

MICHIGAN DEPARTMENT OF CONSERVATION  
Game Division

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Deeryard Cuttings  
June 1, 1960

Deeryard cuttings on state owned land increased from 49,658 acres last year to 63,517 acres under permit for cutting this year. The increased cutting was recorded throughout the northern districts with about 5,500 acres more in the Upper Peninsula and 8,300 acres additional in northern Lower Peninsula.

Northern Michigan wildlands have developed advanced second growth timber on large areas. The pole-sized stands are past the most productive stage for wildlife so that it is desirable to cut them as soon as they become merchantable. If they are cut during the winter when deer food is scarce, the tops cut down furnish large quantities of browse which becomes available to the deer.

Deeryard cuttings as discussed in this report are commercial timber cuttings either in designated deeryards or within one mile of their boundaries.

The record of deeryard cuttings includes cuttings on federal and private land as well as on state owned land. However, the figures for federal and private cuttings are incomplete. Therefore, the various evaluations outlined below are based on state cuttings only.

Record of Deeryard Cuttings - Gross Acreage  
Winter of 1959-60

District	State	Federal	Private	Total
1	2,480	7,170	17,860	27,510
2	13,880	3,060	13,560	30,500
3	4,340	6,840	5,200	16,480
4	8,920	4,080	5,960	18,960
Region I	29,720	21,150	42,580	93,450
5	16,610	3	11,780	26,390
6	10,487	387	567	11,441
7	5,850	0	2,420	8,270
8	1,290	10,313	390	11,993
9	1,560	0	720	2,280
Region II	33,797	10,700	15,877	60,374
State Totals	63,517	31,850	58,457	153,824

Hay Equivalent of Deeryard Cuttings

From detailed calculations we have determined that deeryard cuttings on the average produce deer food from the tops and subsequent regrowth that is equivalent to 30.2 tons of hay for each "forty" under cutting permit. A ton of good hay properly distributed in the deeryarding areas would cost at least \$50 per ton.

1956 deeryard cuttings - 51,948 a. or 1,299 forties

1,299 forties @ 30.2 tons = 39,230 tons @ \$50 = \$1,961,500

1957 deeryard cuttings - 58,223 a. or 1,455 forties

1,455 forties @ 30.2 tons = 43,941 tons @ \$50 = \$2,197,050

1958 deeryard cuttings - 47,279 a. or 1,182 forties

1,182 forties @ 30.2 tons = 35,696 tons @ \$50 = \$1,784,800

1959 deeryard cuttings - 49,658 a. or 1,241 forties

1,241 forties @ 30.2 tons = 38,478 tons @ \$50 = \$1,923,900

1960 deeryard cuttings - 63,517 a. or 1,588 forties

1,588 forties @ 30.2 tons = 47,958 tons @ \$50 = \$2,397,900

The significance of the deeryard cuttings on state owned land is demonstrated in the table below which shows that the carrying capacity of the range has been bolstered considerably. Such evaluations have been based upon deer feeding experiments and browse plot studies carried on at Cusino Wildlife Experiment Station and supplemented by current information gathered by the field men.

Winter deeryard cuttings provide enough browse from the tree tops cut down to carry extra deer through the yarding season (90 days) at the following rates:

Hardwood cuttings	-	1 extra deer per acre
Mixed timber cuttings	-	3 extra deer per acre
Cedar Swamp cuttings*	-	5 extra deer per acre

\*Cedar browse production by logging was carefully studied for 3 years at the Cusino Wildlife Experiment Station. A recent report by Verme shows that the browse produced by cutting cedar to a 10 inch diameter limit supported 5.1 deer per acre cut. Cutting to 8 and 6 inch diameter limits carried 6.7 and 9.6 deer per acre, respectively.

We find that the average cutting (all types) produces browse for 2.6 deer per acre actually cut. Actual cutting is done on 13 acres per forty under permit. Thus each forty acre deeryard cutting provides browse for 33.4 extra deer that the area could not support during the winter without the cutting. In view of the fact that occasional cuttings are not used by deer and some not fully utilized, it has been estimated that deer do actually eat 75 per cent of the browse from the tops. Therefore, the cuttings actually carry 25 extra deer per forty of deeryard cutting.

Furthermore, the sprouts and reproduction following the cutting (which after all is the goal in deeryard management) is more important and productive deer food for several years than the cutting itself. Similar calculations show that the regrowth will provide browse for at least three times as many deer as do the tops or 100 extra deer per forty acres. Here again not all of the regrowth is utilized and our best estimate is that perhaps only 50 per cent is actually utilized which means that 50 deer per forty are carried by the regrowth.

Number of Extra Deer Carried by the Deeryard Cutting Program  
(Based on 75 per cent utilization of the tops and 50 per cent  
utilization of the regrowth)

Year	Acres	Forties	Extra Deer		Total
			Tops	Regrowth	
1955	47,555	1,189	29,725	59,450	89,175
1956	51,948	1,299	32,475	64,950	97,425
1957	58,223	1,455	36,375	72,750	109,125
1958	47,279	1,182	29,550	59,100	88,650
1959	49,658	1,241	31,025	62,050	93,075
1960	63,517	1,588	39,700	79,400	119,100

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