

DEAD DEER INVESTIGATIONS

North Manitou Island
April 29 - 30 - May 1, 1942

In mid-April unconfirmed reports reached Lansing that numbers of dead deer were being found on North Manitou Island. The inference was that a heavy starvation loss had occurred during the winter. To check on this report Mr. David B. Snyder of Baldwin and I went to the Island on the morning of Wednesday April 29 after being held a day in Leland by rough weather.

We first drove to the old Johnson Place on the southwest shore of the Island where a deer feeding station had been established near a small, cedar swamp. This cedar had been heavily browsed in 1939. It was expected that if many deer had wintered in the vicinity dead deer would be found in this locality. The small swamp was searched and a trip made east into the hardwood hills. From there we swung south, back to the beach and thence northerly along the beach, slope and bluff-top to the north end of the old field. Evidence of two heavily-used, winter deer-trails was found in the narrow strip of cedar along the northwestern edge of the old field. Fresh signs of light browsing was noted on hardwood growth through the hills to the east and south of the field. Remains of winter trails indicated that deer also had worked the 30-foot bluff along the shore, picking up what little foliage had grown in during the last summer on the heavily-browsed cedar thickets there. Just north of the old field was a feeding station with oat boxes and piles of old hay. A search of this vicinity revealed general, light browsing on hardwood reproduction and shrubs, but no evidence of heavy deer concentrations or severe browsing. No starved deer were seen in this territory. The skeleton of a huge buck was found on the top of the bluff just south of the Johnson field. This deer evidently had died during the winter or spring two or three years ago judging from the appearance of the bones and the fact that the antlers had been shed before death.

Next we worked the swamp and windfall south of Tamarack Lake. We drove in, south east, on the old grade and worked north nearly to the Lake. Signs indicated a heavier deer concentration in this region than that about the Johnson place. Cedar had been stripped of all available deer browse in years past and the bulk of food obtainable during the recent winter apparently had been hardwood browse. Browsing appeared rather heavy on the more desirable species and in spots it was severe. The evidence remaining of winter trails indicated rather heavy use of the area by deer. The tops of maple windfalls, many of which were still alive, had been heavily browsed. Apparently starved, a dead fawn was found in the edge of the tangled mass of down timber. It was impossible to work this area systematically because of the tangled mass of windfalls and more dead deer may have been hidden among the impenetrable tops.

In the small strip where hemlock timber had been cut north of Tamarack Lake the concentration of deer had been extremely heavy. Deer evidently had gathered there to feed on the foliage in the hemlock tops all of which had been stripped clean of edible browse as high as the deer could reach; twigs had been browsed down to heavy stubs. Two dead fawns previously reported by the loggers were found among the tops. The decayed condition of these carcasses made it impossible to examine them closely but the evident thin necks and small size indicated a lack of food probably had contributed largely to their death. It was

quite evident that the number of deer that had gathered in this locality was in excess of the carrying capacity of the food available in the tops. It is believed a more thorough search of the territory adjoining the hemlock slash would have revealed more dead deer. Lack of time made it inadvisable to do so.

From Tamarack Lake we drove to the big field at the West Side. In the gathering dusk we were able to see eight or 10 deer feeding on the alfalfa.

On the morning of April 30 Mr. Grosvenor was to accompany us to the northwest portion of the Island. It was arranged that Mr. Snyder and I would work the area at the south end of Lake Manitou and meet Mr. Grosvenor later at the north end of the lake.

We worked a portion of the swamp at the south end of the lake. Signs indicated a fair concentration of deer around the feeding station but not so heavy as a year ago. Browsing was rather severe on what natural food was available. Three of the four dead fawns reported by Pete Oien were located but no others were found. It appeared that concentrations had not been as heavy in this region as might have been expected.

The work at the south end of the Lake had taken longer than expected and when Mr. Grosvenor was contacted it was too late in the day to make the long trip to the Pot Holes and the Peaked Bluffs in the northwestern part of the island. Instead, we drove north from the Stormer Camps to the bluff at the center of the north end of the island. From there I worked west along the top of the bluff for three-fourths of a mile, swung south 40 to 50 rods and worked back east to the car. I found that the area was covered with hardwood six to 12 inches in diameter. Starting at the top edge of the bluff and spreading back 20 to 40 rods there was a heavy undergrowth of dogwood, shrub maple and other browse-producing shrubs under the big timber. Beyond this to the south was only the overstory of big hardwoods with almost no shrubs or ground cover. Deer had yarded and browsed heavily in this narrow strip of shrubby growth under the hardwood at the edge of the bluff. There were very few signs that deer used the open big hardwood for winter cover. A few, well-used winter trails leading south indicated continual winter deer movement between this narrow bluff-top yard and the yard at the north end of Lake Manitou. Browsing on the shrubs along the bluff-top was light in some spots and very severe in others. Wherever possible deer had made trails from the top down the precipitous bluff to the beach 150 or 200 feet below. Cedar growing on these slopes had been completely stripped of available foliage except in one or two locations where vertical, clay banks made it impossible for the deer to reach them. I found no dead deer on my trip west from the car. Mr. Snyder went down the old "rollway" to the beach and walked the shore east to the mouth of the outlet of Lake Manitou. He found no dead deer. His observations of browsing on cedar growing on the 150 foot slope were practically the same as those I had made west from the car.

Mr. Grosvenor worked east along the upper edge of the bluff to the creek. His observations were similar to mine. Soon after he left the car he found one dead fawn, apparently starved. The deciduous shrubs and second-growth all along this strip had been heavily browsed. Signs indicating that heavy, winter trails had been established and heavily used all

along the top of the bluff were still evident.

In the evening just at dusk we drove to the "West Side" and up to the big alfalfa field. We counted 26 deer in the field and know that a number left before we could count them. We thought that at least 35 deer were in the field as we drove in.

On May 1 Mr. Snyder and I drove to the south-central portion of the Island near the foot of the sand dune, "Old Baldy". From here we worked southwest into the big windfall that reaches nearly across the southern end of the Island. We were unable to find the expected, heavy yarding signs in this region although the tips of nearly all the twigs had been nipped from the tops of live maple windfalls. We worked east along, through and across this strip of tangled, down timber but found no signs of heavy browsing or yarding until we reached the area where much of the stand had been hemlock, balsam, spruce and cedar. This must have been near the south west corner of Section 22. Here, as in 1941, yarding signs were extremely heavy and all available browse appeared to have been consumed. Mr. Grosvenor had reported finding a starved fawn in this territory but we did not see it. We found no dead deer on this trip. From the eastern end of the conifer windfall we worked back north and west to the car through the stand of open big hardwood.

Much of the fallen timber in this "blow-down" was tipped out by the roots Nov. 11, 1940. As a portion of the root system on most of the trees remained in the ground the trees still showed signs of life. How much fresh browse the horizontal tops produce each year could not be determined. Most of the twigs had been browsed from the tops by deer in 1941 and 1942 but browsing was heavy only on the conifers in the east end. There also seemed a tendency for the branches near the ground to die, as many of these would snap between the fingers, while those getting more sun light higher up were limber and seemed to have more life.

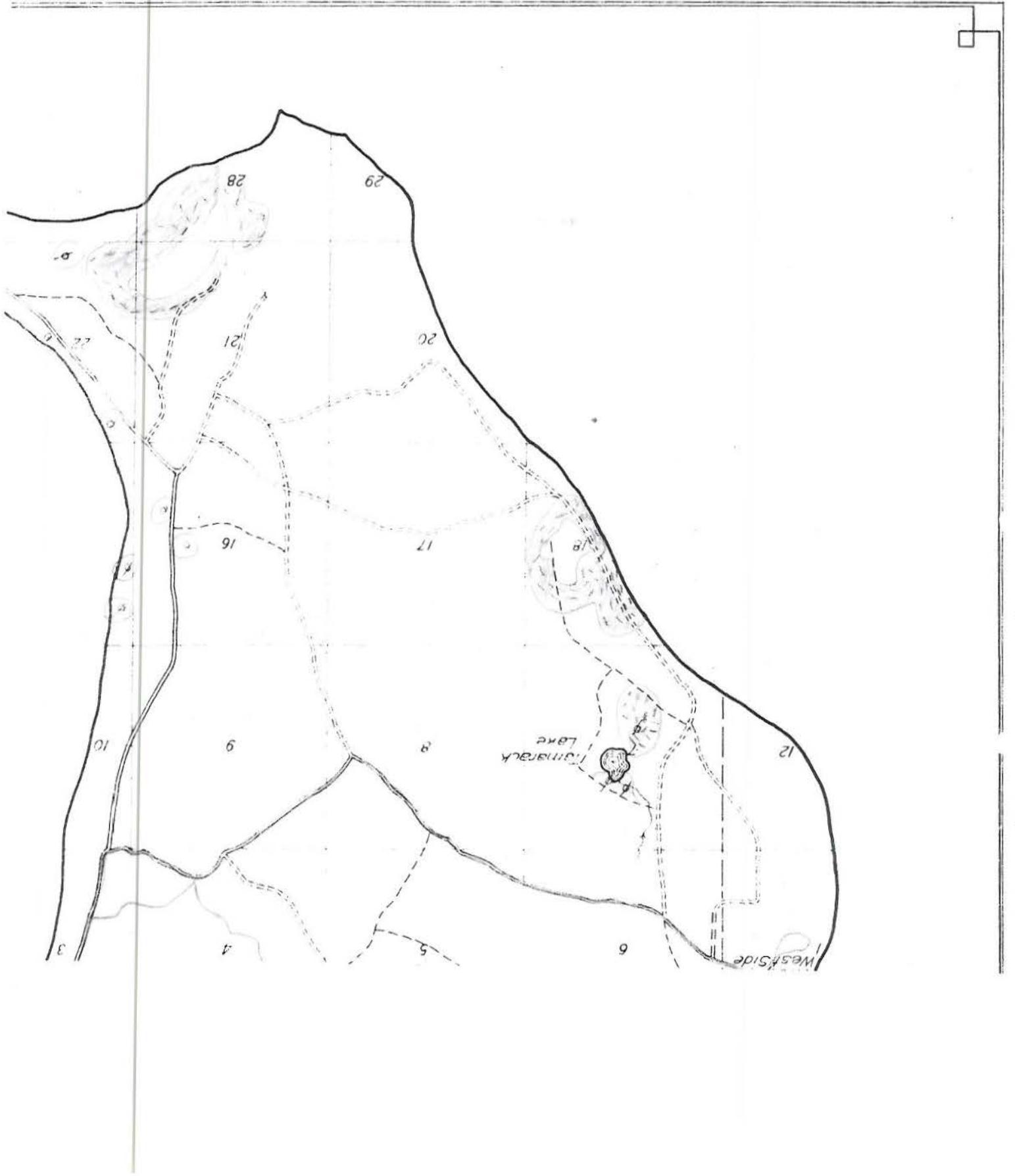
Reports from residents on the Island were that 23 dead deer had been found on the beach by men walking the shore in search of net floats. Four dead fawns had been reported by Pete Oien who had fed the deer. Two more were reported by the men cutting hemlock. Mr. Grosvenor found seven dead deer of which only three showed indications of having starved to death. We discovered only two additional starved deer. Information sufficient to state cause of death was not available on the 23 deer found on the beach. In winter deer are known to work along the shoreline icebergs, looking for food in the water and these 23 deer may have slipped and fallen into the icy water from which they were unable to get out. This of course is a pure guess. Some deer may have been hunting cedar on the steep slopes and being in a weakened condition and unable to climb back to the protection of the timber died on the beach. As no close check has been kept in the past on the deer on the Island this "shore loss" may have been going on unrecorded for some time.

The results of this investigation indicate that the winter deer-loss on the Island is not so severe as first reports implied. The losses reported may have been normal losses for the herd that now exists on the Island under prevailing food conditions. It is almost certain that more thorough investigations carried on earlier in the spring would have revealed more dead deer. However, it seems probable that there was no widespread or wholesale starvation among the deer on the Island during last winter.

It must be borne in mind, however, that natural winter food on North Manitou Island is being utilized to capacity and that if the deer herd is allowed to increase or if the carrying capacity of the food decreases then a heavy starvation loss is imminent.

IHB:hs
6/26/42
IHB:cb
6/15/43 (copied)

I. E. Bartlett
Game Division
Deer Investigations



NORTH MANITOU ISLAND
LEELANAU COUNTY
MICHIGAN

SCALE

1 - MILE

LEGEND

- Traveled by car
- - - Traveled by foot
- Dead deer found - not starved
- ⊙ Dead deer found - starved
- ⊙ Reported by Grosvenor

23 Dead deer reported found along shore by Paul Moleski - Probably not starved.

