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Woodland & Roadside

VOLUME VI

MAY, 1907

NUMBER 2

A Journal of New England Forestry

OFFICIAL BULLETIN OF THE MASSACHUSETTS FORESTRY ASSOCIATION

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EDWIN A. START, Editor and Publisher
No. 4 JOY STREET, BOSTON, MASSACHUSETTS

CONTENTS

EDITORIAL	13
Shade-tree Pruning — Twelve Years of Grace — The Appalachian National Forest Investigation.	
A FORESTRY LECTURE	14
AN APPALACHIAN FOREST CONFERENCE	15
MAINE FORESTRY ASSOCIATION	17
THE EASTERN TIMBER SUPPLY. <i>William L. Hall</i>	18
A TREE WARDEN'S EXCELLENT WAY	19
THE PULP MEN ALSO	20
MAINE'S NEW ROADSIDE TREE LAW	21
FOREST PLANTING LEAFLETS	22
SEEDLING FOREST TREES AVAILABLE	22
MASSACHUSETTS FORESTRY ASSOCIATION DIRECTORY	23
ADVERTISEMENTS	23-24

AN excellent example of shade-tree pruning may be seen on Boston Common along the broad walk leading from West Street to Park Square. The best work has been done on the medium size trees near the graveyard. The pruning work is of the best type, but the tarring of the wounds is unworkmanlike and sloppy. Here is a case where trees have had their heads thinned in a manner which should be applied to shade trees throughout Massachusetts.

THE latest and most reliable estimates by the national forest service are that at the present rate the next twelve years will see the exhaustion of the timber supply east of the Mississippi River. This brings the figures down to a number that can be appreciated by everyone. Twelve years for exhaustion and fifty years to grow even a moderate new supply, and meantime the forests of the far west, of Canada and of other countries that can still produce a surplus of lumber must furnish our supply. This means higher and higher prices for some of the commonest necessities of life. The lesson is obvious. The larger mountainous areas of the east on which the forests are required to protect watersheds, as well as furnish a continuous supply of wood products must be made national forests so that they can be handled to the best ad-

vantage for the whole people; and each state must take care of those areas which are of distinctly local importance. In Massachusetts we must strengthen our forest service in every way and enter actively upon the work of forest management and reforestation. On the three million acres of land in the commonwealth that can be used more profitably for forest growth than for any other purpose, Massachusetts should produce a large part of what she uses of many kinds of lumber. At present high prices and the portable sawmill are working faster than the state forester. He is hampered by lack of funds. The portable mill, to the great detriment of Massachusetts, is stimulated by abundance of them.

THE survey, or more properly investigation, for no technical land survey is intended, of the proposed Appalachian national forests in the White Mountains and southern Appalachians, provided for by an appropriation of twenty-five thousand dollars during the closing days of the fifty-ninth congress, has been put in charge of Mr. William L. Hall, chief of the office of forest products in the United States Forest Service. Mr. Hall entered the service in 1898 and is one of the most efficient of Forester Pinchot's lieutenants. He was in charge of the forest extension work for three years and a half and for two years has directed that of forest products. He has been in close touch with the whole movement for the Appalachian reserves and will bring to his present task intelligent and sympathetic effort. He will have the aid of a corps of competent assistants from his own service and from the United States Geological Survey, and also that of outside experts. A complete statement of the relation of these forest regions to the economic life of the country, as well as the cost and practicability of preserving them, will be ready for the sixtieth congress. The recent heavy floods in the tributaries of the Ohio have aroused a new interest in the project among the people of the middle states and it is not at all unlikely that the measure may now come up in amplified form, providing for a chain of reserves from north to south along the Appalachian ridge. If so, it will be the legitimate outcome of the delay to which the obstinacy of the conservatives in congress, led by the speaker, has subjected the plan. We are learning lessons from Washington. One is that we must have friends everywhere for a public measure that does not appeal to special interests. We have made a modest appeal. It is now time for the East to assert itself and demand full justice in this great policy of national improvement and protection.

A FORESTRY LECTURE.

MR. ARTHUR A. SHURTLEFF will give his illustrated lecture on "The Purposes and Methods of Forest Improvement in the Metropolitan Reservations of Boston," on the evening of Wednesday, May 1, at 8 o'clock in Perkins Hall, 264 Boylston Street, Boston. The lecture will be open to the public.

AN APPALACHIAN FOREST CONFERENCE.

If all of the people who believe in the Appalachian national forest project and who received notice in some form of the meeting at the Twentieth Century Club in Boston on the evening of April 10 had felt their personal responsibility for promoting the measure and had realized the great interest of the discussion, the pleasant hall of the club would not have been large enough to accommodate the auditors. As it was, whether discouraged by the weather or because the keen edge of their interest has dulled, the several organizations whose members were directly invited did not adequately recognize the public spirit of the able and busy men who came here to sound the note for the new campaign that has already opened to pass the Appalachian reserves measure in the next congress.

Nevertheless the meeting was a good and inspiring one. The speakers dealt with actual facts and conditions and the methods of handling them, and the net result was a clear conception on the part of those who were present of the work that is cut out for us in 1907. Both President Dole of the Twentieth Century Club and President Walcott of the Massachusetts Forestry Association were obliged to be absent, and Mr. James P. Munroe presided most acceptably.

Philip W. Ayres, forester of the Society for the Protection of New Hampshire, described conditions in the White Mountains, illustrating his talk with a notable series of stereopticon views, showing clearly the wasteful denudation of the mountain sides under present methods and the permanent evil results by stripping off the soil, preventing future growth and making the run-off of water spasmodic. He showed how ineffectual for protective purposes is a young forest as compared with an old one. Forestry means the management of the forests to make the most from them in the long run. Lumbering aims to get the most at the moment. Their methods are totally different. Lumbering has no regard for the hundreds of millions of dollars invested in manufacturing on the streams, which rise in the mountains. It has no regard for the navigation interests on the lower waters of the Connecticut river.

William L. Hall of the United States Forest Service showed a number of beautiful views, chiefly from the southern Appalachians, and discussed briefly existing conditions as to lumber supply and stream flow. Mr. Hall lectured on Thursday at the Sportsman's Show, speaking more at length on the same subject. Some of his statistics and conclusions are of great importance and are printed on another page.

Four members of congress contributed to the discussion. Hon. Frank D. Currier of New Hampshire sketched the history of the measure in the last congress and ably and eloquently defended Speaker Cannon against some of the charges that friends of this project have brought against him. He de-

clared that it was unjust to impugn the speaker's motives and also to hold him alone responsible for holding up the bill. A large and strong minority, including Mr. Payne and Mr. Williams, the two floor leaders of the house, opposed the bill and it would therefore be impossible to pass the bill under any of the special orders, even if the speaker permitted it to come up. The yeas and nays vote on the survey appropriation was carried by 138 to 115. Of the affirmative votes 69 were from the north and 69 from the south. Of the negative 100 were from the north and 15 from the south. This shows that neither the White Mountain nor the southern measure could be passed alone. The project is weak in the middle states and the west. Efforts of friends of the measure must be devoted to securing a stronger working majority and work through the press and through personal argument should be unremitting from this time. Mr. Currier said that the speaker's objection arose from his belief that the bill would be amended to include many other regions, not now specified, and that it would mean the expenditure of \$100,000,000. Mr. Currier did not personally believe this. He declared anew his belief in the project, his confidence in its ultimate passage, and his purpose to do all in his power to promote it.

Hon. Edwin W. Higgins of Connecticut, who presented the resolutions of the Connecticut legislature to the national house in an able argument which should be widely read, said this was a practical business question for preserving the business prestige of New England. Our greatest natural resource is our water power, and this depends upon the forests on the mountains. The national forest reserves are 155,000,000 acres, all of them west of the Mississippi and all west of the Dakotas, except a small one in Minnesota. Mr. Higgins argued vigorously for the needs and rights of the great population of the more crowded east.

Hon. John W. Weeks of Massachusetts suggested as one of the obstacles to the passage of the measure, the dislike in some quarters of the tendency toward centralization and paternalism. He cordially endorsed most of what Mr. Currier had said, but he believed that the ultimate cost of doing this necessary work for the eastern section of the country would be greater than the estimate of ten millions given by his colleague, though he did not believe it would reach the figure feared by Mr. Cannon. Even if it did, however, he should favor it as a national policy economically necessary and wise.

Hon. Kittredge Haskins of Vermont, a member of the house committee on agriculture, spoke strongly in favor of the project and paid a high tribute to the splendid work of the forest service and of its head, Gifford Pinchot. Mr. Pinchot had arrived a short time before and was in the rear of the hall, a fact which was unknown to Mr. Haskins until the chairman informed him and invited Mr. Pinchot to come forward. Mr. Haskins greeted him cordially and gracefully introduced him as "the man who knows his work."

Mr. Pinchot was the last speaker and gave to the extremely practical political and dollars and cents discussion just the rounding out that it needed. Pointing to our previous wasteful and reckless use of natural resources, he showed that this project, which must ultimately take the form of preservation and protection of all interstate watersheds of the Appalachian range, was a part of a general movement, inaugurated within a few years and greatly promoted by President Roosevelt, looking to the conservation of natural resources and their utilization according to plans laid out with reference to future needs. He instanced the irrigation project, the land office reforms, and several minor measures as parts of the same new national policy, which promises much for the future of the country and its people. He explained in a general way what it is proposed to accomplish with the \$25,000 appropriation. Through the information which will thus be secured much may be expected in the way of disabusing certain members of congress of the idea that this is not an economic necessity. It will also furnish a basis for a much closer estimate than has thus far been possible as to the ultimate cost of the takings. Furthermore these estimates of cost, based upon a close examination by experienced timber valuers, will protect the government against any possible imposition when it comes to making purchases. The speaker felt assured that these government forests would cost far less than Mr. Cannon fears. He also stated that the interest of the southern states has been generally aroused now and that fuller support from that section may be counted on in the next congress. Many powerful agencies are at work in support of the measure, and it is only needful to strengthen and extend these to insure success. The prospect he regarded as most encouraging.

Letters of cordial sympathy with the movement, coupled with assurances of support for the measure, were read from Governor Guild, Senators Lodge and Crane of Massachusetts, Gallinger and Burnham of New Hampshire, and Brandegee of Connecticut, Representatives Ames, Greene and Roberts of Massachusetts, Capron and Granger of Rhode Island.

MAINE FORESTRY ASSOCIATION.

It is a pleasure to note the organization of a forestry association in Maine. Every New England state, except Rhode Island, is now provided with this valuable promoter of good economics and good citizenship. The Maine Forestry Association is largely promoted by practical lumbermen, a fact that gives it a unique distinction. The president, Mr. Frank E. Boston of Gardiner is, we believe, connected with the Hollingsworth and Whitney Company. The other officers are Charles E. Oak of Bangor, vice-president; Edgar E. Ring of Augusta (the state forestry commissioner), secretary; W. W. Thomas of Portland, treasurer; and the following executive board: George H. Eaton, Calais;

Charles H. Bartlett, Bangor; H. B. Buck, Bangor; E. P. Viles, Skowhegan; George B. Dunn, Houlton; Frank W. Butler, Farmington; W. R. Brown, Portland. Steps were taken to have the association chartered by the legislature. The new association was organized on the 14th and 15th of March.

The organization of this association by practical men and the enlightened methods that are being adopted by some of the heavy operators in the Maine woods give hope for the splendid forests of that state; and these things, with the new law elsewhere described for the protection of roadsides and riverbanks, give evidence of an awakening public sense of the value of trees and forests to the state.

THE EASTERN TIMBER SUPPLY.

*By William L. Hall,
United States Forest Service.*

ONE of the strongest arguments for national forests in the eastern mountains is found in the precarious condition of the timber supply east of the Mississippi river. The most liberal estimate ever made of the standing timber in the United States is by Dr. Fernow, who gives the figure of two thousand billion feet. Of this amount eleven hundred billion are probably west of the Mississippi river, where reside only 22 million of our 84 million people. We are using timber at the rate of about one hundred billion feet per year. If 25 per cent of it is used west of the Mississippi, as is reasonable to suppose on the basis of the population, then at its present rate of consumption the trans-Mississippi country has a 44 years timber supply. Moreover one-third of this is in the national forests which are already under careful protection and management. It is safe to say that the western timber supply is in a fairly good condition.

East of the Mississippi the condition is altogether different. In this part of the United States is found three-fourths of its population. By the estimate given above but nine hundred of the two thousand billion feet of timber are east of the Mississippi. At the present rate of wood consumption this means but a twelve years' supply. This conclusion is strongly corroborated. The yellow pine of the south, which has been more closely estimated than any other eastern timber because it occurs in compact bodies, will according to the most careful calculations of lumbermen be exhausted in less than twelve years. Already it has become extremely difficult for railroads, mining companies and other large timber users to get the lumber they require. Prices of all the eastern construction timbers have doubled in the past ten years and they are rising now faster than ever before. Regardless of whether there is a lumber trust or not the fundamental conditions of supply and demand are such that lumber prices must rise and that very fast.

It is useless for us to console ourselves with the idea of getting timber from the Pacific coast. With five billion feet coming from that region in 1905 the railroad traffic was congested to the point of demoralization. The western railroads cannot haul much more than they are hauling now. But double their carrying capacity and they still cannot begin to meet the situation.

Whatever view point is taken we are faced by a serious condition in the timber supply of the eastern states. Almost before we know it we are likely to be on the verge of a timber famine. A bread famine may be bad to-day and fully overcome within a year. Not so a timber famine. Let it once prevail and the blight of its sting will remain on our industries through a generation.

If for no other reason than to make safe the timber supply the federal government should move speedily to take under its control the timber lands of the southern Appalachian and the White mountains in order that they may be protected and that their forests may be restored by planting wherever that is necessary.

A TREE WARDEN'S EXCELLENT WAY.

THE tree warden of Walpole last year issued a circular to the citizens of the town which was so thoroughly commendable in its frank directness and force, and so suggestive of a way in which a tree warden may enlist public interest and sympathy for a good work, that we reprint it for the benefit of others who may be wrestling with similar problems:

To the Citizens of Walpole:—

An outrageous cutting of some of the finest shade trees in Walpole has just come to the notice of the tree warden, and believing that the public sentiment here is strongly for protecting, in every possible way, our shade trees, it seems important that the rights of the town, and the individual, in regard to trees, should be clearly understood. In this particular case, the telephone company bought a considerable number of shade trees standing on private land but bordering closely on the highway—trees planted probably fifty or sixty years ago in exactly the right place, just inside the highway bounds where they are much less liable to damage. The owners say they would not have sold the trees had they not supposed the telephone company had a right to take them and pay for them, or had they known they would have been protected in their refusal to sell the trees. The telephone company has no chartered rights in the matter at all, and in this particular situation, by using higher poles or changing the course of their line to the back side of a neighboring field, they could have saved a line of the most beautiful shade trees we have.

The tree warden was asked by the telephone company to put a value on an old tree farther on the line of these same trees, one that had been hacked and maimed in the center, until there was no shape left, but it was a tree and was still living and struggling hard to make good against heavy odds. It is absolutely impossible to figure in money the value of a beautiful shade tree that has taken two generations to grow. The owner had refused to allow the telephone company to even trim the tree, much less cut it down, and the tree warden refused to place a value on it simply because a tree of this size could not be replaced inside of two generations.

To prevent, if possible, further acts of this kind, is the only reason this circular is going out.

The town and the owner have every reason and legal right to protect their trees, not only from being cut down, but from mutilation and damage of any kind whatever. The statutes are clear on these points and there is a heavy fine for any malicious injury, or injury from negligence of any kind. The trees along our highways for the last few years have been fighting to live, with but few friends to help them along. With the telephone and telegraph wires, electric light wires and the feed wires of the electric road, what chance have they had? Along some of our streets you will find a great many trees that have been maimed for life — whole centers have been cut out, and wretchedly done at that. Improper insulation has burned many a fine limb off and decay has started to creep through the rest of the tree. The trees have not had a square deal and it is high time they had one.

One of the best experts on trees in this country has spent some time with the tree warden in examining the condition of the shade trees of Walpole, and he tells us we must begin at once to get some sort of a systematic planting of new trees and spending more money in protecting the old ones, or we will soon lose a great many of the trees that are now struggling to live. The present officials of the different companies have shown a willingness to co-operate in every way possible to protect the trees, but the real work and burden of protecting the old, and planting new trees, is going to fall on us of the present generation. You only have to go up on Common Street and see the unselfish work of our ancestors three or four generations ago, or Lewis Avenue and other streets where you will see the result of still a later generation — some twenty or twenty-five years ago.

You cannot do much with \$150, which is the sum appropriated by the town, but we ought to spend what we do spend, each year, following a general scheme mapped out by a special tree expert. It is earnestly hoped that individuals will see that trees are set out opposite their own property, and if they will, in each case, take it up with the tree warden, the plan of tree planting will be uniformly carried out. This year on Arbor Day each school in the town planted a tree. We want to interest the younger generation, but it is the older generation that has got to spend the money and do the work. A number of people interested in trees, have offered to contribute money, and of course considerable money will be necessary, but it is the individual tree planting, in line with the general scheme mapped out, that is going to count in future years.

An arrangement has been made with reliable nurseries for getting the best trees at a reasonable cost. Write a letter or postal to the tree warden and you will be supplied with the proper information and suggestions as to the kind of trees and the best location. The trees also will be furnished, if you so desire.

Please see to it that every case of an injury to a tree, whatever the nature, is promptly reported. If every one becomes good friends of the trees, you will see a big difference in the appearance of the streets of this town 20 or 25 years from now — and even sooner.

PHILIP R. ALLEN,

Tree Warden.

Walpole, Mass., May 5, 1906.

THE PULP MEN ALSO.

THE great consumers of wood products are fast seeing the handwriting on the wall and they are joining the ranks of the advocates of conservative forestry in a way that would have been startling five years ago. It is the un-

thinking average citizen who votes, and the small operator who sees only the profit of the moment and has no interest in the future, who now most endanger our forests. This thought is suggested by the following resolutions, recently transmitted to the Massachusetts Forestry Association from the American Paper and Pulp Association which adopted them at a meeting held at the Waldorf-Astoria Hotel, New York, February 7th:

Resolved, That this association calls upon all pulp manufacturers in the United States to adopt, to the fullest extent possible, conservative methods in lumbering according to the approved principles of the science of forestry, and further

Resolved, That this association urges state governments to adopt more efficient means for the prevention of forest fires.

Resolved, That a copy of these resolutions be sent to the forestry associations of the United States and to the governors of the New England states, New York, Pennsylvania, West Virginia, Michigan, Wisconsin and Minnesota.

MAINE'S NEW ROADSIDE TREE LAW.

In the current issue of *Forestry and Irrigation* a resident of Vermont complains that so many of the favorite pleasure-driving roads in that state are being made hideous by the clean cutting of the timber along their borders. In Massachusetts, if the tree wardens do their duty, this condition is somewhat ameliorated by reserving such trees as stand within the highway location. In other states, and too often here as well where the warden is not alive to his duty, the practice of the lumberman is to cut his lot clean and close up to the traveled portion of the highway location. Maine has suffered severely from this practice, but her legislature of 1907 has provided a way by which the people may protect themselves if they will, or rather so far as they are financially able.

"An act to preserve trees abutting public ways and other places" is the title of the new Maine law, and it gives authority to the officers of a city or town to take by right of eminent domain strips of land, not exceeding five rods in width, "abutting any public way or located on uplands adjoining any navigable river or other body of water." The act specifies that "all trees and shrubs growing on said land shall be held as for park purposes." Under the provisions of this law the public does not acquire the fee in the land, nor the right to in any way enter upon the land under the trees, except by the proper officers in the performance of their duty of caring for the "trees and shrubs." The taking merely covers the tree and shrub growth, and the right to keep the same standing for the purpose of ornamenting and shading the adjacent road or river.

Naturally such takings will be limited by the financial ability of a town to pay the attendant damages, but in a country town these would not in most cases be prohibitive, especially since the law provides that the owner of the

fee shall not be prevented from building upon the strip, or laying out a private way across it, or from utilizing it in any way not inconsistent with the safety of the trees or shrubs upon it, except upon payment of further damages.

It is not a law that will work to perfection in all cases, but was ever law drafted that would? It seems to be a long step in advance, and if it furnishes even partial relief from the present trying conditions, its enactment will have been fully justified.

FOREST PLANTING LEAFLETS.

THE United States Forest Service has made a most helpful addition to its publications in the recently issued series of forest planting leaflets. These leaflets give the condensed practical information for the tree planter which WOODLAND AND ROADSIDE planned to give its readers in a series of which only that on white pine has been published. In the series as thus far published by the service there are four dealing with operations in general, the subjects being the cultivation and care of forest plantations on the semi-arid plains, how to pack and ship young forest trees, how to transplant forest trees, and fence post trees. There are nineteen on specific trees, namely: basswood, red pine, eucalypts, Norway spruce, white elm, shagbark hickory, bur oak, red oak, black locust, jack pine, white pine, chestnut, European larch, cottonwood, honey locust, hackberry, western yellow pine, red cedar and Scotch pine.

Several of these trees are important in New England tree culture. The leaflets describe the form and size of each species, its range, habits and growth, and economic uses, and give concise directions for propagation, planting and culture. They may be obtained by application to the United States Forest Service, Washington, D. C.

SEEDLING FOREST TREES AVAILABLE

The state forester, F. W. RANE, State House, Boston, gives notice that he can distribute to a limited number of those who apply, 150 white pine and 150 white ash two year old trees, suitable for setting out for forest purposes. SEND ONE DOLLAR WITH ORDER. Express charges will be advanced. No orders received after April 30th. As the object is to disseminate these seedlings quite generally, only one order will be allowed to one person. Should the supply become exhausted the money will be returned.

Set the plants where they are to grow 6 x 6 feet apart as soon as they are received. Do not allow the roots to get dry. It is hoped that this one-fourth acre planting will create an interest in doing more planting later. It is understood that these seedlings are to be planted in Massachusetts

Massachusetts Forestry Association

The office of the Association, No. 4 Joy Street, Boston, is open daily during business hours. There is a small library and visitors are cordially welcome.

Membership. Blank applications for membership may be obtained of the Secretary on application. The fees are:

For annual membership, *two dollars.*

For life membership, *fifty dollars.*

For patron membership, *one thousand dollars.*

All fees received from patrons and life members are invested in the permanent fund and the income only is used for the work of the Association.

Lecture Service. The Association will provide lecturers on forestry subjects. These lectures may be with or without lantern illustrations. Terms will be given by the Secretary.

Publication Department. WOODLAND AND ROADSIDE is the official bulletin of the Association and a subscription to it is included with each membership. Other publications are occasionally issued. Some of these are for free distribution; for others a nominal sum is charged.

OFFICERS, 1907.

President.—Henry P. Walcott of Cambridge.

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Forest and Tree.—Edwin A. Start.

Membership and Publications.—Mary Lee Ware.

Finance.—George M. Weed.

Legislation.—Henry James, Jr.

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Austin Cary, Brunswick, Maine.

Harrison W. Smith, 188 Woodland Road, Auburndale.

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For further information, address **W. C. SABINE**, 15 University Hall, Cambridge, Mass.

MASSACHUSETTS FORESTRY ASSOCIATION

PUBLICATIONS FOR SALE

Des Cars on Pruning. Always a standard work. Price, \$1.00, postpaid. Price to members of Association, 40 cents.

Spraying. A small calendar and brief manual published by the Association. Price, 5 cents.

Laws of Massachusetts Relating to Trees and Woodlands, 1903. Published by the Association in convenient pocket form. Price, 10 cents.

Suggestions to Tree Wardens, 1899. A limited number of these pamphlets remain and may be obtained at 25 cents each.

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