plant trees, send in the lists to the head office in the province, and inspectors should be sent out to examine each farm, so as to advise farmers where to plant, and how to prepare the ground for the following year's planting. It is all right to expend money on the general Conservation Commission to enthuse citizens the Dominion over on what our natural resources are and how they should be conserved, but the practical working end of the problem should not be neglected. Give Saskatchewan forestry farms and practical men to meet progressive farmers, and in a few years the treeless, windswept prairies would be changed to a park-like country, with trees on every farm.—*Saskatchewan Farmer*.

Pennsylvania Forests.

Pennsylvania is not only doing a good deal in the way of forestry, but it is letting the people know it by means of leaflets and circulars.

The state, beginning in 1897, bought back 984,064 acres of non-agricultural lands for \$2,221,993, an average of \$2.26 per acre. This is the state forest.

The state now employs 56 foresters and 92 rangers.

Over 3,000 miles of trails and 75 miles of telephone line have been built. Fire observation towers have been constructed.

Improvement cuttings are being made.

Three large forest tree nurseries and 16 small ones have been started.



HON. W. J. ROCHE, MINISTER OF THE INTERIOR.

All federal forests in Canada come under the Department of the Interior. Hon. Dr. Roche takes a keen personal interest in forestry work. He recently accepted the office of Director in the Canadian Forestry Association.

Over 8,500,000 forest tree seedlings have been planted on more than 4,000 acres.

The forests are now being used as sanatoria.

Campers, hunters and fishermen are invited upon State land.

State Forests afford employment where work is scarce.

Cities and towns are supplied with pure water from these protected forests.

The flow and purity of streams which head within them are regulated and conserved.

By recent enactments the Department of Forestry is permitted to enter into co-operative agreements with local forest fire associations, and also to designate certain of the foresters in the state service to be known as District Foresters, who shall aid farm and woodlot owners in the management of their woodlots, report on fire protection, and take general charge of the forest work in the district.

STUDYING EUROPEAN FORESTS

Mr. R. H. Campbell, Dominion Director of Forestry, Department of the Interior, Ottawa, is at present on a trip to Europe, where he is inspecting forestry methods.

Lookout Towers.

At a cost of only \$50 the Dominion Forestry Branch recently erected a lookout tower fifty feet high, overlooking two hundred square miles of woodland. Similar towers are being built on all the Dominion forest reserves in the West in order that fires may be seen and extinguished before they have time to spread beyond control.

Forest fires in the United States have caused an average annual loss of 70 human lives and the destruction of 25 million dollars worth of timber.

Juniper from the Indian reservations of New Mexico and Arizona may prove an excellent source of material for lead pencils. Manufacturers are searching the world for pencil woods.



Modern Co-Operative Forest Protection—Mr. Henry Sorgius, Manager of St. Maurice Fire Protective Association on an inspection trip. This shows method of patrolling rivers and lakes by canoe.

Another Protection Association.

On June 4 a meeting was held in Montreal to consider the question of the formation of a forest fire protection association by the representatives of a number of camping and summer cottage associations. By request the gathering was addressed by Mr. Ellwood Wilson, Vice-President of the St. Maurice Valley Fire Protection Association and the Secretary of the Canadian Forestry Association. The territory lies north and west of Montreal, embracing the Lake Manitou, Trembling Mountain and Mt. Laurier District. A committee was formed to deal with the matter, of which Mr. R. A. Outhet, 54 Beaver Hall Hill, Montreal, is Chairman, and Mr. A. R. Whitall, 734 Mullins street, Montreal, Secretary. As this territory lies between the St. Maurice Valley and the eastern edge of the Lower Ottawa Forest Protection Association territory, it is possible that a new association will be formed here, so that the whole area between Three Rivers and the Gatineau will be covered by fire protection associations.

Lumbering is the greatest American manufacturing industry and is exceeded only by agriculture in supplying the essentials of life.

Are Associations Necessary?

A gentleman writes: 'In regard to the plan of improving forest conditions by propaganda carried on by an independent organization like the Canadian Forestry Association.' He says: 'Instead of the individual subscription, helping to make the Hurrah, should not the Government take up the burden? Is it not a most important matter to the Government? Have they not in the past been lax in control, and have they not reaped all the revenues from the forests? and when improvements are made by reforestry will not they reap the benefit?'

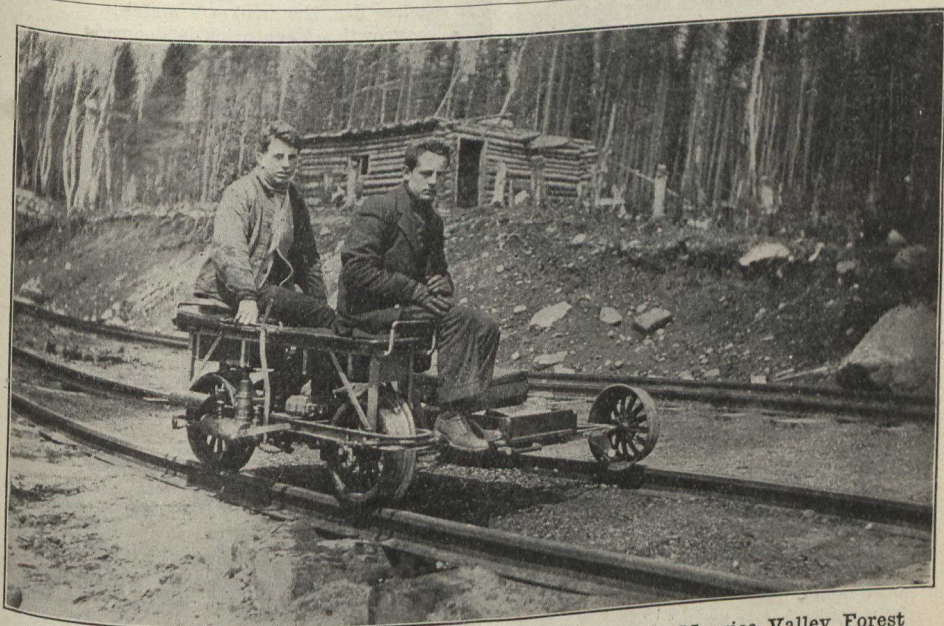
This is a question frequently asked. Doubtless if our conditions were ideal and all citizens took a keen interest in public affairs, and governments were truly representative of this intelligent activity, there would be no need of independent societies like the Canadian Forestry Association. But as it is, those citizens who really care about forests or mines or any other national asset are at present, probably, in the minority. In this case it is the minority who urge reforms for the good of the whole country. Gradually the public is becoming aroused, and when it is thoroughly awake then organizations like the Canadian Forestry Association can disband, but until then they are a necessity and the larger and more

vigorous they are the more rapid will the process of awakening be. Government departments are accomplishing a great deal, but they can never carry on an educational propaganda like an independent organization and that is the field of our Association.

Besides this it is a very short-sighted view which sees only increase in government revenues in improved forest management. The governments gain, but the general public gains ten times as much in increased trade, in improved farming conditions, in safeguarded waterpowers and navigation, and in increased rail and steamship traffic. Timber is a heavy bulky raw material, and before it is worked up for the use of man and transported to where he desires to use it much labor must be expended, the results of which benefit the whole community.

Wedding Bells.

On June 30th, Mr. A. G. McIntyre, former superintendent of the Dominion Forest Products Laboratories and Editor of the Pulp and Paper Magazine, now manager of the pulp mill of the Bathurst Lumber Co., at Bathurst, N.B., was united in marriage to Miss Josephine Clarke, daughter of Mr. and Mrs. W. G. Clarke, of Bear River, N.S. The wedding was solemnized in the Baptist church at Bear River, by Rev. W. E. McIntyre, father of the groom. Mr. and Mrs. McIntyre have taken up their residence at Bathurst. The many friends of both the contracting parties, who are widely known in forestry and lumbering circles, will wish them every happiness.



Modern Co-Operative Forest Protection—Rangers of the St. Maurice Valley Forest Protective Association patrolling the railway line on a gasoline speeder following a railway train.

Conservation—What It Is Not!

A common popular misconception with regard to conservation is that it consists in merely saving or hoarding natural wealth for the use of future generations. Nothing could be further from the truth. Mere hoarding is not conservative; it is almost as wasteful as reckless destruction. Wise statesmanship regards our natural resources as so much capital of which the State is

the trustee. The community is entitled to the interest, but the principal should be conserved for all time. An exception to this rule must be made in the case of minerals, such as coal, of which there is only a limited supply, that, when once used, can never be restored. But in the case of our forests, our lands, our seas and our wild animal life, the existing supply of timber, of soil fertility, of fish and of fur-bearers, should never diminish, but should rather increase.

—*Montreal Witness.*

Yukon Timber Protection.

A member writing from the Yukon says, 'I know of no other place in Canada where our limited area of timber should be so zealously guarded as in the Yukon. We have many uses for wood here, whereas it is not so necessary in other parts of Canada. We must depend entirely upon it for fuel, and we cannot import timber for mining purposes as it would be too expensive and we would have to let low grade mines remain undeveloped. Notwithstanding these facts, our timber land is burnt over and thousands of cords destroyed every year. Most of this destruction could be avoided. The fires mostly occur along the Yukon valley on account of people making their way into the interior in small boats. They land on the bank of the river to cook their food. After this is done they return to their boats, leaving the fires to go out or to ignite the nearby woods just as may happen. This could be stopped by increasing the Mounted Police patrol, and this should be done as early as possible, as we expect large travel to the new gold strikes during 1914.'

Ontario Beaver Thrive in Minnesota.

There are now about four hundred beaver in Itasca State Park in Minnesota. These are all descended from one male and two females sent from Algonquin National Park, Ontario, in the spring of 1902. The beaver were sent to the Governor of Minnesota by the Prime Minister of Ontario. Five beaver were sent, but two died on the way from Ontario to Minnesota. Within twelve years the descendants of these animals have spread themselves all over the west side of Itasca Park, an area of about twenty-five square miles.

Reasons for Growing Trees.

Trees retard wind.
 Trees prevent drifting of soil.
 Trees lessen evaporation.
 Trees hold snow.
 Trees increase yield.
 Trees lessen the effect of hot wind.
 Trees make a home for birds that eat harmful insects.
 Trees furnish fuel and fence posts.
 Trees make a place home-like and shelter stock, garden and fruit trees.
 When clean-cultivated trees will do well. If left to fight weeds and grass they are quite apt to fail.—H. A. Bereman.

The Summer Camp.

A joyous time in wood and copse,
 To wander free from morn till night;
 O'er grassy vales and mountain tops,
 And back to camp, a welcome sight:
 With the purling brook hard by.

The forest bids with open arms,
 To nature seekers one and all;
 Partake in full of all her charms,
 So rich in life that ne'er can pall:
 And the bubbling brook hard by.

Does not a scene so bright and free,
 Bespeak a meed of thought and care;
 A constant call to you and me,
 To breed no devastation there:
 With the sparkling brook hard by?

A careless fire, the smoker's match,
 The growth of centuries is doomed;
 With sick'ning haste the giants catch,
 The pleasing view's for aye entombed:
 And the brooklet now is dry.

* * *

We have a duty, sacred trust,
 The young and old, the small and great;
 For each one may, he can, he must,
 Protect our woods from such a fate:
 And the babbling brook hard by.

—R. F. Child, Victoria, June 15, 1914.

CO-OPERATIVE FOREST FIRE PROTECTION.

A bulletin (No. 42) has just been issued by the Dominion Forestry Branch on *Co-operative Forest Fire Protection*, by G. E. Bothwell, B.Sc.F.

This bulletin explains the method of forest fire protection pursued by the co-operative association of timber owners, with special reference to the work of the St. Maurice Valley Forest Protective Association. It gives the principles of the organization, the cost to the timber owners, the assistance given by the Provincial authorities, the methods used to combat fires by constructing trails, telephone lines, and lookout towers, and the equipment used by patrolmen and fire fighters.

Copies of this bulletin may be had free by those interested upon applying to the Director of Forestry, Department of the Interior, Ottawa.

The labouring men should support forestry because seven-tenths of the products of the forests go to the men engaged in logging and lumbering.



Modern Forest Protection—Ranger of the Dominion Forestry Branch looking over the country from a lookout tower. He will report conditions to headquarters by telephone, the station being located at the foot of the tower.

The Reforestation of Sand Lands.

Mr. R. F. Davy, Assistant Engineer, Dept. of Public Works, Timiskaming, Que., writes: 'The reforestation of sand lands is a timely subject, and it naturally follows how best to achieve this result. Questions will arise as to which is the most suitable timber to grow; whether to sow seed or plant saplings; the cost per acre; amount of labor required and proper season in which to do the work. Again what benefits are to be derived, also, will these benefits be immediate or in the far distant future. Will the reforestation of sand plain in the backward counties of Ontario, for example, ever be of benefit.'

'Those best informed know there are many townships, and even counties, that are really barren and unfit for habitation, and are unable to support a population even in poverty. Some will use the argument that every tree planted will assist to maintain

a more uniform flow in rivers than when areas are devoid of timber. Even admitting this argument, do we not see something more tangible ahead of us. A child will in 90 per cent. of circumstances support itself and be of assistance to the community at the age of twenty-one; a tree likewise planted by seed or sapling will support itself and likewise be productive from twenty-one years of growth. It will be of value commercially speaking, and from the same area an everlasting growth of timber can be maintained, reaching a maximum value at the end of 100 years. More figuratively speaking, an acre of small trees at the age of, say 21 years, will be worth \$15.00; at 30 years, \$75.00; at 60 years, \$200.00; and at 100 years, \$1,000.00.

'The above figures would vary with the species of timber and the demand, and are used only as an argument. To my mind this work should not fall upon the individual but upon the Government.'

What is Forestry?

(So much interest has been expressed in the Circular recently issued by the Association entitled 'What is Forestry?' that it is here reproduced.)

What Is Forestry?

Forestry is the science and art of making the best permanent use of the forest.

For What Purpose?

To increase the wealth and comfort of man. It seeks to preserve forests only in so far as these may minister to man's well being.

Does It Demand That No Trees Be Cut?

No. It aims to have every acre of land in the country put to its highest use: Wheat land to wheat, pasture land to pasture; pineland to pine; spruce land to spruce, and so on. It would clear farming lands as soon as that may be done profitably, but it urges that absolute forest land be so cut over that a new and better crop of trees will take the place of the virgin crop.

What Is Absolute Forest Land?

Land that will never grow anything profitably but trees.

What Interest Has Canada in Forestry?

Over half the soil of habitable Canada is fit only to grow trees.

Is Not Lumber Going Out of Use?

On the contrary, in spite of concrete, steel and other substitutes, more lumber is being used today the world over than ever before. The price of timber is constantly rising. Nearly all the countries of the world are importing timber. Canada is one of the very few timber-exporting countries. In her large forest area Canada has a resource which should go on increasing in value every year.

Would Forest Preservation Kill Lumbering?

No. Forestry does not prohibit the cutting of ripe trees any more than agriculture forbids the cutting of ripe wheat. It simply asks that cutting on non-agricultural lands be done in such a way that a new and better crop will come on. It also asks that timber areas be protected from fire and from injurious insects, so as to save both the mature trees and the young forest, the hope of the future. It looks to making lumbering (timber harvesting) just as permanent a business as farming.

Would Not Forests Crowd Out Farms?

No. All the land that the forester asks for permanent forests is land unfit for farming—too poor, too hilly, too stony. The attempt to farm this land results in poverty, abandoned farms, man-made deserts. On the other hand, the maintenance of forests on such lands means a distinct gain to agriculture, especially in regard to moisture conditions, wood supply, wind-breaks, covers for insectivorous birds and evenness of stream flow. Every interest in the country, in fact, is benefited and none injured by retaining forests on non-agricultural lands.

Is Forestry Worth While?

It is. The value of forest products in Canada in their first stage of manufacture (in the sawmill yard) is estimated by the Dominion Forestry Branch at \$170,000,000 per year. This timber is at the base of all our manufacturing. It forms a great proportion of our transportation business, and the maintenance of forests on the uplands keep our streams in even flow, thus preserving our water supplies and water powers. Forests are also great health resorts and game preserves.

Have We Not Plenty of Timber?

We used to think so, but now we know that a few decades will see the remainder of our virgin timber cut. Some authorities think the United States will have exhausted their virgin timber by 1930 or 1935. Then, if they should come to Canada to get their supply, our authorities tell us our timber would last seven years.

What Can Be Done?

The first thing to do is to stop forest fires which consume at a dead loss seven or eight times as much timber as the axe of the lumberman. The great factor in this is the educating of public opinion. When the public is aroused forest fires will stop. Much can be done by disposing of the debris left after lumbering, by screening smokestacks of locomotives, regulating times of settlers' brush-burning, and by patrolling timber lands to reduce the danger from tourists, campers, prospectors and from lightning. When forests are protected, then will come methods of reforestation.

Does Anybody Care?

Many care, but not all. Last year the different governments in Canada spent considerably over one million dollars in forest protection and administration, chiefly in fire protection. Lumbering and railway companies and private individuals spent half a million more. This included trail and telephone-line building and the introduction of oil-burning locomotives on some railways.

How Can I Help?

One of the most efficient methods is by joining the Canadian Forestry Association. This is the national organization which has for its object the awakening of the public to the need and value of forest protection. In numbers there is strength, and those who believe in forest conservation have, by banding together, done much more in getting governments, corporations and private individuals to adopt better methods than they ever could have done by separate effort. The work of the Association, which is constantly growing, has been endorsed by leading public men. Joining the Association will keep you informed of what is being done and show you how you can help. The membership fee is the nominal one of One Dollar per year, and this entitles members to receive, without further charge, the *Canadian Forestry Journal* (monthly) the report of the addresses, papers and discussions at the Annual Convention, and other publications issued from time to time. If you are already a member you can assist by sending in the names of those who may be interested.

Timely Reminders.

The British Columbia Forest Branch is not only endeavouring to prevent and fight forest fires but it has entered upon the work of educating the public to help in fire prevention. The Branch has distributed a picture, a copy of a painting entitled 'Putting Out the Camp Fire.' These pictures are being distributed chiefly among school children of the Province, but also to country hotels and banks, sawmills and logging camps, post offices, stopping places, stores, government buildings, steamships, etc.

The Branch has also issued a pocket whetstone bearing on the back the following:—

WHEN YOU ARE IN THE WOODS
Keep Your Axe and Knife Sharp
and
BE CAREFUL
Not to Start
FOREST FIRES.

Presented by the Forest Branch Dept. of
Lands, Victoria, B.C.

The pocket whetstones were distributed among men of the woods of all kinds, as loggers, hunters, fishermen, surveyors, prospectors, settlers, rural mail carriers, and cruisers.

Samples of the material were sent also to newspaper editors and to clergymen. Altogether over 55,000 of the various posters, pictures, whetstones, and circular letters were distributed throughout the province. In most cases explanatory letters accompanied the articles to the sundry recipients.

It is confidently expected that the character of the material and the method of its disposal will impress in a forcible manner on the public the importance of care with fire in the woods.

Bears Worse Than Mice.

Mr. David Gillies, of Carleton Place, the well known lumberman, received an amusing letter from one of his old fire rangers on the Upper Petawawa a short time ago. For people who are afraid of bears, it affords an interesting insight into the contempt entertained for these 'varmints' by the real backwoodsman. The ranger writes to Mr. Gillies as follows:—

'Bears are a little troublesome this month. They have broken into the hut at Catfish several times during my absence, and have eaten my provisions and upset everything. I had the window nailed up with inch boards and five-inch spikes, and they tore that off and got in again. They come at night, too, and waken me up. I struck one in the face one night as he was trying to climb in the window, and I scared another away when he started to pull down the barricade. The park men told me I should get a heavy revolver. I am not afraid of bears, but they are more troublesome than the mice and squirrels.'—*Rod and Gun.*

Minnesota State Forests.

Next November the electors of Minnesota will vote on an amendment to the constitution. The state has fifteen million acres of land unsold, and under present laws this must be sold for agricultural purposes. The object of the amendment is to have such of these lands as are unfit for farming turned into a state forest and managed on modern forestry lines. The Minnesota Forestry Association has inaugurated a campaign in favor of the amendment. It is stated that most of these lands are absolute forest lands, and if attempts are made to farm them they will become desert like much of the land that has already been stripped of timber in the state.

Forests and Mines

A. Lakes, Ymir, B.C.

The only redeeming features of the great forest fires in a mining way are, that after them if the plant has survived, there is less danger of another fire and the burning off of timber and brush makes the following of leads on the surface and prospecting more easy. But these compensations are incomparable with the irreparable loss of necessary timber and the protection the growing timber affords against the miner's worst enemy, the snowslide.

The burning off of the country has a pernicious influence on the storage and equable distribution of water necessary for all kinds of mining. The barring of a mountain-top and its denudation of soil, trees and bushes, causes the water it receives to gather so quickly that it will discharge in torrents into the river below, washing out flumes and filling reservoirs with silt and gravel, whilst forests growing on mountain summits and protecting water-sheds, not only collect and retain the moisture and snow, but let the water out gradually and advantageously in the season when most needed.

The rapid thawing in spring of a great fall of snow accumulated during the winter, so far from being advantageous to the mines, and especially the placer mines, and supplying them with an abundance of water, may be detrimental, and often after destroying flumes leaves the area dry and waterless or nearly so.

The writer who has passed some winters in the mountains of British Columbia near Nelson, has had ample opportunity of noting the influence of forest fires in originating and promoting snow slides and of standing timber in preventing and arresting them. Snow slides great and small are very common on either slope of Wild-Horse Creek. The entire valley has more than once been swept by forest fires, leaving patches of timber here and there, usually a thousand feet or more above the river, that next to the river having been burnt out. Above this standing timber some high peaks rise for another thousand feet. Snow slides abound on the latter but rarely reach the valley, being arrested by the standing timber in the intermediate zone. Nearly all the slides of a damaging nature to mining works, start from bare places immediately below the timber but not from within it, although snow there lies deep. In a recent wide slide that skimmed off the snowy crust of a hill for a width of half a mile and a downward length of 1,000 feet, it was noticeable that when the great sheet started it broke off invariably at points

just below the standing timber in an irregular line. The great sheet left this line of parting in a well-defined bench five to ten feet high all along the hill side resembling an irregular brush fence and rolled down into the valley and river in a mass of foaming snow. On the opposite mountain our mine has been troubled by small slides rolling down from the timber above. These would at times block the entrance to the tunnel and separate it from the blacksmith shop. Larger slides in an adjacent gulch frequently disturbed our pipe line supplying power to the compressor. Sections of flumes were carried away causing power to be shut off for a day or more. The difference such annoyances made in mining was shown in the drilling returns and progress of the tunnel. During the summer months the average cost was about \$12 per foot. In March (the worst snow-slide month) it was \$30.00. Many small slides descending from the slopes on either side obstructed our wagon-road to town and train for mail and supplies. These slides had to be dug through for the passage of teams and sleighs. Winter expenses due largely to snow slides, directly or indirectly are usually far in excess to those of the summer months. The existence of these slides is almost entirely due to the burning off of the timber. Before the great fires, slides were few and confined to well-known gulches. Since the fire they have appeared in every direction as much on the open face of the hills as in the gulches. Sometimes the whole snow face of a hill will slide off bodily, in other cases, the slopes are literally channelled by them and at times there is an epidemic in which the hills are said to 'rain slides' only a few yards apart. From our cabin window you can count thirty slides within the space of a mile. Whilst the burning off of timber has removed further fear of fire to the camp and has exposed some prospects on the opposite hill side such could not be worked in winter through fear of slides, whilst those being worked on the other hill are constantly annoyed by them. The aim should be to prevent fires and to stop snow slides from forming by leaving timber to stand and grow at least above the mine. A miner would be very foolish to clear the timber back of and above his mine and use it because it was 'handy' thereby exposing himself and his men and mine to the snow slide. On the other hand it is advisable to clear a certain space around the plant in view of a possible forest fire. In felling such timber all branches should be cut off and piled away and burnt by themselves as 'Slashings' are fire traps and common starter of fires.

CANADIAN FORESTRY ASSOCIATION.

The Canadian Forestry Association is the organization in Canada for the propagation of the principles of forest conservation. This it does by means of conventions, meetings, lectures and literature.

It is a popular organization supported by the fees of members, assisted by some government grants.

There is a vast field of work before the Association which is only limited by the funds at the disposal of the Association.

Those who are not already members are invited to join and assist in the work. The membership fee is one dollar per year, and this entitles the member to attend and vote at all meetings and to receive the Annual Report and the *Canadian Forestry Journal*. Women as well as men are eligible for membership.

Applications for membership and requests for literature and information may be addressed to

The Secretary,
Canadian Forestry Association,
Journal Building, Ottawa, Can.

OBJECTS OF THE ASSOCIATION.

- (1) The exploration of the public domain, so that lands unsuitable for agriculture may be reserved for timber production.
- (2) The preservation of the forests for

their influence on climate, soil and water supply.

(3) The promotion of judicious methods in dealing with forests and woodlands.

(4) Tree planting on the plains and on streets and highways.

(5) Reforestation where advisable.

(6) The collection and dissemination of information bearing on the forestry problem in general.

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