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DIVISION OF HORTICULTURE.

CLASS BULLETIN No. 9.

THE EXPENSE OF THE PROPOSED NATIONAL PARK FOR MINNESOTA.

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It has been proposed that the National Government reserve for the purposes of a public park the land and water included in the Leech Lake Indian Reservation in Minnesota, except such land as has been allotted to the Indians in severalty. Allowing for the land taken by the Indians, which no

one proposes to interfere with, there would remain to be included in the proposed park 489,790 acres of land and 218,470 acres of water surface. Of the land 100,000 acres is classed as "timber land," that is contains much valuable timber. The surface is gently undulating and is mostly covered with trees although there are some natural meadows. The water surface comprises three of the largest lakes in the state besides many smaller lakes and many miles of river that are suitable for canoeing. The lake shores are broken and picturesque and the sandy beaches are good bathing places. There is also good hunting and fishing.

This reservation is crossed from east to west by the Great Northern Railway, and is reached from the south by a direct railway line from St. Paul. These lines of communication make this section easily accessible, which is an important point if it is to be set aside for the purposes of a public park.

There is no apparent good reason why this proposed national park should not be carried on as an example in good forestry and serve the purposes of a park at the same time. In Europe many of the woodland resorts are thus carried on, so that they not only afford good pleasure grounds, but a fair return on the money invested in them. It seems to me that this is the only practical way of managing such a large park as is proposed. The carrying out of such a plan means practically the establishment of a business which at the outset will result in the employment of several hundred men for several years, cutting two-thirds of the present stand of pine, which business will thereafter be continued indefinitely, paying out each year probably at least \$40,000 for wages and supplies. The data for the estimates of the yield per acre are obtained from Bulletin No. 49 of the experiment station of the University of Minnesota, published in 1896, together with subsequent data which I have collected at various times and from several visits made to this reservation. I am very sure that the

estimates given are conservative, and that the balance between outlay and income has not been made to appear more favorable than can be realized in practice. Each item is numbered, and following the financial statement will be found notes on each according to number wherever explanation seems necessary.

IMMEDIATE OUTLAY.

(1)	100,000 acres timber land containing pine estimated at 625,000,000 feet, at \$4 per M.....	\$2,500,000.00
(2)	389,790 acres at \$1.25 per acre.....	487,237.50
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		\$2,987,237.50
(3)	Houses and barns.....	15,000.00
(4)	Horses, implements, etc.....	3,000.00
		<hr/>
	Total immediate outlay.....	\$3,005,237.50

IMMEDIATE INCOME.

(5)	By sale of trees now overripe and beginning to deteriorate, and which should be cut at once to save loss, estimated at two-thirds present stand.....	\$1,666,666.67
	Balance of purchase price unpaid..	\$1,338,570.83

ANNUAL INCOME.

(6)	185 feet, board measure, per acre annual growth on 100,000 acres would be 18,500,000 feet, board measure, which can be cut each year without intruding upon the normal growing stock, <i>i. e.</i> the principal, at \$4 per M.....	\$74,000.00
(7)	For fishing and hunting privileges, cranberries, rents and pasture.....	21,500.00
		<hr/>
	Total annual income.....	\$95,500.00

ANNUAL OUTLAY.

(8)	Interest at 5% on \$1,338,570.83.....	\$66,928.54
(9)	For administration and protection.....	12,500.00
(10)	For planting 3,000 acres with pine and spruce.....	15,000.00
(11)	For labor improving meadows, making roads, fire-lanes, etc.....	8,000.00
(12)	For implements, repairs, etc.....	5,000.00
	Total annual outlay.....	<u>\$107,428.54</u>
	If debt is funded at 3% instead of 5% the total annual outlay will be.....	\$80,657.12
	and the net annual income.....	14,842.88

ANNUAL INCOME, AFTER TWENTY YEARS.

(13)	Increase 185 feet, board measure, on 200,000 acres at \$4 per M.....	\$148,000.00
(14)	Income from hunting and fishing privi- leges, rent of house sites, agricultural land, etc.....	10,000 00
(14)	Hay and pasture, 10,000 acres at \$1...	10,000.00
	Total annual income after 20 years...	<u>\$168,000.00</u>

ANNUAL OUTLAY AFTER TWENTY YEARS.

(16)	Interest at 5 per cent on debt \$1,338,570.83.....	\$ 66,928.54
(17)	Administration and protection	20,500.00
(18)	For planting 5,000 acres per year at \$5 per acre.....	25,000.00
	Total annual outlay after twenty years..	<u>\$112,428.54</u>
	If debt is funded at 3 per cent instead of 5 per cent the total annual outlay will be \$	85,657.12
	and the annual net income.....	82,342.88

Item No. 1. This 100,000 acres of timber land I estimate to contain approximately 625,000,000 feet of timber which is somewhat higher than the government estimate, but it is considered a fair estimate by those who know the situation. This is here valued at \$4 per thousand, with the expectation of cutting two-thirds of it at once on the selection plan, which will be more expensive than if it were logged in the ordinary way, and perhaps will cost as much as 50 cents per thousand in excess of ordinary expenses; but I believe that even under such conditions \$4 per 1000 feet is a reasonable figure, since there is a railroad going through the reservation, and the timber is easily gotten out by this or by water, and there are two saw mills close by or on the reservation of very large capacity. I am inclined to think that this figure is under rather than above what can be obtained for the timber.

Item number 2. There are 389,790 acres termed "agricultural land" in this reservation. This is a misnomer, for but little of it is really agricultural land in the ordinary sense of the word. As understood here the term "agricultural land" means only land that has but little, if any, pine timber on it. But this land is so poor in quality that comparatively little of it has any value for agricultural purposes. And in view of the fact that there is such a large amount of good agricultural land in the timbered section of this state that is still unoccupied, it is ridiculous to claim it necessary to hold this land open for agricultural purposes. The agricultural land is figured at \$1.25 per acre, the regular homestead price, and which would be a reasonable sum for the government to pay the Indians for it.

Item number 3. It is estimated that at least twenty families must be permanently located at once upon this land were it taken for park purposes.

Item number 5. From many surveys made it seems fair to estimate that about two-thirds of the trees on this land are overripe, so to speak: in other words, are not improving,

and these, under good forest management, should be cut at once. This would mean the employment of fully two-thirds as much labor as would be employed were the whole timber cut at one time, and would give a large immediate income, which could be applied upon the principal, thus reducing it by two-thirds. After this was cut, it is estimated that the land would continue to render a certain annual income in timber, as shown by item No. 6.

Item number 6. The estimate of 185 feet board measure per acre increase per year may seem high at first thought, but it will be noticed that it is figured on only 100,000 acres, and it is well known that there is a large amount of timber on what is known as "agricultural land," on which no increase whatever is figured, and in my own experience I have found 185 board feet per acre increase per year to obtain in a number of localities in Minnesota on land apparently no better or better stocked than this, I have thought that it is no more than fair to use this as the factor for the sustained yield.

Item number 8. The interest on the balance of the principal not paid is here estimated at 5 per cent, although this money could be borrowed at a much lower figure, for the reason that the government is required to pay the Indians 5 per cent on money received from this purchase. If this principal were paid to the Indians at once, and the government were to borrow the money for this purpose, it would not cost over 3 per cent, which would result in the very material reduction of this interest by \$26,771.42 per year.

Item number 13. After twenty years I am sure it would be safe to expect double the returns from the land that would be possible soon after taking the reservation in hand, for the reason that a large amount of what is now classed as agricultural land will, under proper management, have developed into good timber land. This has been figured at \$4 per thousand, but it seems very probable that in the course of the next twenty years timber as centrally situated

as this, and so very accessible, will more likely be worth \$6 per thousand, besides which, the meadows and some agricultural land will have been opened up and rented out, and will afford an income much greater than that estimated in No. 7. The annual outlay, on the other hand, after twenty years, will not necessarily have increased much except for purposes of planting and perhaps a little closer supervision of the grounds.

It would seem quite probable that the estimate for patrolling this land for fire protection would be reduced very materially by the assistance of the war department, which, it is more than likely, would detail a company of cavalry for this purpose. The estimate given does not take into consideration any returns from the sale of firewood, and is figured on conditions now existing in our woods. It seems certain that after twenty years 40 per cent. of the material which is now left in the woods by our loggers will be readily salable for fuel, if easily accessible.

EFFECT ON THE SURROUNDING COUNTRY.

The immediate effect of putting this reservation into a park on this plan will be very apparent. Two-thirds of the standing timber, to the value of \$1,666,666.67, will be cut at once. This will mean the employment of a large number of men, and will start a period of great activity in the country near by. But when this has been done the source of wealth will not have ended, as in the ordinary cutting of timber. There will still be employment in the park for probably one hundred or more men continuously, in the harvesting of \$74,000 worth of annual increase, the building of roads, the making of fire lanes and other employment; and should the United States government decide to locate a company of cavalry here for fire protection, there will be in addition the supplies for this force. This will, with the families depend-



ent upon the employes, etc., probably mean the location at once, and permanently, of 500 persons on or near the reservation, many of whom would be in families, and this would make a large and permanent market for the farm products of the country near by. In addition to this, the natural attractions of the section are such that many tourists would come in, each of whom would leave some money behind, and this would assist in making a permanent demand for supplies by the hotels located here. It is probable that one or more sanitariums would be established here for the cure of pulmonary diseases, which would be open the year round. School houses would be opened in the park, and the better agricultural land would be used for agricultural purposes.

If the above figures are correct the proposed park, merely as a financial venture, will take care of itself, and as an example in good forestry and a place for recreation for our people it ought to be above almost any price. Besides, from the purely economical standpoint, the establishment of this park would have the effect on the surrounding country that the establishment of any great, permanent manufacturing concern has, and would undoubtedly result in much improvement over the ordinary way of cutting timber in this state which so often has left a trail of stagnation behind it. Why not try such a plan as this? Surely the government can well afford to do so, and it cannot possibly be any worse than the plan of selling all the timber to the highest bidder without any regard to the interests of posterity.