

FIRE PROTECTION ON THE NATIONAL FORESTS

Cooperation with States, Counties and Organizations.
Paper read by Supervisor S. C. Bartrum at the Supervisors'
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The subject which has been assigned to me deals directly with the enemies of the forests. You might say that it deals with conditions outside of the profession of Forestry. It has the same relation to Forestry as the insect pest has to horticulture; the chinch bug, the grasshopper and the army worm to agriculture. A man, however efficient he may be in the arts of horticulture, will make a dismal failure and will have no fruits to sell unless he can successfully combat the enemies of his industry, "The Insect Pest." So it is with Forestry, unless we can successfully combat and overcome the enemies of our forests you will have no timber to sell, you will have but little use for the trained timber estimators and scalers; the Office of Silviculture can devote its entire time to the study of the density of smoke and the reconnaissance of what might have been; or they can study the art of grazing for when timber diminishes by fire grazing increases.

I do not desire to belittle or underrate the importance of the grazing industry in connection with the administration of forests for our watchword is the best "Use" of all our resources. In our enthusiasm to promote any of the various branches of work which we are confronted with on each of our forests we must not lose sight of the purposes for which these vast areas were originally withdrawn and established into National Forests. They were not established, if you please, to create, to protect and promote the grazing industry alone; they were not created for the purpose of obtaining a trained Forester to examine timber, mining and homestead claims; they were not made for the purpose of securing the services of a Forest Ranger to turn down a June 11 case or survey a Ranger Station. The 195,000,000 acre of National Forest lands of this country was withdrawn primarily and fundamentally for the protection and perpetuation of the timber supply, to retain a Forest cover, to regulate the water flow and streams for irrigation, power and other useful purposes. This was what they were withdrawn for and this immense area could never have been withdrawn for any other purpose. It is true, necessarily so, that these other branches are an important adjunct to our work, we are dealing with the present generation, we are confronted with conditions of today and we must meet them, and will meet them, but in our efforts to do so, we must ever keep in mind the paramount object for which we are here. To quote the Bible "Whosoever believeth in me shall have everlasting life," so we must see that the trees above everything else on the Forests be given a chance to have everlasting life, else we will have no Forests. It is our belief, our religion, and our duty. This does not mean that we should lose sight of the magnitude of the grazing business or any other industry connected with Forest work, for grazing is a valuable resource and will be for many years an important branch of our work, but eventually (not in your day, or mine, perhaps) forest lands will be segregated from agriculture or grazing land, and will be administered along forest lines and made to produce timber to its utmost capacity.

Our work 100 years hence will be measured by what we have done along silvicultural lines, whether or not we have done our duty to the forest problem for the future prosperity of our country, whether we have protected and left the people of that time a sufficient supply of timber for their commercial and other needs.

The most dangerous enemies of our forest today are "fire" and "man." The question arises how are we to successfully combat these potent elements of danger. We will first take fire since it is probably the most devastating of the two, but in doing so I shall not attempt to go into detail and suggest the manner in which a fire should be suppressed, for there are so many kinds of fires and so many conditions to encounter, and there is such a vast field of thought and study on this subject that I believe it a waste of time to outline any definite policy of fire fighting for the Forests of this District. While my experience has been somewhat varied and I could probably tell you how some particular fire was successfully extinguished, yet if you should apply the same method on a similar fire on your Forest it might prove a failure. Therefore, it reverts back to that "bulwark" which we have to rely upon in so many things the "judgment" of the man on the ground. It is up to him to study the fire to determine what action to take, it is for him to study the fire to determine what action to take, it is for him to tax that gray matter to its utmost and to promptly grasp the situation. Soil, moisture, altitude, prevailing winds, forest composition, topography and many other things have more or less influence on fires. According to the report of the Secretary of the State Board of Forestry there was a total of 413 fires in Oregon in 1909, with a total area burned over of 61,037 acres aggregating a total of 191,213,590 feet of timber destroyed, or a manufactured value of more than \$2,485,776. Since this timber was destroyed and not manufactured or used, that sum was a total commercial loss to the people of the state; that wealth was prohibited by fire from passing through the channels of trade and supplying to our people labor, and the necessities of life.

In addition to this there were 5,607.5 acres of second growth timber under merchantable size burned over and destroyed. This as you all know had a potential value for if it could have been saved it would have come into the market at a time when there would be a greater demand and, of course, a greater stumpage value. So it is difficult to estimate the enormous annual loss in this direction.

The next most dangerous foe to our forest is "man." I am not sure that man is not more dangerous than fire when we consider that the origin of our forest fires is largely due to man. Ten per cent of the causes of fire in this District is attributable to lightning, the balance, or 90 per cent, is directly chargeable to man through incendiary, willfulness or carelessness. In addition to actually setting the forests on fire he stands as a barrier and a stumbling block to those who want to protect them. He prevents the enactment of laws whereby the sinews of war can be obtained for defense. He imposes high taxation which makes private forestry prohibitive. In further reference to this last enemy I will confine myself to the State of Oregon alone, for two reasons, first because the Washington men are here within our gates and on that account I do not want to say anything unkind of their state. On the other hand, I am more familiar with the conditions

of this state, and, therefore, will briefly mention some of our natural resources and their relation to legislation.

Probably there is no country in the world that can excel Oregon in the production of slumber – not lumber, but slumber. The conditions, climatic and otherwise, appear to be favorable to the fullest enjoyment of that delightful peaceful repose, sleep. The inhabitants have been susceptible to its apparently irresistible influences and tranquility. A violent stage of awakening, however, is at hand. Some are actually sitting up and stretching, some are sitting up, yawning and rubbing their eyes, some have not arisen but are soon to awake, while others will never awake to a realization of the stupendous resources of this state.

Reflect for a moment – can you realize that the Oregon forests contain more than 350 billion feet of merchantable timber or one-sixth of the total stand of the United States. At the present stumpage value it is worth 500 million dollars, as a resource and as taxable property. If it was manufactured into lumber, it would bring in the markets of the world today, about five billion dollars. This enormous amount partly represents the wealth of this vast crop of timber already grown and ready to harvest.

This stupendous wealth is a perishable property, the loss of which would be shared by all persons and industries. It is estimated that sixty billion feet of timber has already been destroyed by fire, representing a stumpage value of more than sixty million dollars. An absolutely irreparable loss, directly and indirectly, to every man, woman and child in the State of Oregon; not alone in a commercial sense, but also in taxable property. Timber to the value of millions and millions of dollars is annually destroyed by fire, in this state, to say nothing of the young growth, which is the hope of supplying future generations, and in consequence has a great potential value.

What are the people of this great state, with their legislative body of lawmakers, doing to prevent these annual losses? Nothing. I say nothing – they appropriate \$250.00 per year, about the same sum that you and I contribute to our Commercial Club to advertise the commercial resources of the state. Think of it! Two hundred and fifty dollars per year to protect five hundred million dollars worth of perishable property, with an annual loss by criminal neglect, of many millions of dollars. You ask, "Why this condition?" I have already stated it. The name of the disease is "lethargic drowsiness," a state of inaction, indifference and complete apathetic repose.

The total appropriation for Oregon made at the last session of the legislature, amounted to about three million dollars, seventy-five thousand of which, including licenses, fines, etc., was appropriated for the protection and propagation of fish and fishing industries of the state; thirty-four thousand, including licenses and fines, was appropriated for the protection of game; thirteen thousand for horticulture, including one thousand for the society of horticulture; and only \$500.00 for the protection of timber and the suppression of fires. These appropriations were made to cover a period of two years, 1909 and 1910. I mention these different appropriations merely as a comparison and not for criticism. I concede the necessity for all of these appropriations, and especially is this

true in regard to the Department of Fisheries. I am quite familiar with their great work in this state, and how they are fostering and actually keeping alive the great salmon industry, while, if this protection was not given, the business would dwindle to practically nothing in a few years.

I will quote a few figures as a comparison also; in 1908 the total product of salmon and other food fishes, including shell fish, in Oregon, amounted in round numbers to one million, eight hundred and eighty thousand dollars. During the same year there was one and one-half billion feet of Oregon timber manufactured into lumber, valued at 20 million dollars, or more than ten times the value of the fish product. The fish resource, which product in 1908 was valued at less than two million, was protected by the state appropriation during the same year, to the amount of \$48,681.50, while the timber, whose product amounted to 20 million, received from the state as protection, \$250.00. It will, therefore, be seen that the state pays for protection \$280.00 for every one hundred thousand dollars of fish business and \$1.25 for every one hundred thousand of timber business, or 224 times more protection to the fishing industry than it does to the protection of 500 million dollars worth of perishable property. It takes about four years to produce a mature salmon worth from \$1.00 to \$1.75, and 150 years to grow a tree worth \$4.00 or \$5.00.

In 1908 there was \$21,276.87 expended by the state for the protection of game. Now for what purpose is the game protected? Not to stimulate trade or build up large enterprises, or to protect some perishable property; not to create a revenue for the state, corporations or individuals, for there is no revenue derived from game. This money, then, was expended to protect the game largely for the pleasure and enjoyment of those who like to hunt. And it is entirely proper and right that the game should be protected; but is it right – is it economy – is it a business proposition for the state to absolutely ignore and neglect to protect a perishable crop of timber which has taken from seventy-five to three hundred years to grow, the present annual revenue of which is greater than the combined resources of the state, outside of agriculture. When the timber is developed to its fullest capacity in this state, the business and revenue will be greater than the combined resources of the state, including agriculture.

The state makes large and liberal appropriations for the protection and growth of every other resource, commercial industries and experiments, and neglects almost entirely its timber resource. Yet the average annual loss of timber by fire, if used and not destroyed, would bring to the people of the state more than the total appropriation made to carry on the entire state government.

Session after session the legislature accepts the enfeebled argument that the "timber baron" the "timber trust" and the "looters of the public domain" have gobbled all the timber, and that they should, therefore, protect it at their own expense; that it would be an unjust burden to tax the people for the protection of privately owned timber. I think the same could be said of fishing, game, agriculture, horticulture and many other things which the state assists in like manner. This well meant ignorance on the part of the lawmakers substantiates my opening statement. The so-called "timber baron" or private

owner, receives only his share – the stumpage value. The balance, \$10.00 per M. feet, goes for wages, or 85 per cent through manufacture, goes into the pockets of Labor, and flows through every channel of trade and occupation. Money pours into the state from every country where lumber is sold, and Oregon is thereby paid a high tribute for her trade.

I have outlined the situation, in a feeble way, with which we find ourselves confronted today. I have given you the cause of our trouble and the name of the disease. Now for the remedy, the name of which is "Awakening." Public sentiment must be awakened to the true sense of its grave responsibility. It must be made to realize that it is a crime – a moral crime at least, to destroy and squander so vast a wealth left temporarily to our care and charge, the loss of which will be felt by us, but not so much us, as it will be felt by our children and our children's children and unborn generations. When our people understand that we are not living entirely within ourselves, and are willing, in a measure at least, to cast aside personal selfishness and greed for the sake of leaving to posterity this great natural wealth, when we have finished with it, for it is theirs as much as ours; to leave it in as good a condition, if not better than it came to us, then, and not until then, can we expect remedial legislation and successful cooperation. When this is done, I say adequate fire laws will be enacted and substantial appropriations made, as by magic, and the fellow who helped to defeat meritorious laws will say, "I told you so."

When public sentiment so shapes itself that it can be shown that it is to the public's welfare and financial interests that its timber resources be given the same proportion of protection, as is given to other resources and industries of this state; when Oregon is ready to do this and make a sufficient appropriation to perfect an efficient state organization, (for nothing can be accomplished without organization) to operate under broad and wise laws, then cooperation can be carried on successfully with the United States Government, with counties, with associations, corporations, and companies and individuals.

I say again as I have said before that old sleepy Oregon will soon burst forth from that deep slumber and startle the world with advanced forest legislation as it has done on water legislation, and this is where the great danger lies. A man startled from a sleep confronted with a grave danger will act and will act quickly, but we can not depend on him to always act wisely. In his impulsiveness it is very likely that he will act rashly and unthoughtedly at least in many things. This is true of the famous water legislation in this state at the last session. In this case he acted both wisely and rashly, the ill effects of which we are confronted with today, and before the full development of the many ways in which water can be utilized it will be necessary to correct some of the evils emanating from the recent water law.

At the time that this water bill was under discussion at Salem the friends of conservation were on hand and were successful in embodying within the bill the meritorious measures. The enemies of conservation were also on hand and succeeded in getting provisions into the law which created a monopoly instead of preventing one.

In order to bring out the necessity of universal cooperation I will have to give you some figures. During the year 1909 the Washington Fire Association paid out for fire fighting and protection in the western portion of that state nearly \$40,000; Oregon timber owners paid for protection \$40,000, while Idaho timber men paid over \$51,000. During the same year the Forest Service paid for protection in Oregon nearly \$40,000; Washington paid about \$35,000, this also includes patrol for four months of the dry season. In addition to this the Forest Service has expended \$241,538 in the last two years in this District for permanent improvements, which is in the broad sense, directly or indirectly, for the purpose of fire protection. Each of the two states have contributed their little mites. Individuals of which we can secure no authentic record of their expenditures have also paid out large sums. All of these interests were acting independently. Now then it seems to me that these different factors should get together under some broad and comprehensive system of cooperation, and more successfully carry out this work. It is reasonable to believe that the combined efforts of all these interests could accomplish what each in a narrow sense have been trying to do. The state should make an appropriation sufficient to employ a competent State Forester with a broad and practical experience and one or two assistants to help him. There should also be an available fund for the state to cooperate with the Government, associations, companies, individuals and others in this work, and to further carry out the provisions of the law.

A word about taxation and I am through. Under the present system of taxation in the Pacific Northwest it practically prohibits the private owner to conduct forestry along scientific lines. It is a losing game to the first owner to carry an investment the length of time it takes to grow a crop of timber without some earning power.

There is no uniformity in timber taxation in the different states and counties. It varies from \$2 to \$3 per acre for cut-over lands. Some counties make a lump valuation of \$20 to \$40 per acre for timber lands, other counties put a flat valuation on the land from \$2 to \$5 per acre, and in addition from 50 cents to \$1 per thousand feet for the timber. There are extreme cases where the timber is taxed to that extent that the tax itself amounts to \$5 per acre. It can reasonably be seen that a timber owner can not hold timber to practice forestry even though it is in a growing condition very many years at this rate. Legislation on taxation is also a much needed reform.

Theodore Roosevelt once said that "Second only to good fire laws is the enactment of tax laws which will permit the perpetuation of existing forests by use."

I again quote from the National Conservation Commission. "Present tax laws prevent reforestation of cut-over land and the perpetuation of existing forests by use. The annual tax on the land itself exclusive of the timber, and a tax upon the timber when cut is well adapted to actual conditions of forest investments and is practicable, and certainly it would insure a permanent revenue from the forests in the aggregate, far greater than is now collected and yet be less burdensome upon the state and upon the owner. It is better from every side that the forest land should yield a moderate tax

permanently than that it should yield an excessive revenue temporarily and then cease to yield at all."

The forest unlike almost every other earth producing necessity can be made to live, to perpetuate and produce. While other resources like iron, coal, gold, oil, gas and many other elements of our industries when once exhausted are gone and can not be reproduced. It is within our province to neglect, to impair and to waste our forest, or it is also within our power to protect, improve and to use this vast resource for the best use and benefit of our people; not for this generation alone but for all time. This Government unlike its inhabitants, lives not a few years but for countless hundreds of years.

The forests of the Pacific slope have not grown entirely within our lifetime, it has required the lifetime of several generations. We have received them as a heritage and it is our duty at least, to use them without waste and pass them on.