THIRD BIENNIAL REPORT

NEW HAMPSHIRE

FORESTRY COMMISSION

1899-1900

FOURTH REPORT

(THIRD BIENNIAL)

OF THE

NEW HAMPSHIRE

FORESTRY COMMISSION.

1899 – 1900.

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REPORT OF FORESTRY COMMISSION.

To His Excellency the Governor and the Honorable Council:

The Forestry Commission, in summarizing its acts for the past two years, takes occasion to call attention at the outset to the fact that its labors during the time mentioned have been conducted with the same restrictions as to appropriations with which to prosecute research and as to power to enforce its conclusions that have characterized all forestry agitation in this state since the subject was first given official attention.

It is now twenty years since forestry was first recognized by the New Hampshire legislature. The year 1881 was an active one in American forestry. It was in that year that Baron von Steuben, one of the high forest officers of the German empire, visited this country to attend the Yorktown centennial observance. His presence here attracted attention to his calling, and, by the stimulus thus aroused, the first American Forestry Congress was assembled in Cincinnati, Ohio. Out of this meeting grew the existing American Forestry Association, which has accomplished so much in the way of bringing the subject of forestry to popular knowledge.

NEW HAMPSHIRE AHEAD.

New Hampshire, however, was in advance of this movement, and at the June session of the legislature, nearly three months before Von Steuben had aroused interest in the subject, a temporary forestry commission was provided for. This board was given a further lease of life for two years by the legislature of 1883, and in 1885 it published a most admirable report, which has ever since served as a constant source of information

for New Hampshire foresters. With the publication of this report, this commission of 1881 went out of existence, and no further action was taken on the subject until 1889, when another temporary board was created. This board was continued in existence by the legislature of 1891, and in 1893 it recommended the establishment of the present permanent commission.

EDUCATIONAL WORK.

The work of the board has been wholly educational in its character. By means of public addresses, through private conversation, by numberless published articles, by correspondence, and by personal appeal, the members of the board have sought to accomplish two purposes: First, to convince the private landowners, lumbermen, and other operators, that the rational treatment of their tree growth meant greater future profit to themselves and marked benefit to the state. Second, to arouse public sentiment to the importance of forest preservation while there are still some forests to be preserved.

While the board has been conscious that much of its efforts in both these directions has fallen far short of its intended result, yet it cannot repress the conviction that some good has been accomplished. When the board first began to cultivate friendly relations with lumbermen and to attempt to convince the logger that he and the forester had something in common, the prevailing spirit and custom among such operators was to denude the forest utterly, and then seek new woods to conquer. Now, thanks in part to the efforts of the board, nearly one third of the annual timber product of the state is harvested with some attempt to apply rational methods of timber utilization; while, on the other side of the board's work, a creditable body of public opinion stands ready to indorse some definite and affirmative steps to secure the most desirable results of forest preservation.

PRESERVATION, NOT STAGNATION.

The purpose of forest preservation, however, should not be misunderstood. No one believes more fully than the forester

that forests grow to be used. He does not wish tree growth to come to maturity and then to go to waste. That would not be forest preservation; it would be an unnecessary stagnation. Forest preservation looks to the utilization of tree growth in such wise as to quicken nature's restorative powers, so that the tree which is removed may be followed by another in the least possible time, thus insuring a never ceasing supply of trees fit for the axe. This kind of forest preservation is sorely needed in some parts of New Hampshire.

THE BEST WAY.

The best way to bring about such a condition is, of course, for the state, by the appropriation of the necessary money, and by the exercise of its power of eminent domain, to take to itself the title to such forests as are most in need of preservation because of their scenic value and their relations to the great water-courses of the state. Having once put itself in possession of these forest lands, the state could then put into practice the rules of rational forestry, affording to private owners an unmistakable object lesson of the benefits of such a course, and at the same time deriving for itself an income sufficient to pay the cost of the investment. By such a course the board thinks the state could put itself in possession of the forests of the North Country, which, in forty years' time, could be made to pay for themselves, and then leave us the forests still standing and in such an improved condition as to be ready to yield a constant revenue to the treasury.

It needs but little reflection to demonstrate the essential truth of this proposition. The credit of New Hampshire is of the best. At the present rate of decrease our entire existing state debt will be wiped out in a few years. Under these conditions we can borrow money upon the best of terms; and a bond issue for the purpose of financing a plan for forest preservation could be made at a rate of interest at least as low as three per cent. Given forty years as the period during which the bonds would run, and assuming that the average

cost per acre of the forest placed under preserve is ten dollars,* and it would require only thirty cents' worth of timber to be taken from each acre per year to meet interest charges and twenty-five cents' worth for sinking fund purposes. It would be hard indeed to imagine a scheme of lumbering or forestry so conservative as to put the annual removal of timber below fifty-five cents per acre, when one recalls the magnificent, pure, unmixed spruce growths which constitute so large a portion of the White Mountain forests which have thus far escaped the axe.

So great is the board's faith, not only in the ultimate benefits of such an investment for the state, but in its immediately happy results, that it has no hesitation in recommending the establishment of a forest preserve sufficient in area to insure the perpetual preservation of the White Mountain forests.

New York has already begun to reap the benefits of such a course. Under the constitution of New York it is impossible to utilize at present any of the timber now standing on the forest preserve, so that any direct revenue from such a source has not yet been realized. But the indirect benefits have been plainly seen in the increased summer hotel business in the region of the Adirondack preserve. Summer visitors can go to the Adirondacks and the Catskills with the perfect assurance that the mountain scenery is not to be ruined by irrational timber cutting. They have no such assurance in visiting the White Mountains, and it is not strange that Adirondack hotel registers now bristle with names that once were regularly found in our own White Mountain hostelries. Our forests are better than New York's from every point of view. They are unparalleled for beauty and unapproached in commercial value. They bear closer relations to our water-courses, and they are worth more to all our interests for preservation.

ANOTHER MEANS.

Another means of securing the same end is one which this board has outlined in a previous report, and which it is

*This is a most reasonable estimate, judging from the experience of the state of New York in a like plan. The cost of Adirondack spruce forests taken by the Forest Preserve Board in New York was less than seven dollars per acre

thought wise to emphasize again, because it is not open to any objection on the ground of excessive cost. Accordingly, the subjoined paragraphs are reprinted from the second biennial report of this board, that report being now very nearly out of print:

"Fifteen years ago New Hampshire, having parted with the last acre of her public domain for small consideration, awoke to the danger that her grantees, if unrestrained, might so use their possessions as to destroy the forestry resources of the commonwealth and inflict irreparable injury upon the health, property, and occupations of all their fellow-citizens. Three successive forestry commissions have been appointed to investigate the forestry conditions of the state, and to report upon the extent and effects of the indiscriminate cutting of wood and timber, the wisdom and necessity for the adoption of forestry laws, and to hold meetings in different parts of the state for discussion of forestry subjects.

"All three of these commissions have reported that the present methods of lumbering, if continued, inevitably will entail baleful scenic, climatic, and economic results; that already the ruthless axeman and wasteful pulp-miller have impaired the scenic attractions of several mountainous districts, and by their denudations apparently have occasioned disastrous floods; that the continued removal of immature trees must limit to one generation the number of crops of forest products that can be harvested, and that the prosperity of both the agricultural and manufacturing industries in our great river basins largely depends upon the perpetuity of the forest in such condition as to preserve its functions as an equalizer of water supply and water flowage.

"This commission would not assume the rôle of an alarmist of the commonwealth, but it is bound to take official notice of the fact that, after fifteen years of forestry agitation, indiscriminate cutting of wood and timber is continued to such an extent as to threaten the exhaustion of our spruce forests within another fifteen years, and to render intermittent the flow of the rivers which are most important to our agricultural

and manufacturing industries, and especially that of the Merrimack.

"Discussion of forestry subjects has sufficed, as has been stated elsewhere, to lead many of our lumbermen and operators, including several important corporations, voluntarily to restrict their cut; but enough owners of large forested areas and operators of pulp-mills still persist in so denuding the White Mountain region, the source and equalizer of all our rivers, as to jeopard the health, property, and occupations of the citizens in other parts of the state, and to impair permanently its economic resources. The number of such owners and operators is relatively small, but their continued refusal to recognize the just claims of the state, which creates and protects their titles, now raises the question whether they should be allowed longer so to use their own as to injure others. These persons, blind to everything except their immediate pecuniary gain, and deaf to every entreaty to spare immature trees, will continue to stand mute when addressed by any forestry commission until it may command them in the name of the state. Their persistent violation of economic laws is believed by many persons already to have inflicted large losses upon their innocent fellow-citizens. No competent authority will deny that the tendency of their action is to impair permanently the productive power of New Hampshire. The imperative interests, therefore, not only of future generations, but also of the people now living within our borders, demand energetic action by the state to stay the hands of these improvident axemen and pulp-makers.

"The disastrous floods of the past two years warn us that such action should be immediate and radical. This involves the direct interposition of the state in the creation of a forest reservation by the exercise of the power of eminent domain, or in the prohibition of indiscriminate cutting, through the exercise of the police power. The first of these remedies would be complete, but the apparent unreadiness of the people to increase their present burden of taxation forbids any hope of its seasonable adoption.

"This commission, therefore, after due deliberation, deems it to be its duty to recommend the adoption of the other of these

remedies by the enactment of a statute making it unlawful for any person to cut or remove any spruce, pine, or hemlock tree, unless the same shall be twelve inches in diameter three feet above the ground or fallen, burned, or blighted timber, or any poplar or birch tree, unless the same shall be ten inches in diameter three feet above the ground or fallen, burned, or blighted timber, but providing that such enactment shall not apply to any person cutting wood or timber for his own exclusive, domestic consumption, or to any farmer clearing land for agricultural uses only, not exceeding fifty acres in any one year.

"Such an enactment, efficiently enforced, would, it may be confidently predicted, insure a perpetual series of forest crops for New Hampshire, and the preservation through successive generations of its forest cover in such condition as to enable it to fulfill its function as an equalizer of water supply and water flowage, and so perpetuate the agricultural and manufacturing prosperity of the state.

"Though such restraint upon private greed is urged, because deemed to be necessary for the common weal, its adoption could not fail ultimately to benefit the very persons who seemingly would be hindered and obstructed in the conduct of their lumbering business.

AUTHORITY FOR PROPOSED LEGISLATION.

"Ample constitutional authority for such enactment is believed to exist in the possession by the state of the sovereign power of police. The circumstance that courts confess that it is difficult accurately to define this power, and to mark its proper limits, does not prevent them from affirming that its legislative application may be co-extensive with public health, morals, social order, and property rights, nor cause them to disallow any legislative application of it because novel, if this can be shown to correspond to changed economic, political, or social relations, and to be a necessary and proper means to accomplish the purpose.

" 'The police of a state, in a comprehensive sense,' according to Judge Cooley (Constitutional Limitations, 6th ed., p. 704),

'embraces its whole system of internal regulation, by which the state seeks not only to preserve the public order and to prevent offenses against the state, but also to establish for the intercourse of citizens with citizens those rules of good manners and good neighborhood which are calculated to prevent a conflict of rights, and to insure to each the uninterrupted enjoyment of his own so far as is reasonably consistent with a like enjoyment of rights by others.'

"Other authoritative descriptions of this power have been given by two of New England's most eminent jurists.

"Redfield, C. J., for the court in *Thorpe* v. *Rutland & B. R. R. Co.*, 27 Vt. 140, 62 Am. Dec. 625, said: 'This police power of the state extends to the protection of the lives, limbs, health, comfort, and quiet of all persons, and the protection of all property within the state. According to the maxim, *Sic utere tuo ut alienum non laedas*, which being of universal application, it must, of course, be within the range of legislative action to define the mode and manner in which every one may so use his own as not to injure others.' The issue in this case was the constitutionality of a statute imposing upon existing railroads the duty of erecting and maintaining cattle guards at all crossings, and the statute was upheld.

"Shaw, C. J., for the court in *Com.* v. *Alger*, 7 Cush. (Mass.) 85, said: 'Rights of property, like all other social and conventional rights, are subject to such reasonable limitations in their enjoyment as shall prevent them from being injurious, and to such reasonable restraints and regulations, established by law, as the legislature, under the governing and controlling power vested in them by the constitution, may think necessary and expedient. This is very different from the right of eminent domain, the right of a government to take and appropriate private property to public use, whenever the public exigency requires it; which can be done only on condition of providing a reasonable compensation therefor. The power we allude to is rather the police power, the power vested in the legislature by the constitution to make, ordain, and establish all manner of wholesome and reasonable laws, statutes, and ordinances, either with penalties or without, not repugnant to the constitution,

as they shall judge to be for the good and welfare of the commonwealth, and of the subjects of the same. It is much easier to perceive and realize the existence and sources of this power, than to mark its boundaries or prescribe limits to its exercise.' In this case the validity of a statute fixing lines in the harbor of Boston beyond which no wharf shall be extended or maintained, was upheld.

"This description of the police power by state tribunals and the competency of a state legislature to enact all manner of laws not expressly forbidden by the constitution, which shall be deemed necessary and reasonable for the protection of public health, morals, social order, and property rights, has been affirmed repeatedly by the supreme court of the United States.

"The leading case upon the regulation by the legislature of private property affected by public interests (*Munn* v. *Illinois*, 94 U. S. 113), was brought to the supreme court of the United States in 1876 on a writ of error to review a judgment of the supreme court of the state of Illinois, which affirmed the constitutionality of a statute of that state fixing a maximum charge for the elevation and storage of grain in warehouses in that state. This act was challenged as a violation of the constitutional guaranty contained in the fourteenth amendment to the constitution of the United States. The supreme court affirmed the judgment of the state court, on the ground that the legislation in question did not infringe the clause mentioned, but was a lawful exercise of legislative power, and by Waite, C. J., said: 'When one becomes a member of society, he necessarily parts with some rights or privileges which, as an individual not affected by his relations to others, he might retain. This does not confer power upon the whole people to control rights which are purely and exclusively private (*Thorpe* v. *R. R. Co.*, 27 Vt. 143), but it does authorize the establishment of laws requiring each citizen to so conduct himself and so use his own property as not unnecessarily to injure another. This is the very essence of government. From this source come the police powers, which, as was said by Taney, C. J., in the License Cases (5 How. U. S. 583), "are nothing more or less than the powers of government inherent to every sover-

eignty, that is to say, the power to govern men and things.' Under these powers the government regulates the conduct of its citizens one towards another, and the manner in which each shall use his own property, when such regulation becomes necessary for the public good.'

"The circumstance that no precedent for a legislative act forbidding the indiscriminate cutting of trees by private owners may be found, cannot bar the state from such exercise of its police power. In the leading case above cited, the court, by Waite, C. J., said: 'Of the propriety of legislative interference within the scope of legislative power, the legislature is the exclusive judge. Neither is it a matter of any moment that no precedent can be found for a statute precisely like this. It is conceded that the business is one of recent origin, that its growth has been rapid, and that it is already of great importance. And it must also be conceded that it is a business in which the whole public has a direct and positive interest. It presents, therefore, a case for the application of a long-known and well-established principle in social science, and this statute simply extends the law so as to meet this new development of commercial progress.' The argument of this case was very elaborate, and its treatment by the court was unusually thorough, the conclusions being clear and decisive.

"The criticism of the decision in *Munn* v. *Illinois* by two dissenting justices, and by writers of some ability, has failed to shake the foundations upon which it is based or to detract from the general favor in which it is justly held. The objections that have been urged against it are carefully examined by Andrews, J., in *People* v. *Budd*, 117 N. Y. 1, 15 Am. St. Rep. 460, and his conclusions thereon are announced with great force in the following language: 'The criticism to which the Munn case has been subjected has proceeded mainly upon a limited and strict construction and definition of the police power. The ordinary subjects upon which it operates are well understood. It is most frequently exerted in the maintenance of public order, the protection of the public health and public morals, and in regulating mutual rights of property, and the

use of property, so as to prevent uses by one of his property to the injury of the property of another. These are instances of its exercise, but they do not bound the sphere of its operation. There is little reason, under our system of government, for placing a close and narrow interpretation on the police power, or in restricting its scope so as to hamper the legislative power in dealing with the varying necessities of society and the new circumstances as they arise, calling for legislative intervention in the public interest.'

"A striking analogy to the proposed legislation for the preservation of the timber supply of New Hampshire, and one which cannot be distinguished in principle, is found in existing laws for the preservation of game and fish which affect the property in game lawfully taken. Such statutes actually impair in a marked degree the value of what is called private property. Yet these laws have been universally upheld as a wise and just exercise of the police power by the highest judicial authorities in the land, and that notwithstanding their enforcement incidentally affected interstate commerce.

"The principle of these cases is well stated by Clark, J., in *State* v. *Roberts*, 59 N. H. 256, 47 Am. Rep. 199, as follows: 'The taking and killing of certain kinds of fish and game at certain seasons of the year tend to the destruction of the privilege by the destruction consequent upon the unrestrained exercise of the right. This is regarded as injurious to the community, and therefore it is within the authority of the legislature to impose restrictions and limitations upon the time and manner of taking fish and game considered valuable as articles of food or merchandise. For this purpose fish and game laws are enacted.'

"The leading case upon this subject is *Phelps* v. *Racey*, 60 N. Y. 10, 19 Am. Rep. 140. This was an action to recover penalties imposed by a statute on any person who should have in his possession any dead game at a certain season. Defendant answered that some of the dead game was in his possession before the passage of the statute and when the killing was not prohibited, and the remainder was received from another state where the killing was lawful. In holding that a demurrer to

such answer was properly sustained, the court of appeals of New York by Church, C. J., said: 'The legislature may pass many laws the effect of which may be to impair or even to destroy the right of property. Private interest must yield to the public advantage. All legislative powers not restrained by express or implied provisions of the constitution, may be exercised. The protection and preservation of game has been secured by law in all civilized countries, and may be justified on many grounds, one of which is for purposes of food. The measures best adapted to this end are for the legislature to determine.'

"Such statutes have been sustained by the supreme court of the United States. In *Lawton* v. *Steele*, 152 U. S. 133, on writ of error to the court of appeals of New York, the case was elaborately argued on both sides, and the language of the court by Justice Brown is particularly instructive on the general principle under discussion: 'The extent and limits of what is known as the police power have been a fruitful subject of discussion in the appellate courts of nearly every state in the Union. It is universally conceded to include everything essential to the public safety, health, and morals, and to justify the destruction or abatement, by summary proceedings, of whatever may be regarded as a public nuisance. Under this power it has been held that the state may order the destruction of a house falling to decay or otherwise endangering the lives of passers-by; the demolition of such as are in the path of a conflagration; the slaughter of diseased cattle; the destruction of decayed or unwholesome food; the prohibition of wooden buildings in cities; the regulation of railways and other means of public conveyance; and of interments in burying-grounds; the restriction of objectionable trades to certain localities; the compulsory vaccination of children; the confinement of the insane or those afflicted with contagious diseases; the restraint of vagrants, beggars, and habitual drunkards; the suppression of obscene publications and houses of ill fame; and the prohibition of gambling houses and places where intoxicating liquors are sold. Beyond this, however, the state may interfere

wherever the public interests demand it, and in this particular a large discretion is necessarily vested in the legislature to determine, not only what the interests of the public require, but what measures are necessary for the protection of such interests. To justify the state in thus interposing its authority in behalf of the public, it must appear, first, that the interests of the public generally, as distinguished from those of a particular class, require such interference; and second, that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals. The legislature may not, under the guise of protecting the public interests, arbitrarily interfere with private business, or impose unusual and unnecessary restrictions upon lawful occupations. In other words, its determination as to what is a proper exercise of its police powers is not final or conclusive, but is subject to the supervision of the courts.' After enumerating a number of such instances, he continues: 'The preservation of game and fish, however, has always been treated as within the proper domain of the police power, and laws limiting the season in which birds and wild animals may be killed or exposed for sale, and prescribing the time and manner in which fish may be caught, have been repeatedly upheld by the courts. The duty of preserving the fisheries of a state from extinction, by prohibiting exhaustive methods of fishing, or the use of such destructive instruments as are likely to result in the extermination of the young as well as the mature fish, is as clear as its power to secure to its citizens as far as possible a supply of any other wholesome food.'

"The conditions thus described by the highest judicial authority as essential for the constitutional application of the police power to a new subject matter, in the opinion of this commission, now exist in New Hampshire. 'The interests of the public generally, as distinguished from those of a class',—lumbermen,—require the conservation of its forestry resources. The interference herein recommended prohibiting the indiscriminate cutting of trees is believed to be 'reasonably necessary for the accomplishment of that purpose, and not unduly oppressive upon individuals.'

RESTRICTION ON COMMON CARRIERS.

"Such proposed legislation, in order to be most effective, should be supplemented by a corresponding restriction upon common carriers. This commission, therefore, also recommends the passage of an act making it unlawful for any railroad or other transportation company to transport or to have in its possession for the purpose of transporting, except it shall receive the same from some point outside the state, any spruce, pine, or hemlock timber in the log whose diameter at the larger end shall measure less than twelve inches; or any wood or timber of poplar or birch in the log whose diameter at the larger end shall measure less than eight inches.

"Precedent for such legislation to protect our timber supply may be found in our present game laws, which were enacted to protect the food supply of the commonwealth."

The recommendations above outlined are hereby renewed, and the board purposes to present to the legislature about to assemble bills covering the points enumerated.

PURCHASE OF DENUDED LANDS.

Another phase of forest preservation which has been called to the attention of the board is one looking even more remotely to future benefits than either of those already discussed. It is that the state should purchase denuded lands which may be had for a reasonable sum, say not exceeding two dollars and fifty cents per acre, and should hold them for future forest growths.

This plan is not without its advantages, if such lands could be found with an adequate promise of a future growth of spruce. But it is doubtful if such lands can readily be discovered. However, the deciduous forest answers certain of the demands for which forests exist, and it may be that such a course would be desirable in some sections of the state.

A FOREST MAP.

The need of an accurate forest map of New Hampshire grows daily more apparent, and the board has no hesitation in

recommending that action be taken to procure it. Through the co-operation of the United States Geological Survey it is possible for the state to procure such a map, showing in addition to the forest cover, the location of all highways and prominent buildings, together with contours showing the configuration of the country at intervals of fifty feet. These maps have already been made for most of the other New England states, each state sharing with the general government the cost of doing the work, and New Hampshire may reasonably be supposed to be ready to do likewise. The cost will be small and the addition to public knowledge considerable. Accompanying this report is a print of the map of the Presidential Range such as would be made of the entire state in case such co-operation with the Geological Survey be determined upon.

FOREST FIRES.

Our state has been remarkably free from forest fires during the past two years. Our forest fire laws are deemed adequate for their purpose, and copies of them are annexed to this report for inspection.

PRESERVATION OF SHADE TREES.

The demand for tags to designate protected shade trees along the highways of the state has been active and the supply available for the current year has already been exhausted, so that no more can be furnished until the beginning of the next fiscal year, June 1, 1901.

TREE PLANTING.

Little or nothing has been done in New Hampshire toward reforesting either the denuded forest land or the waste pasture and tillage land, of which we have so much—according to one authority no less than 116,000 acres. The Hon. John D. Lyman of Exeter has assiduously preached and practiced the growing of white pine on waste areas; but he has had few imitators. It may be that it would be wise for the state to stimulate forest planting by remitting the state tax from land

which is set out to timber of a specified variety and planted in a specified manner as to the number of trees to the acre. It may be, also, that it would be wise to remit the state tax from such forested lands as are lumbered conservatively; such remissions to be secured upon certificate of the forestry commission that such lands had not been cut below ten or twelve inches on the stump.

SPEEDY ACTION NECESSARY.

Whatever is done to preserve our forests should be done quickly. In other words: Forest preservation should begin while there are forests to preserve.

The approximate area of primeval spruce forest in New Hampshire today is about half a million acres, of which about 300,000 acres is in the White Mountain region. In a little more than ten years this area will have been cut over, at the present rate of the lumberman's progress. It is time to act. The people of the state who have her best interests at heart demand it. The thousands of summer visitors who come to us each year demand it. Good sense demands it.

"New Hampshire's prosperity," says a recent writer discussing this matter, "is no longer founded on her agriculture, but on industries to which the continued existence of her forests is of the first importance. The factory towns along the Merrimack—which has been called the main artery of the state's economic life—and on some of the other streams in the lower part of the state, are the communities which are flourishing and growing in population. To their well being it is of the greatest importance that the flow of the rivers should be regular, and should not go on increasing its fluctuations as during the last three or four years. In other regions the plentiful presence of the summer visitor, who has of late been bringing New Hampshire between seven and ten millions a year, is the one condition of prosperity; and this summer business, which centers very largely round the White Mountain region, would be wiped out entirely if either fire or wasteful lumbering should sweep the forests from the mountain sides generally, as they already have in several regions now well-nigh

deserted. Finally, the lumber business itself is one which the state would not willingly see disappear. But if the state is not to come near seeing it do this, if it is to see the lumbermen go on happily and prosperously without working harm to other industries it must regulate their operations. With this end in view it will frequently be enough to point out to timber owners, what some of them have already discovered, that methods of cutting which perpetuate the forest are really to their best interest. In other cases moderate legislation will be all that is needed. But in a few places the state will undoubtedly have to take charge of the forest lands herself. This may seem a grave step, and the task of awakening public interest in forestry generally may seem a heavy one, but when manufactures, summer business, and in the long run lumbering, are all vitally interested, and when the agricultural regions are all so well supplied with wood and so perfectly fitted for its production, New Hampshire cannot afford to remain officially inert any longer."

GEORGE BYRON CHANDLER,
NAPOLEON B. BRYANT,
GEORGE E. BALES,
GEORGE H. MOSES,
Forestry Commissioners.

NEW HAMPSHIRE FORESTRY LAWS.

CHAPTER 44, LAWS OF 1893.

AN ACT FOR THE ESTABLISHMENT OF A FORESTRY COMMISSION.

Be it enacted by the senate and house of representatives in general court convened:

SECTION 1. There is hereby established a forestry commission, to consist of the governor, *ex officio*, and four other members, two Republicans and two Democrats, who shall be appointed by the governor, with the advice of the council, for their special fitness for service on this commission, and be classified in such manner that the office of one shall become vacant each year. One of said commissioners shall be elected by his associates secretary of the commission, and receive a salary of one thousand dollars per annum. The other members shall receive no compensation for their services, but shall be paid their necessary expenses incurred in the discharge of their duties, as audited and allowed by the governor and council.

SECT. 2. It shall be the duty of the forestry commission to investigate the extent and character of the original and secondary forests of the state, together with the amounts and varieties of the wood and timber growing therein; to ascertain, as near as the means at their command will allow, the annual removals of wood and timber therefrom, and the disposition made of the same by home consumption and manufacture, as well as by exportation in the log, the different methods of lumbering pursued, and the effects thereof upon the timber supply, water power, scenery, and climate of the state; the

approximate amount of revenue annually derived from the forests of the state; the damages done to them from time to time by forest fires; and any other important facts relating to forest interests which may come to their knowledge. They shall also hold meetings from time to time in different parts of the state for the discussion of forestry subjects, and make an annual report to the governor and council, embracing such suggestions as to the commission seem important, fifteen hundred copies of which shall be printed by the state.

SECT. 3. The selectmen of towns in this state are hereby constituted fire wardens of their several towns, whose duty it shall be to watch the forests, and whenever a fire is observed therein to immediately summon such assistance as they may deem necessary, go at once to the scene of it, and, if possible, extinguish it. In regions where no town organizations exist, the county commissioners are empowered to appoint such fire wardens. Fire wardens and such persons as they may employ shall be paid for their services by the towns in which such fires occur, and in the absence of town organizations, by the county.

SECT. 4. Whenever any person or persons shall supply the necessary funds therefor, so that no cost or expense shall accrue to the state, the forestry commission is hereby authorized to buy any tract of land and devote the same to the purposes of a public park. If they cannot agree with the owners thereof as to the price, they may condemn the same under the powers of eminent domain, and the value shall be determined as in the case of lands taken for highways, with the same rights of appeal and jury trial. On the payment of the value as finally determined, the land so taken shall be vested in the state, and forever held for the purposes of a public park. The persons furnishing the money to buy such land shall be at liberty to lay out such roads and paths on the land, and otherwise improve the same under the direction of the forestry commission, and the tract shall at all times be open to the use of the public.

SECT. 5. This act shall take effect upon its passage.

[Approved March 29, 1893.]

CHAPTER 85, LAWS OF 1895.

AN ACT FOR THE PROTECTION AND PRESERVATION OF ORNAMENTAL AND SHADE TREES IN THE HIGHWAYS.

Be it enacted by the senate and house of representatives in general court convened:

SECTION 1. The mayor and aldermen in cities and the selectmen of towns are hereby authorized, as hereinafter provided in this act, to designate and preserve trees standing and growing in the limits of the highways, for the purposes of shade or ornament, and to designate not more than one such tree in every sixty-six feet where such trees are growing and are of a diameter of one inch or more.

SECT. 2. Said mayor and aldermen and selectmen shall, at such seasons of the year as they deem proper, designate such trees as are selected by them for the purposes set forth in this act, by driving into the same, at a point not less than four nor more than six feet from the ground, and on the side toward the highway, a nail or spike with a metallic washer hung thereon, on which shall be stamped the seal of the state of New Hampshire, together with such numbers or figures as will enable said officers to keep a correct record of said trees. Said washers shall be procured by the secretary of the forestry commission, and furnished by him to said officers as may be required by them for the purposes of this act; but nothing in this act shall prevent said officers from removing said trees whenever in their opinion the public good requires it.

Said mayor and aldermen or selectmen shall, at least once each year, renew such nails or spikes and washers as shall have been destroyed or defaced, and may also designate, in the same manner as hereinbefore directed, such other trees within the limits of the highway as in their judgment should be preserved for ornament or shade.

SECT. 3. Whoever shall wantonly or intentionally injure or deface any tree thus designated, or any of said nails, spikes, or washers affixed to said trees, shall forfeit not less than five nor

more than one hundred dollars, to be recovered by complaint, one half of which fine shall go to the complainant, and one half to the city or town wherein the offense was committed.*

SECT. 4. This act shall take effect on its passage.

[Approved March 28, 1895.]

CHAPTER 110, LAWS OF 1895.

AN ACT FOR THE PROTECTION OF FORESTS FROM FIRE.

Be it enacted by the senate and house of representatives in general court convened:

SECTION 1. It shall be the duty of the forestry commission, upon application by the owner or owners of any tract of forest land, situated in a locality where no town organization exists, to appoint a suitable number of special fire wardens for said tract, to define their duties, to limit their term of employment, and to fix their compensation. The expense attending the employment of said special fire wardens shall be borne one half by the party or parties making the application for their appointment and one half by the county in which said tract of forest land is located.

[Approved March 29, 1895.]

PROVISIONS OF THE PUBLIC STATUTES RELATING TO FOREST FIRES.

If any person shall kindle a fire by the use of firearms, or by any other means, on land not his own, he shall be fined not exceeding ten dollars; and if such fire spreads and does any damage to the property of others, he shall be fined not exceeding one thousand dollars.—Chapter 277, section 4.

If any person, for a lawful purpose, shall kindle a fire upon his own land, or upon land which he occupies, or upon which he is laboring, at an unsuitable time, or in a careless and

*All moieties were repealed by the legislature of 1899.

imprudent manner, and shall thereby injure or destroy the property of others, he shall be fined not exceeding one thousand dollars.—Chapter 277, section 5.

Whoever shall inform the prosecuting officers of the state of evidence which secures the conviction of any person who willfully, maliciously, or through criminal carelessness has caused any damage by fire in any forest, wood lot, pasture, or field, shall receive from the state a reward of one hundred dollars. The state treasurer shall pay the same to the informer upon presentation of a certificate of the attorney-general or solicitor that he is entitled thereto.—Chapter 277, section 7.