

## CONSERVATION PROBLEMS IN INDIANA.

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When the organized movement toward the conservation of natural resources began with the White House Conference of Governors in 1908, very little attention was given it. But wide publicity was given to the new undertaking, and because of the people's faith in the integrity of purpose of its leaders, Roosevelt and Pinchot, the movement met with very general favor and enthusiasm. We had already seen the essential principles of conservation successfully applied in the management of the Federal forests and irrigation enterprises. Not only did the conservation movement stand out against the useless destruction and waste of natural resources, but also against the century-old policy of the government almost giving away its great resources of forests, water power, and minerals to corporations which were becoming gigantic monopolies. At once, conservation became a scientific and economic problem. The rapid reforms that followed the agitation for conservation struck terror to the monopolies and individuals who were getting control of our great national possessions; and conservation has been compelled to fight against the crafty, powerful and insolent onslaught of certain vested interests. The history of the past year is primarily a story of this struggle. The fight is by no means over; but the National Conservation movement has gained some very decisive victories, and today conservation enjoys a very marked degree of popularity. Already the close observer can see the tendency of certain classes of men to eagerly support the conservation policies in order to secure public favor for themselves. Other well meaning people are insisting on becoming leaders of the movement, whose enthusiasm surpasses everything except their deplorable ignorance of conservation itself.

In view of the recent beginnings of conservation activity in our own State, it may be well to briefly recall to your minds some of the conservation problems of Indiana.

Two natural resources are almost entirely depleted, our great virgin forests and natural gas. While the removal of our forests was necessary for agriculture and the demand for lumber, yet it must be admitted that deforestation has taken place to a greater extent than the actual needs

of agriculture called for. The criminal waste of natural gas is quite recent history; and the industrial consequences of its failure are painfully evident in the manufacturing cities of the gas belt.

Our natural gas and primeval forests belong to the past and are things therefore beyond the help of any conservation. But we have a great wealth of natural resources which need our most careful attention.

*Present Forests.*—Our existing forests are made up of limited areas of primeval forest, and second-growth timber of inferior quality on our stream bluffs and other waste lands, and in the farmers' wood lots. In the matter of afforestation there must be an improvement in the character of the growing trees in the wood lots, which can only be brought about by scientific forestal methods. Each farmer must be as competent in tree growing as in corn and wheat growing. In southern Indiana and along the streams of northern and central Indiana we have a large combined area of land too steep for successful field culture; and for the sake of soil protection, and for future lumber supply, these tracts should be kept in perpetual forests. In this matter of forests upon non-agricultural lands, there should first be a careful survey of such lands in order to form an accurate estimate of the total area, and to determine what species of trees are best adapted to make a rapid growth of valuable timber. It seems quite safe to say that the present woodland areas are of sufficient acreage to meet all the needs for lumber within our own State, if the quantity and quality of timber grown will be what it should be.

*Soil Fertility.*—The most valuable natural resource of our State is its soil, and the maintenance of its fertility is of paramount importance. The loss in fertility due to poor agricultural methods is beginning to be keenly felt. The loss due to soil erosion in southern Indiana was ably presented in the Presidential address of two years ago.

*Sewage Pollution.*—No conservation program can ignore the problem of keeping the state waters pure. Our streams must be brought back to their original purity. As our population becomes more dense, the need of a pure water supply becomes greater, and it becomes imperative that we stop polluting our streams with sewage. The turning of sewage and factory wastes into our streams is not only vicious from the standpoint of sanitation and aesthetics, but the carrying of sewage to the sea is a waste of certain elements of soil fertility which should go back to the land instead of being lost in the ocean.

*Coal Deposits and Other Mineral Wealth.*—In the matter of coal mining there must be a steady insistence that wasteful methods of coal mining must stop. In the mining of the best veins of coal, the layers of lesser value are left in such a condition that their removal in the future will be almost impossible. The securing of large dividends in the mining industry must not be at too serious a sacrifice of the future supply of coal. There also can be an enormous saving effected in the consumption of coal for heat and power by the general adoption of appliances for complete combustion.

*Water Power.*—In this State, water power is practically an undeveloped resource which is yet the property of the whole commonwealth and from the very nature of flowing water is not subject to private ownership. It is an outrage that our State laws enable individuals or corporations to get the control and profit of the available power of a stream simply by purchasing a power site and building a dam, without giving to the State one cent of revenue. There can be no more important thing in the conservation program than to insist on the passage of laws that will clearly establish the principle that water power belongs to the State, and that will provide for the leasing of water power rights for a definite term of years at a rental that will be fair to the power company and to the people of the State.

*Conservation of Public Health.*—The campaign for public health has been carried on so efficiently by our State Board of Health under the leadership of Dr. J. N. Hurty that it is not necessary to do more than suggest that this phase of conservation must always be of the very greatest importance.

*Scenic Beauty.*—Another phase of conservation should be the preserving of the natural beauty of the State. More and more will our State become crowded with artificial features; and the desire for beautiful natural features will be correspondingly greater. We must insist that the beauty of streams and hillside, trees and flowers, and songs of birds are worth while, and that the future development of our resources shall not destroy these things. I hope that the State Federation of Clubs will make this subject its chief conservation activity.

*Conservation Organizations.*—Within the last few months we have seen the formation of organizations to do special work along lines of conservation. The value of these bodies will depend very largely upon the

ability and fitness of the leading members to be leaders in conservation. Any organization that expects to obtain and hold the support of the people of the State must have as its leaders the men who are engaged in scientific work in soils, waters, forests, public health, and kindred subjects. Any association to conserve or develop a natural resource must be conspicuous in having as its leaders men who have first-hand knowledge of the natural resources involved; and not be conspicuous by the absence of such men. It must always be kept in mind that the most important conservation work must be done by the farmers, and that no organization which is promoted by a self appointed leader can win the attention or co-operation of the workers in whose hands must rest the burden of real and enduring conservation.

*State Agencies.*—Let us not forget that we have permanent governmental departments whose work is along important conservation lines, such as Geology and Natural Resources, State Board of Forestry, State Board of Health, etc. We should see to it that the people have a chance to become better acquainted with the splendid work of these scientific departments. Their usefulness is limited only by the amount of money appropriated for their use. We can do no better work than to insist that these conservational agencies of long-tried efficiency be given more money in order that they may render still better service to the State.