

THE INDIANA FOREST PROBLEM.

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Emerson Hough has recently pointed out that we are living in a fool's paradise and that the time had arrived when we would have to take some measures to protect and if possible perpetuate our vanishing supplies of timber, coal and other natural resources.

The forest problem and the idea of making some provision for a future timber supply has for many years been before the public in a sort of half hearted way and it has been a source of inspiration for many half baked reformers who had turned to reform as a tired business man turns to golf. It has become a plaything for politicians and as a result there is no real progress in timber conservation to be seen.

It has recently been advocated that the solution of the problem in Indiana consisted in the purchase of some vast but vague number of acres of waste land and then reclaiming this land by the planting of trees. Such a project would be most admirable from the stand point of the political "reformer" for it would place in his hands a considerable amount of public money—and if there is anything that the average politician likes to do better than anything else it is to handle public funds.



Michigan forest land in which all young growth has been killed. Trees have been replaced by asters, fire weed and bracken ferns.

We are fortunately not in the dark as to the possible success of such a program for there have already been planted in Indiana quite a number of "forest plantations". It has been the writer's good fortune to visit many of these plantings and to secure data on the rate of growth, the value of the land, the possible return, etc. Without exception not a single plantation of

this kind has produced enough to pay the taxes on the land it occupies. Without exception, every plantation visited could be characterized as an absolute failure. The best of them were planted on land that was good enough to be rated as good corn ground. In such situations young trees thrive fairly well but when planted in poor, "washed", abandoned soil the trees struggle along for years before they are large enough to cut first class bean poles. Certainly it is not proposed to buy high priced Indiana farm land, take it out of production and plant trees on it. And yet if we deliberately plant trees on the opposite type of land no one will ever be benefitted by the work—and the tax payers will have to foot the bill.

In southern Indiana we have still many thousands of acres of timber land. Some of this, most of it in fact, has been cut over more or less. It is difficult to find a tract from which no timber has ever been removed. There are other thousands of acres that have been cut over and practically all of the merchantable timber sold. This cut-over land has not been cleared for agricultural purposes, however, and still contains the stumps and roots of the former trees.

It is a well known fact that when a tree is cut down that the root will as quickly as possible send up one or more vigorous sprouts in an effort to replace the top. It is also well known that when the mature trees are



The forest fire is the worst enemy of our future timber supply.

removed in a forest the younger trees make a tremendous growth in a very short time. What then is to prevent these cut-over lands from replacing the trees removed much more quickly than similar trees could be grown on abandoned farm lands? There is but one answer to that question and that is "fire". Every year in Indiana we permit forest fires to rage over our timber lands and no one ever takes the trouble to do anything about it. In my own neighborhood we had a fire a few years ago that killed more young trees than have been planted in the state since the Board of Forestry was first organized. This particular fire was prevented from doing still greater damage only by the prompt action of a private individual. It was known

at the time by whom the fire was started and a prosecution could have been made under the existing fire law but altho the authorities were notified they did not indicate any disposition even to investigate the matter.

In our neighboring state of Michigan a similar condition prevails as it does in most of the states in the Union. Our public indifference to forest fires is preventing the growth of timber to supply our future wants and a stringent fire law would do more to perpetuate our forests than would any amount of forest planting on low grade state owned land. In Wisconsin I have seen large areas of white pine land that had been burned over year after year until even the humus had been burned out of the soil and only the pure sand sub-soil was left. In the same district I have seen small patches of land which have been protected from fire for thirty years or more and now have a perfect stand of pines nearly a foot in diameter. In Michigan I know of one tract of cut over land that has not had a fire in it for sixty years. To one who does not know the history of the place it is thought to be virgin forest and to all intents and purposes it is, for it bears a crop of trees that are ready for market.



A typical Catalpa planting. Plantings of this worthless tree have at various times been urged by the state.

In my own neighborhood in Indiana I know of one little tract of white oak land that has been protected from fire for over thirty years and supports a growth of very perfect trees nearly all of which are large enough to cut cross ties and many of them will make saw logs. On the same farm is another tract that has been burned over at intervals of a few years and the growth on it consists of sassafras, sumach, blackberry and tangled vines. If this tract should be protected for a few years the sassafras even would quickly reach a size that it would be valuable. Repeated burnings have

killed successive crops of young trees until now only a stand of bean poles is left.

The question may be raised as to whether or not it is possible to enforce an anti-forest fire law. This might well be answered by referring to the results obtained by our northern neighbor. Canada has a forest fire law and enforces it. When a hunter or camper goes into a Canadian forest he knows beforehand just what will happen to him if he allows a fire to escape in the woods. The farmers have the same information and as a result such fires simply do not happen. The few forest fires that have been reported from Canada have either been set through agencies over which no control can be practiced (such as lightning) or they were "nipped in the bud" through the work of the law enforcing bodies.

The same laws and the same methods which have reduced Canadian fires to a minimum might well be applied to our own country and our own state. We would then have a chance to provide a timber supply for the future without tapping the public till to obtain funds for a gigantic experiment which is at best but doubtful in its outcome—but very certain in its outgo.



A part of a Michigan forest that has grown in the last sixty years. An evidence of what may be expected on cut-over lands when fire is kept out.