MICHIGAN DEPARTMENT OF CONSERVATION
Game Division

Report No. 2069
September 22, 1955

North Manitou Island Deer
1954-1955

During the 1954-'55 hunt (October 15, 1954 to January 20, 1955) 289 deer were shot on North Manitou - 13 male fawns (up to and including 75 pounds), 152 adult males (76 pounds and over), 11 female fawns (up to and including 72 pounds), and 113 adult females (73 pounds and over).

The winter of 1954-'55 was about normal with roughly 18 inches of snow during the major part of the deep snow period. There were no long periods of sub-zero weather. Snow density was such that deer roamed over most of the Island most of the winter with heavier concentrations in the vicinity of the natural yarding areas where the feed troughs were located.

Mr. Grosvenor, manager of the Island, reported that he had fed 55 tons of Kellogg deer food pellets a year ago and had increased this ration to 60 tons this last winter. Roughly half-ration was fed from December 1 to January 15, then as the winter increased in severity the ration was increased to maximum from about January 15 to April 8. Feed was distributed in 34 10-foot double troughs placed in strategic locations about the Island. A full ration was roughly 100 pounds per double trough, twice a week.

This winter for the first time Grosvenor found, on certain occasions, feed from the previous feeding left in some of the troughs. Grosvenor feels he was feeding the deer about all the food they would consume. It has been his intention to increase the kill until the herd was brought under control, then increase the food until he was feeding the deer a sustaining ration. He could then manipulate the herd and the amount of food as desired. Conditions indicate that he may have reached this point. Prostrate juniper, previously nearly killed out by heavy browsing, is now showing definite signs of recovery, and ground juniper, also nearly killed out, seems to be coming back in many areas, indicating a lighter browsing pressure due either to more adequate artificial food, or less deer, or a combination of the two. Only four dead deer were located this spring by Grosvenor in his rather extensive searches about the southeast part of the Island and in other areas of deer concentrations. Three additional dead fawns and one dead adult were later found in the northwest part of the Island. Starvation apparently was light and thought to be limited mainly to small weak fawns and possibly some that did not visit the feed boxes.

No extensive searches were made this spring by Departmental personnel as Mr. Grosvenor's searches had covered most of the strategic areas.

Most of the desirable browse species continue to be heavily browsed with beech reproduction alone surviving in areas of lighter deer concentrations.

As the hunt is somewhat selective no accurate indication of herd composition can be obtained from the sex and age composition of last fall's kill.

Mr. Grosvenor estimates from counting deer at troughs with a known amount of feed and figuring daily consumption, that last winter there were about 1,000 deer on the Island. He is somewhat concerned regarding the number of deer he

could take this year. A previous high kill of 302 in 1944 seemed to bring the herd under control. With kills of 50 and 138 in the two years following, the herd was again underharvested and heavy starvation resulted. It seems that under present conditions the kill now could be safely increased to 300 (roughly 200 males - 100 females) and possibly even more if the increase was mostly bucks.

Since hunting was started in 1937 roughly 2,927 deer have been shot on the Island. About 56 per cent of these (1,665) have been bucks and 44 per cent (1,262) does. Assuming sex at birth to be 50-50 this would leave a slight preponderence of females over males in the present herd. The present estimated herd of 1,000 might easily be made up of roughly 600 females and 400 males. It could reasonably be expected that the 600 females (including non-producing yearlings) would produce an average of one fawn apiece or 600 fawns.

Estimated losses of 100 in the summer (mostly infant fawns) and 100 in the winter (including cripples and small fawns) would still leave a safety factor of 100 after the take of 300 was made.

Actually under these assumptions the herd should increase if adequate food is made available.

NORTH MANITOU ISLAND DEER
DEER HUNTING KILL, STARVATION, AND OTHER LOSSES

	Hunting Kill					Starvation* And Other Losses	
	Adult		Fawn				
Year	Males	Females	Males	Females	Total	Sample Count	Estimated Total
1937	15	1		2	18	5	10
1938	25	12	2	2	41		
1939	40	5			45	5	10
1940	55	29	8	3	95		
1941	91	40	4	4	139	8	20
1942	91	70	11	4	176	25	50
1943	89	116	39	48	292	32	50
1944	155	104	20	23	302	20	50
1945	33	9	6	2	50	4	10
1946	113	23	2		138	22	50
1947	133	58	7	4	202	164	300
1948	77	41	1	1	120	47	100
1949	117	52	5		174	25	50
1950	112	75	4	5	196	116	200
1951	78	127	10	13	228	37	70
1952	83	139	23	29	274	20**	75
1953	68	120	27	23	238	9	30
1954	152	113	13	11	289	27	100
1955						7	50
Total	1527	1134	182	174	3017	573	1225

* Approximately 90% due to straight starvation, about 10% due to crippling during hunt.
** Reported by Hadra as having been seen in vicinity of feeding stations.

NOTE: These figures may not be the same as shown on the weight charts. Some deer were not weighed, and some deer called fawns or adults from their weight may not have been so identified by sight. The total hunting kill figures shown on this chart should be accepted as more nearly representing the actual kill than the total number of deer shown on the weight charts.

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