## CONSERVATION OF OUR FORESTS.

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Many might think it strange that forest conservation should have a place of importance in the "Prairie State." And statistics might be cited to bear out the contention that for us the topic is one of small significance. Illinois is accustomed to occupy among our States a place near the top in almost any statistical table, whether it be a matter of bushels of corn, miles of railroad, number of people, gallons of whisky, or degree of intelligence. In amount of lumber production, however, there are more than thirty States

ahead of us, and it is our lot to be classed with such humble company as Maryland, Connecticut, and New Mexico. Forest planting might for us appear to be a much more fertile symposium topic. And indeed this is a topic about which much might be said. Although our State has a vast amount of land that naturally was treeless, there is scarcely a foot of this prairie area which is unsuited for the growth of trees. As a rule, it has been much more profitable to devote our marvellously rich soil to other uses, but there is reason for supposing that the time has arrived when we may well consider the desirability of tree planting to a much greater degree than has hitherto obtained. However attractive this subject might prove to be, it is not the one that has been assigned to me, and I must proceed forthwith to consider Forest Conservation.

Far from being one of the poorest states in which to exploit conservation theories concerning our forests, Illinois actually is one of the best, and for the obvious reason that it will not be necessary here to combat the undue cupidity of the lumber interests. In states like Washington or Louisiana, which are in the throes of extravagant timber exploitation, the sentiment of the ordinary intelligent citizens is against any large measure of forest conservation; as might be expected, the lumber interests in such states are vigorously opposed to any sort of conservation. Quite as unreasonable as the views of the average western lumberman, and very much harder for a rational conservationist to deal with, are the views of the idealistic conservationist, who lives for the most part well outside the regions of lumber exploitation, and chiefly in our cities. Many lumbermen are too much concerned in immediate gain to take thought for the future, and many conservationists are too impractical and too little familiar with forest conditions to be able to deal sanely with things as they are. One of the most pleasing signs of the times is the readiness of many of our most intelligent lumbermen to listen to plans of forest management which take the distant future into account; equally pleasing is the attempt made by the wiser conservationists to deal with the complex problem of forest conservation in the practical and conservative manner, which the name conservation ought to imply.

The establishment of forest reserves in our western states has met with vigorous opposition from many of the best citizens of the States concerned, and it is scarcely to be doubted that by the somewhat wholesale establishment of such reserves a good deal of injustice has been done to legitimate present interests. It must not be forgotten that it is quite as wrong to reserve everything for our descendants, leaving ourselves in want, as it is to appropriate everything for present needs. Nor may one rely too much upon statistical presentations which show that after a certain number of years (usually startlingly few) our supply of timber will be exhausted. It is not so many years ago that our ancestors were worrying themselves into premature graves, because of the rapidly diminishing supply of whale oil. We well may laugh at our forefathers who paid high prices for the poor light that whale oil gave, while we revel in the numerous cheap and satisfactory methods of lighting which are given us by coal oil, gas, and electricity. And we may expect our descendants to laugh at us for many of the things which we worry about today. Who knows what inventions are to come that will enable us to do away with many of the economic uses of wood? Already the wooden house is being replaced, even outside the fire limits of our cities, by houses of brick, stone, or concrete; and one wonders just where, at the present rate of progress, the replacement of wood by concrete is going to stop. Steel also is replacing wood in the manufacture of railway cars, bridges, and in many other articles of construction. Possibly the somewhat exuberant zeal displayed by many of our lumbermen in forest destruction may be caused by the fear that the rapid replacement of wood by other substances is likely to leave them stranded with a lot of useless standing timber on their hands!

Whatever the merits of the discussion that is being carried on at long range between the lumbermen of the Far West and our city friends in the East, we well may congratulate ourselves that we in Illinois are not on the firing line. We can continue on in the even tenor of our way, and can indulge in a good deal of effective conservation without exciting a storm of controversy. This is not the only reason why Illinois is a peculiarly satisfactory State for the working out of conservation principles. Our forests are composed chiefly of the hardwoods, which as a class are much less subject to destructive fires than are the coniferous trees. Thus there is great likelihood that in Illinois long-continued experiments with timber tracts would not be suddenly terminated, as might be the case in a coniferous forest, no matter how carefully it might be guarded. Again, our Illinois forests are of unusual scientific interest because they abut upon the prairies. It is probable that, were artificial factors removed, the forest

area would gradually encroach upon the area of prairie. No problem has been or is more fascinating than this forest-prairie problem, and we are only just beginning to understand some of the factors involved, when we are faced with the danger of the destruction of all our natural areas of vegetation. This forest-prairie problem is not without its economic aspects, for it involves the natural forestation of treeless areas; if we can determine how and why natural forests develop on prairie soil, we will have discovered a principle of forestry of the widest significance.

The advantages of forests commonly cited by conservationists are as real in Illinois as elsewhere. These advantages are selfevident and may be mentioned merely by name. Erosion is greatly retarded by an effective forest cover; it would be possible to display views from various parts of Illinois, showing the destruction of rich layers of surface soil, owing to injudicious deforestation. Our prairies are often very windy, and wind incites excessive transpiration, which often is ruinous to crops; forests serve as effective windbreaks. Every farmer should have his wood-lot, and thus secure a large measure of independence; the wood-lot supplements the fuel supply and contributes much in manifold ways to the peace and prosperity of the farmer. The establishment of rational conservation and scientific forestry in Illinois will have an influence beyond the borders of our State. It is probable that those States which are now the chief seats of lumber exploitation will before many years realize the need of conservative forest management. Perhaps by then our State will have accomplished something of significance that may serve as a pattern for other commonwealths which were endowed more plentifully with natural forests of commercial importance.

Illinois has started well and in the right direction by acquiring land for a State reserve at Starved Rock, between La Salle and Ottawa, along the Illinois River. Doubtless this area would not now be a State preserve but for the remarkable combination of historic interest and scenic beauty, with features of botanical and geological importance, that are centered there. Several representative forest types are there displayed, and now that their preservation is assured they may be expected to increase in interest and beauty from year to year. At least four forest types are there preserved: the river-bottom type, with elms, hackberry, mulberry, box elder, willow, ash, coffee tree, honey locust, and many more; the ravine type, with the hard maple, basswood, and

ironwood; the rock-face type, with the white pine and arbor vitæ; and the upland forest, with the red oak, white oak, black

oak, and hickory.

Much has been said concerning the preservation of the white pine forest in Ogle County, by all odds the most important forest of this species in Illinois. There is no question as to the desirability of preserving this forest, as a monument to future generations of the type of forest which was originally the most important forest asset of our country. It is believed that only a slight effort will now be needed to secure the purchase and preservation of this splendid forest. After this has been accomplished it would appear to be worth while to have set aside at least one example of each of the forest types of Illinois. Among these there should certainly be a river-bottom forest in southern Illinois, preserving some of the gigantic specimens of the primeval forest; a southern cypress swamp with its unique plant inhabitants; a yellow pine forest in southern Illinois; a beech forest; a tamarack swamp in northern Illinois. These are to be taken only as important samples; a number of other important forest types should also be included.

The forest reserves mentioned hitherto, probably should be State parks, but there remains to be mentioned a conservation scheme of yet wider significance. It has been proposed to establish county preserves; it is much to be hoped that this idea will be carried out. The expense involved should not be very great, and the return to the county would increase from year to year. In most counties such preserves might well be established in places of scenic interest, for such places usually have more or less diversified topography, displaying several types of forest and many tree species. These preserves would furnish places for picnics, and for excursions in connection with the nature study work of the schools; not only would the tree life increase in interest and beauty from year to year, but the same would be true of the wild flowers beneath the trees, and of the birds, and in fact of all kinds of plant and animal life. Bits of forest here and there would gradually be restored to the primitive wildness and beauty of the forests of pioneer days.

Possibly conservation might go even farther than has been generally suggested; that is, there might be township preserves, at least in many instances. In this event our forest tracts would be numerous enough to be within easy reach of all our people. All of our boys and girls could come into contact with forest life.

in its many phases of beauty and interest, and all without any great expense and without any great sacrifice of arable land. With such development as this we might hope some day to approach the standard of efficiency illustrated by Germany, where, in a thickly settled and long civilized country, the forests are made to serve many interests, economic, scenic, educational. There the forest is an asset, as measured in financial terms, and it also ministers to German culture in various ways. What is possible in Germany is possible in Illinois, and more possible in Illinois than in most of our States, where forests are managed in terms of commercial exploitation rather than in terms of culture and human progress.