

State Forestry for America.

Of the nature and extent of the original or native forests of the United States, of their destruction and the consequent effect upon the climate and upon economic conditions much has been written and much more might be written. Suffice it to say that the forests of America were entrusted to the care of private ownership and that they have disappeared not alone as the result of wasteful and improvident use but also because of wanton destruction that more land might be cultivated. Thus, always destroying, never replanting, is it strange that Americans have learned to underestimate the value of the forest, or that successive generations of such training has branded ours as a nation of forest vandals? With the growth of a market for forest products in the arts and in commerce, this vandalism has

amounted to almost universal destruction, vast areas being denuded of their timber by the lumberman's ax without any effort being made to replace the growth. Thus gradually have the great natural forests disappeared, until today, but a small fraction of the original amount is left standing. With the limit of forest destruction almost reached, with a lumber famine not far distant and prices already advancing, the prodigality of the past forces the problem of future resources upon us.

Aside from what might be termed purely economic ~~considerations~~, there are other strong reasons for forest conservation, not the least of which are the climatic influences of the forest and the changes which are sure to follow its destruction. Disastrous climatic results followed when the forests were removed in Spain, France, Italy, Greece and Syria and similar changes are becoming every year more apparent in America. Seasons are more variable, winters are colder, summers are hotter and drier and freshets and floods increasingly prevalent in springtime. Fountains and brooks which once were con-

stant the year round now have an intermittent flow and that only during a rainy season. Great rivers, once the channels of commercial transportation, are deserted by the steamboats because they dwindle into mere creeks in summertime since the destruction of the great forest reservoirs of moisture. Meteorological records also indicate that winds have increased in frequency and violence, hail storms are less uncommon and that, owing to rapid evaporation and drainage earlier in the season, there is less rain fall during the warm months when it is needed the most.

The reparation of this damage, which, for the most part, has been committed unwittingly, is a problem that faces the American people. Private enterprise does not promise a satisfactory solution. But, while the same physical means and results which have contributed to successful state forestry in other nations are possible in the United States, other conditions are not the same. Political privileges, property rights and land tenures interpose such serious obstacles that new administrative methods

must be devised. Be that as it may, the fact remains, that to achieve uniform success in such a great system of public improvements the operations must be under the direction and control of governmental authority.

Nearly every nation in Europe, except Great Britain, has a regularly organized forestry service, with laws for the regulation and control of all forests, whether on private, communal or State lands, and provide for this service by supporting well trained forestry corps. Of these, that of France is one of the most efficient and is a model worthy, in some respects at least, of the emulation of its sister republic in America.

Within the past century the sand dunes of the French coast and the Landes (swamps formed by the impeded watercourses back of the dunes,) have been reclaimed by planting with maritime pine, the swamps being drained for that purpose. Thus the desolate sand ridges and malarious swamps were transformed into a wealth producing forest. Vast sums have been expended

in the reboisement of the denuded mountain slopes in southern France. Although the amount thus spent seems to border on extravagance yet the fact remains that a single flood would have destroyed property valued at more than whole sum thus expended, if the mountain slopes had not been recovered with a forest growth, thus preventing the formation of torrents and freshets.

As before stated the American system of land tenures and property rights are obstacles that would hinder the adoption of such a system in this country. Anything that would in anyway interfere with private property rights would be at variance with the spirit of republican institutions and consequently it would require more than just mere modification to make its adoption possible in America. Still many of its features suggest possibilities of what an American system of forestry management might be.

In the discussion of the question of

a public forestry system the query naturally arises as to whether it is to be controlled by the federal government, by the several states or by both. There are many reasons why there should be co-operative action on the part of both. In the division between the two, that part of the work falling to the lot of the national government would naturally be, like all Federal powers, that which concerns all the states more or less. Thus it might create public forest reserves of the mountain lands in which many rivers have their sources. Such reservations would affect not alone the states in which they are situated but, indirectly, every state through which these rivers flow would be more or less benefited. For example, if by the reboisement of the denuded mountain slopes in which the Pennsylvania and West Virginia affluents of the Ohio river rise, the freshets and floods of spring and early summer are lessened and the average flow of later summer and autumn is

so increased as to make navigation once more possible at a time when it is now commonly suspended, it would clearly be within the province of the general government to establish such reservations. The timber area of the mountainous parts of the western states could be largely increased and by this means, together with the construction of suitable storage reservoirs for water, not only could much of the arid land be reclaimed but climate might be changed to a marked degree. All mountain land which is not suited to agriculture, grazing or mining should be held as public property, subject to the care and protection of the Federal government as a forest reserve. To this it may be argued that the care and preservation of such immense tracts would require the services of a small army of government employes. Granting that it would, yet even then the benefits derived and the advantages gained would far outweigh the disadvantages while the State forests would, with proper

management, yield a revenue that would nearly equal the expense incurred. For this purpose a forestry corps, semi-military in its form of organization and discipline, and similar to those of some of the European states, would prove most efficient. It should be organized on a permanent basis and as far removed from partizan politics and the spoils system as are army and navy, and it should be composed of men who have been trained and educated for its service.

It may be further argued that, by the establishment of extensive forest reservations the national government will be entering into competition with the people — that the State having become a producer is assuming a form of paternalism that is detrimental to the interests of the private producer. But if this be granted it must yet be admitted that the selfish rights of the few must not be weighed in the balance against the good of the many. The primary function of all government is

that of restraint. Organized society exists because of the excesses of the individual. Then, if, in the past, the private property owner has been prodigal and has wantonly destroyed the forest without thought or care as to the public good or the wants of posterity, it is clearly the duty of the government to assume the right to act for the common weal even if it be charged with paternalism. In promoting the general welfare and providing for the wants of posterity all governments are paternal, differing in degree rather than in kind.

But a large part of this public duty must devolve upon the several states of the Union. This would include the enactment of laws for the encouragement of forest culture by private property owners. How this could be most successfully accomplished is a mooted question, but that it must be done is patent. Kansas, with a superficial area of 52,000,000, acres, probably never had 1,500,000, acres of natural forest (certainly less than 2,000,000, acres,) and

much if not most of that has been cleared off, while recent agricultural statistics indicate that there are less than 200000 acres of artificial forest in the state. The best authorities on forestry have estimated that Kansas should have ten million acres of forest land (nearly ten per cent. of the entire area of the state) in order to insure the most equable climatic conditions within its borders. Aside from the economic value of the timber thus produced the remaining eighty per cent. of the land would then be worth more for agricultural purposes than is the whole amount under the existing conditions.

Probably the first duty of the Commonwealth would be the establishment of a state bureau of forestry and a state forestry school for the collection and dissemination of useful knowledge. Thorough meteorological, hydrographic, geological and botanical surveys should be made and a number of practical experimental stations established.

For the most complete and satisfactory results it might be necessary to extend

the system of an organized service to county and municipal divisions. If it became expedient to have county forest officers they should be charged with the duties of county surveyor and the township deputies—if such an officer be created—should also be charged with a road overseer's duties. Then these positions, while elective, should be open only to such as had pursued an approved course of study or passed a satisfactory examination before the state bureau. Upon this corps would devolve not only the construction, care and repair of highways, roads and bridges, but they should see that trees are planted upon the road side and should be held responsible for the inspection and measurement of all artificial timber tracts and water reservoirs upon which bounties may have been offered or taxes remitted.

It may be questioned whether a state has the power to compel a land owner to plant any timber. However the same end might be gained by means of bounties granted and taxes remitted, the inducement

to be increased on a sliding scale up to a certain amount. While this would stimulate and encourage forest culture it would make taxation burdensome to the non-forestgrowing land owner but from reasons of self interest ~~he~~ ~~should~~, in time, be compelled to plant timber on his own lands. Thus in time the desired amount of timbered land would be gained and possibly public sentiment might be educated to ~~the~~ point where it would warrant the enactment of laws for the maintenance and control of all forest lands in the state.

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