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FEDERAL FORESTRY[1]

THE part played by the nation in forestry must always be large. Here as in all other countries, the real development of forestry began when the government took up its practise. Even to-day some persons would leave the forests entirely to private owners; others insist that the public phases of forestry are altogether a state function and federal activities in this field uncalled for. Those who hold this view are usually either lukewarm concerning the need for forest conservation or opposed to restricting private activities.

National responsibility in forestry is perfectly clear-cut. There need be no confusion with an equally clear-cut responsibility of the states. And as to private forestry little of value has so far been done that has not been an outcome of public action through state or federal agencies, or both. It was the work of the federal government in placing its own forests under administration, its demonstration of fire protection and of conservative lumbering, its experimental and educational work, and its stimulus to our educational institutions to train and turn out a large body of foresters, which created the present wide interest in forestry and brought the efforts of other agencies into successful play. I do not mean in any way to overlook the splendid work of certain individual states like Pennsylvania and New York, which dates back many years. But that was localized in a few states. It required the nation itself to set in motion a national move-

[1] Address delivered at the Fifth National Conservation Congress, Washington, D. C., November 19, 1913.

ment. The national work will always be the backbone of American forestry, not trenching on or interfering with state work or individual efforts but serving as a demonstration of forest management on its own lands, a center of leadership, cooperation and assistance to state and private work, a means to handle interstate problems and coordinate the work of neighboring states, a guarantee that national needs which individual states can not meet will be provided for on a national scale.

Underlying the forestry problem are two fundamental considerations which should be emphasized and reiterated until thoroughly driven home. One is the public character of forestry. The public has a peculiar interest in the benefits of forestry. Both in the matter of a continued supply of forest products and in that of the conservation of water resources the public welfare is at stake. In each case purposes vital to the prosperity of the country can be accomplished only with the direct participation of the public. Private owners will secure results only on a limited scale in the long run on their own initiative. It takes too long, 50 to 200 years, to grow a crop of timber trees. Most private owners in face of fire risk, bad tax laws and uncertain future markets will not make the necessary investments. Most lumbermen have bought their lands either to log or to speculate in the standing timber, not to grow trees for later generations. Nor will private owners make investments for general public benefits, as in watershed protection. If the public is to secure the benefits of forestry it must take the measures necessary to guarantee these results, and it must bear the cost of what it receives.

Closely related to the fact that forestry is in many aspects a public problem is the second of the fundamental considerations I wish to emphasize. Forestry requires stability of administrative policy and such permanence of ownership as will ensure it. Herein lies the difficulty of private forestry on a large scale. Timberland owners are interested in the protection of their standing timber merely as insurance. Most of them are not interested in forest production, or in protecting cut-over lands if that involves substantial annual charges and is not necessary in order to protect their remaining standing timber. As yet the problem of cut-over private lands is unsolved. It is now devolving on the state to aid in their protection from fire in the interest of its own citizens. It will require the utmost resources of state and federal government together to handle this problem of getting reasonable protection of private forests and permanent production of timber on cut-over lands. Stability of policy and permanence of ownership are essential to any successful attack on this great conservation problem.

This principle of stability of policy of administration is a large factor in successful handling of public property and has been consistently considered in the national forest work. I am frequently asked as I travel about the country whether I am going to make important changes in the forestry policy. I was asked that very often in 1910, when I first took office. I am asked it often this year. My answer is that what we are seeking is not changes but the development of a permanent public enterprise with consistent and stable policies. The national forests were set aside in the recognition that the bulk of these lands should be handled permanently under public protection and control. Provision was made for the acquisition of agricultural lands that might best be developed under private ownership, and such areas are now being classified and segregated from the forests very rapidly. The

successful handling of the national forests requires annual expenditures in administration and protection and in development of roads, trails, telephones, buildings and other improvements necessary for proper administration. We seek, therefore, as fast as possible to develop through classification the permanent boundaries of the forest land, and the management of it according to definite far-sighted plans that will make for the best results of all expenditures in the long run. The result sought is an efficient business administration, a proper and adequate forestry practise, and development of the public property in the interests of the people who own it. These simple principles have been kept in mind since the first organization of the work by Mr. Pinchot, who was more than any other one man responsible for what has been accomplished in forestry in this country.

The national forests have now been under administration fifteen years, and under the Forest Service for eight years. The aim of the present administration is not to overturn, but to take every possible step to increase efficiency of the organization, to adjust difficulties, and advance as fast as possible the purposes for which the national forests were established. Secretary Houston recently said to me regarding the national forests:

"Establish permanent boundaries. Classify your lands; segregate the agricultural land and fix right limits for what is needed as protective and productive forests. Develop permanent policies based on full recognition of lasting public interests, and settled forestry practise fitted to the individual needs of each forest and locality. Study efficiency; make any changes necessary for this purpose, but make no changes that are not clearly called for in the public interest. Carry out your plans for the development and increasing use of the forests; but above all, make each forest work for community upbuilding and local as well as general welfare. We must always have in mind the men and women who are building up a new country and laying the foundations for prosperous, thriving commonwealths. We must try to study their needs and see where and how the forests can help them. But we must not cease to guard effectively against the evils of private privilege and monopolistic control of resources now the property of the public."

The first important result of national forestry is a demonstration that the forests can be protected from fire. It was only a few years ago that many asserted this to be impossible. In the northwest the smoke season was as inevitable as the rainy season of winter, and this was not merely the result of clearing land but from forest fires. It is only recently that our own forest officers have regarded lookout stations as feasible in certain places; for lookout stations are useless if smoke hides the view. This year has been the worst in many respects of all years in California because of the frequency of lightning fires. Yet the lookout stations on only two forests, and then only for a short time, were out of commission because of smoke; and the smoke came from fires on private lands. This year in California there were over 1,100 fires on the timbered areas. These were kept down to an average of a little over 20 acres per fire. This was done by an effective fire organization and through the means of the trails, telephones and lookout system. In one storm lightning set over 20 fires on one forest. It takes swift and efficient work to handle such a situation. The results so far attained show that fires can be mastered. But it is necessary first to put the forest in a condition to enable

the force to prevent fires, to detect promptly those which start, and to reach them quickly. The Forest Service is developing a system of lookout stations, fire lines, trails, and telephone lines that ultimately will make the forests secure. Already the force is able to save every year property valued at many million dollars through the improvements so far built, although as yet only a beginning has been made. This work is carried on according to a definite plan, already projected in detail. Each year's work adds 2,500 miles of trails, 3,500 miles of telephones, and many lookouts and other improvements, progressing toward the final scheme. Until that is completed the forests can not be made entirely secure. With that development, the forest fires can be handled even in that exceptionally dry year that occasionally comes to every region.

This protection not only saves the trees from destruction or injury, but already the effect is shown in the restocking of many areas where the old fires had prevented reproduction. Personally, I had hardly expected that there would be so quick a response. But the results are now apparent to even a casual observer. More specifically, while previously the forests were going backward because of fires, there is now an annual gain through growth. This increase translated into dollars and cents is much greater than the total cost of protection and all other expenses of the forests.

The necessity to take immediate steps to prevent the public forests from being destroyed by fire has placed a large emphasis on the protective feature of the administration. The wise use of the forest resources in the development of industries and in building up the country is essentially the real aim of maintaining the forests. Protection from destruction is a first essential; otherwise there would be no resources to use. But the purpose of the administration is not merely protective, but constructive. It is a favorite theme of the opponents of the national forest system to represent the forests as a separate federal domain, held for the use of future generations or for persons other than those now living in the region in which the forests are situated. Such statements are not only contrary to the spirit of the administration of the forests, but are disproved by the results already being secured. The aim is to make the forests count in the highest possible measure in the industrial upbuilding of the local communities, at the same time that they serve their broader public functions. In classifying the agricultural lands the aim is to get people to make permanent homes in the forests. Every consideration in the development of the states and in the upbuilding of the forests themselves makes for the encouragement of a greater local population. When there are people to create a demand for the timber and other resources, the real development of the forest becomes possible, and the forest begins to render its greatest service.

To encourage this development the Forest Service is promoting the sale of its ripe timber to build up local lumber industries of a permanent character; it is opening to entry land chiefly adapted to agriculture; it is further helping the settler by providing free such timber as he needs and protecting him in the use of the range needed for his stock; and in every way it undertakes to make the forests of public service and the country in the long run a better place for men and women to live in.

That a long step has already been taken toward this end is indicated by the very extraordinary change in sentiment in the west in the last few years. I have this year

been able to analyze in detail the sentiment on the individual forests and now know just where opposition in each case exists and the extent to which the work of the federal government is valued. I have been astonished at the overwhelming preponderance of sentiment among the local communities in favor of the forest system. Frequently there are objections to certain regulations, or difficulty and friction in specific transactions. But every year these local troubles are being adjusted on the ground. There is still definite opposition to the forest system and the principles of our administration from certain groups, and certain interests. There are still certain water power interests which are carrying on a fight against the Forest Service. Many speculative interests oppose the forest system because the resources are not open to private acquisition under the general land laws. Certain men are opposed to the national forests because they can not secure privileges that would be possible if the forests were unprotected. For example, in the southwest I find a well defined opposition among those who desire to run herds of goats on the forests without restriction. The desire to secure valuable timber for speculation is now, and always will be, a source of opposition to the public control of our forests.

One proof of the present favorable sentiment is the fact that there are now relatively few breaches of the regulations. For example, in the fourth administrative district, which includes Utah, Nevada, northern Arizona, southern Idaho and southwestern Wyoming, over 11,000 permits were issued last year, each involving some regulation. There were only 35 cases of trespass, about half of which were innocent and the majority of the remainder not very important. Such a record would be absolutely impossible if the people themselves were not right behind the regulations. In other words, it was public sentiment that made it possible to carry out the procedure with such success.

In the national forest districts it is now seen that the aim is to make the national forests serviceable at present as well as in the future, and people are cooperating more and more with the government to make the local administration successful.

In the east the work of the federal government is to-day far more effective than ever before. The establishment of national forests under the provisions of the Weeks law is accomplishing many results not anticipated even by its most earnest advocates. The purchase of lands on important watersheds in the White Mountains and southern Appalachians is steadily progressing. Already contracts for over 700,000 acres have been approved by the National Forest Reservation Commission. These lands are located on the most important watersheds and have been secured at prices representing their actual value, the average being $5.07 per acre. It has already been demonstrated that the building up of national forests by purchase and at reasonable prices is practicable.

The first effect of these purchases has been an educational one. The wide interest in the work has resulted in an awakened appreciation of forest protection and forestry wherever the government has been examining land for purchase. Cooperation in forestry between the government and the states has received a great stimulus. The actual annual saving from loss on areas protected from fire directly as a result of the Weeks law, on private as well as public property, would amount to a very large aggregate sum. In short, the Weeks law is now yielding results which fully justify the new policy which it established.

The nation's interest in the success of the forestry movement is very great; the contribution of the nation through federal agencies should be correspondingly liberal. Let the federal government assume its full responsibilities of leadership, assistance and cooperation, and our forest problem will be on the way to certain solution.

Henry S. Graves
Federal Forest Service,
Washington, D. C.

The Essentials of an Education[1]

The official recognition of the subject of mental hygiene by the International Congress on School Hygiene is an important event, indicating formal assent to the principle that thought and conduct can only be intelligently discussed when considered in relation to all other forms of human activity. After having been perpetuated for centuries by mechanical repetition, the phrase "a sound mind in a sound body" has suddenly acquired a vital meaning for our civilization.

Although the honor of presiding at this symposium upon mental hygiene is deeply appreciated by me, I am keenly alive to the fact that the force and set of the currents in this movement are already so strong that the question of merit in the selection of your chairman is almost a negligible factor.

The common elementary truths of daily life are frequently either ignored or forgotten. "We go to Switzerland," said Lowell, "to learn the sun rises and to Italy to find out the sky is blue." In considering what the aims and methods of obtaining an education should be, our attention is so often fixed upon remote unattainable ideals that the really essential factors in the problem are overlooked. The cause of idealism in education, as well as in other matters, is often best served by those who take a direct practical interest in the problems of everyday life. It is an exceedingly dangerous form of sophistry which has recently been promulgated that tends to cast suspicions upon any system of education reflecting either utility of purpose or immediate practicability of application. The value of ideals is commensurate with their practical usefulness, unless we assume with the Buddhist that the *summum bonum* of human existence is found in passive contemplation. Mr. Snedden, the Massachusetts commissioner of education, in his recent book[2] affirms that many of our academic studies are organized and presented too much with reference to their pure aspects —that is, without regard to their application in contemporary life and activity.

Clear ideas in regard to some of the chief characteristics of the educational process will be of material assistance in restating the entire problem of educational reform in terms that shall be favorable, and not antagonistic to a rational solution. The successful execution of this plan will ensure the perpetuation of popular government. A distinguished writer recently indicated the direction in which all our hopes for the improvement of political and social conditions lie by affirming "the most important problem of democracy is the education of the citizen."

No intelligent person would dissent from the view that the process of education is intended to direct or shape the activities of living beings. Unfortunately, the tendency of the human mind either to contemplate events in the past or to speculate about the future has hitherto left man little time or opportunity to study his own activities or

[1] Chairman's address, "Symposium on Mental Hygiene," Fourth International Congress on School Hygiene, Buffalo, August 25 to 30, 1913.

[2] "Education Readjustment," Houghton, Mifflin Co., 1913.