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PROGRESS IN THE MICHIGAN DEERYARD SURVEY

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As reported before this Section of the Academy last year, during the winter of 1927-28 a rather intensive investigation of deeryards and yarding was begun as a result of increasing demands that the State, in some manner, relieve the deeryard situation.

Our tentative conclusions from the first year's investigation were:-

Yards found in the Upper Peninsula could be divided into 3 groups.

Cedar yards found in the eastern portion.

Cedar-Hardwood yards found in central and southern portion.

Hardwood yards found in the west portion.

Deer yarded, primarily, where they could find the best cover and feed. Cedar, hemlock, and hardwood browse constituted the main diet. Wolves, and perhaps coyotes and bobcats seem to do considerable damage in the yards by killing and scattering deer. Deep snow tended to concentrate the deer in small areas and in extreme conditions might cause starvation. Heavy cutting of cedar and spruce in a yard tends to decrease the amount of feed and cover so that under extreme conditions death from starvation and exposure may result.

Many questions presented themselves and could not be answered from a single season's work, among them were:-

Why are deer concentrated in certain areas when similar areas in the near vicinity have no deer?

Does the availability of running water tend to fix the location of the yards?

Do predatory animals tend to shift the deer herds from one part of a yarding area to another?

Does a deer tend to return to the same yard each winter?

What is the reason that deer do not readily eat spruce and balsam?

How serious is the damage to stands of small cedar resulting from heavy yarding?

What species of tree or shrub will produce satisfactory deer feed in the shortest period?

During the past year we were again steadily in the field during both the summer and winter months, revisiting the yards on which we had made investigations during the previous winter, and also visiting new areas.

The difference in weather and snow conditions between the two winters was very marked. In the winter of 1927-28 cold weather started in November and continued until April. Snow was two feet deep by the first of December and increased to four or six feet by March. Heavy storms accompanied by much snow, wind, and cold weather were frequent.

The winter of 1928-29 was quite different. Mild weather continued into December and a fall of 18" of snow on January 3rd was the first appreciable storm. Throughout the winter the average snow depth ranged from two to four feet with very few storms. From present indications there will be an early breakup.

Behavior of the deer varied with the character of the winter. Observations made in the winter of 1927-28 showed that the deer yarded early and closely and stayed in the yards until the late breakup. Heavy browsing was common and reports of starvation were frequent. Predatory animals were very active presumably because of the deep snow which seemingly caused them to move about more to find food.

In the winter of 1928-29, however, because of the light fall of snow, the deer did not yard until about the first of January and then not very closely. Deer were observed all about the yards during the whole winter. During the storms they would take shelter in the thicker areas of the swamps but would wander out again as soon as the weather settled.

Because of the difference in the conditions prevailing during the two winters we have definitely answered very few questions and many new questions have been added to the list.

Some of the more important questions yet to be answered seem to be:-

- 1- To what extent are existing yarding facilities adequate or inadequate for the deer now in existence?
- 2- To what extent is shortage in yarding facilities caused by the increase in the number of deer to be provided for, or caused by the cutting of merchantable timber in the old yarding areas?
- 3- How fast and to what extent are logging operations depleting the yards of their feed and cover?
- 4- To what extent and at what rate is the reproduction in used, unused, and cut-over yards, both swamp and hardwood, "coming back" in a manner to furnish deer with feed and cover?
- 5- To what extent must present yarding facilities be preserved or increased in order to insure that adequate winter quarters will be available if and as the deer herds continue to increase?
- 6- In what manner and to what degree is the public ownership of such areas justified or necessary?
- 7- If the public ownership of essential yarding grounds is to be advocated, shall the effort be confined to the actual yarding territory or should this be absorbed into a Standard Game Refuge which is surrounded with Public Hunting Grounds?
- 8- What is to be advocated in counties which have elected to keep their deer protected against hunting, if and as the deer in such counties increase so that yarding facilities become inadequate and starvation develops?

It seems obvious that most such questions can be answered only by intensive and extensive investigations, both summer and winter, and continued over a period of years.

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