

DRUMMOND ISLANDDEER HUNTING INVESTIGATIONS1943

Deer hunting investigations on Drummond Island were conducted from November 11 through December 2, by Ivan Thomson and myself. Mr. Thomson is responsible for most of the field work. The same procedure and the information secured was the same as taken in previous years.

Pre-season Work:

The investigator spent three nights and two days previous to the opening of the season in passing out Game Tally Sheets and copies of the Michigan Conservation. Pre-season work is important. Numerous questions are asked relative to past and the present investigation, and a tally is kept of the hunters going on the Island. Of more importance is the fact that as the same group of hunters go on the Island year after year, and realizing the purpose of the investigations, have been increasingly cooperative and it would appear safe to assume that the data secured from these same hunters should yearly become more dependable.

Antler Tally:

The antlers of each buck taken on the Island were calipered with the exception of three boatloads of hunters, and some were not calipered due to the last minute congestion of hunters at the ferry dock. One fish tug with twelve hunters was not recorded, and two boats from Rogers City with fifteen hunters were not tallied. No other boats are known to have taken bucks off the Island.

The results of the antler tally for 1943 show:

| | |
|-----------------------------------|-----------|
| a. 1½ year old bucks taken was | 90 |
| b. 2½ year old bucks taken was | 113 |
| c. 3½-4½ year old bucks taken was | 84 |
| d. 5½ year and older taken was | 15 |
| e. antlers not calipered was | <u>38</u> |

Total bucks taken was 340

The percentage composition by age classes is as follows:

| | | |
|-----------|----------------------------|------------------------------------|
| 90 | - 1½ year old bucks, or | 29.2% of the total calipered |
| 113 | - 2½ year old bucks, or | 37.4% of the total calipered |
| 84 | - 3½-4½ year old bucks, or | 27.9% of the total calipered |
| <u>15</u> | - 5½ and older bucks, or | <u>4.9%</u> of the total calipered |
| 302 | | 100.0% |
| plus | | |
| <u>38</u> | bucks not calipered | |
| 340 | bucks taken | |

Discussion of Antler Tally:

Of particular interest is the fact that the percentage of $1\frac{1}{2}$ year old bucks taken dropped 8.0% from the 1942 figure. There was only 29.2% of the bucks killed in this age group - the lowest this figure has been since 1935. The $2\frac{1}{2}$ year age group showed only 1% difference, an increase this year, the $3\frac{1}{2}$ - $4\frac{1}{2}$ year age group dropped 7% this year, and the $5\frac{1}{2}$ year and older age group varied only 2%.

During the past nine years since this investigation began it is a fact that the percentage of older deer, from the $2\frac{1}{2}$ year old group on, taken did not vary to any great extent from year to year. It appears from the curves of these age groups that if there were any considerable difference, either more or less, this difference seemed to be made up by an increase or decrease in some other age group (other than the $1\frac{1}{2}$ year old group). Therefore, hunters' success, or lack of success, comes in the $1\frac{1}{2}$ year old group. If there are not many of this age class taken then the entire success figure is down.

Now, referring to past investigations the assumption was made in 1941 and again in 1942 that there was not enough bucks available in the $1\frac{1}{2}$ year old group and the difference would have to be made up, if possible, from the older age groups. This occurred to some extent.

The deeryards on Drummond Island have in general been getting steadily worse. The carrying capacity of the yards has been decreasing, and what food there is has been harder to obtain, particularly for the smaller deer. When the carrying capacity of a yard is not equal to the herd numbers, and the surplus number of deer are not removed during the hunting season, then the only way that the balance can be restored, without planned removal of the surplus is for starvation losses to occur. Under present regulations it is not possible to manage the herd so that the balance of carrying capacity of the yard would approach more closely the herd number and requirements. In 1942 the assumption was made, based on the known condition of the yarding areas, that in 1943 we would "find a continued decrease in the percentage of $1\frac{1}{2}$ year old deer taken, perhaps a sharp decrease if the winter is at all hard." The winter of 1943 was hard on the deer, deep snow set in early and extended the usual length of the yarding season. We note a drop of 12% in the number of $1\frac{1}{2}$ year old deer taken. Exactly 75% of the deer found starved during the break-up of the 1942-43 yarding season were fawns.

Table 1, showing the percentage composition of the deer kill is to be found on the following page, page 3.

Hunters and Success:

The following table 2, shows the yearly number of hunters, the number of bucks taken and the success percent. This table includes all bucks taken both those calipered and those not measured, and the actual number of hunters leaving the Island.

| Year | No. of Hunters | No. of Bucks | Success Percent |
|---------|----------------|--------------|-----------------|
| 1935 | 966 | 344 | 35.6% |
| 1936 | 780 | 338 | 43.3% |
| 1937 | 954 | 406 | 43.6% |
| 1938 | 991 | 414 | 40.7% |
| 1939 | 1125 | 442 | 39.5% |
| 1940 | 1045 | 439 | 42.0% |
| 1941 | 1272 | 471 | 37.0% |
| 1942 | 1067 | 397 | 37.2% |
| 1943 | 1116 | 340 | 30.4% |
| Total | 9316 | 3591 | 349.3% |
| Average | 1035 | 399 | 38.8% |

DRUMMOND ISLAND

1943

| AGE GROUP | 1935 | | 1936 | | 1937 | | 1938 | | 1939 | | 1940 | | 1941 | | 1942 | | 1943 | |
|---------------|-------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1½ | 87.6 | 25.5 | 125.6 | 39.3 | 182 | 45.9 | 197 | 49.8 | 230 | 51.5 | 236 | 54.0 | 233 | 49.9 | 149 | 37.5 | 90 | 27.2 |
| 2½ | 89.7 | 26.1 | 96.4 | 30.1 | 126 | 31.6 | 122 | 30.8 | 136 | 30.7 | 135 | 30.9 | 156 | 33.4 | 153 | 38.5 | 113 | 37.4 |
| 3½-4½ | 138.2 | 40.1 | 82.0 | 25.8 | 72.5 | 18.3 | 62 | 15.7 | 63 | 14.1 | 58 | 13.3 | 71 | 15.2 | 79 | 19.9 | 84 | 27.9 |
| 5½+ | 28.5 | 8.3 | 16.0 | 5.0 | 16.5 | 4.2 | 15 | 3.8 | 18 | 4.0 | 8 | 1.8 | 7 | 1.5 | 7 | 1.7 | 15 | 4.9 |
| Not Meas'd | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | -- | 38 | -- |
| Totals | 344 | 100 | 320 | 100 | 397 | 100 | 396 | 100 | 447 | 100 | 437 | 100 | 467 | 100 | 397 | 100 | 340 | 100 |

Table 1. Percentage Composition of Deer Kill

DEER HUNTING INVESTIGATION

Hunters' Reports:

Part of the pre-season work is giving out to each group of hunters a Hunters Game Tally form. This is given to each group that they may fill in their daily observations. There were 130 of these forms turned in at the dock, which means that 12% of the hunters filled in these forms. The remaining hunters filled in the questionnaire at the dock. The hunters' observations, plus the kill figures, are as follows:

Table 3. Tabulated Hunters' Reports

| | Observed | Killed | Total |
|-------------------|----------|--------|--------|
| Bucks | 985 | 340 | 1,325 |
| Does | 8,814 | -- | 8,814 |
| Fawns | 1,908 | -- | 1,908 |
| Unidentified Deer | 1,067 | -- | 1,067 |
| Totals | 12,774 | 340 | 13,114 |
| Bear | 0 | 0 | 0 |
| Wolf | 4 | 0 | 4 |
| Fox | 3 | 0 | 3 |
| Rabbit | 615 | 47 | 662 |
| Coyote | 15 | 4 | 19 |
| Albino deer | 2 | 0 | 2 |

Additional Information:

- 1116 - Hunters on the Island
- 6768 - Total number of days hunted
- 6.06 - Days hunting were had by the average hunter
- 1.9 - Days to see a buck by the average hunter
- 1325 - Bucks reported seen
- 25.6% - Of the bucks seen were killed
- 19.9 - Man days hunted per buck killed
- 100.1 - Deer per square mile reported seen
- 2.4 - Bucks per square mile killed
- 10.2 - Bucks reported seen per square mile

Hunting Conditions:

Hunting conditions were in general considered good this year. The average 8 AM temperature was 26° above zero, and the average 2 PM temperature was 31° above zero. There was an average of 0.2 feet of snow all during the season. In general there were seven days in which there was good tracking conditions, seven days were only fair as to tracking, and there was only two days on which there was no tracking. There were only four hours of snow fall during the daylight hours of the entire season. There was no rain.

The hunting conditions by hours was 141 hours of good hunting, 21 listed as only fair, or medium, and two hours were listed as poor hunting.

STATE GAME AREA

DEER HUNTING SEASON WEATHER RECORD

194__

| DATE | OUTLOOK AT | | | TEMPERATURE | | SNOW DEPTH AND CONDITION | | SNOW DEPTH | | | HOURS OF TRACKING SNOW | HOURS OF PRECIPITATION | | HUNTING CONDITIONS | | |
|--------------------|------------|-----|----|-------------|--------|--------------------------|-------------------|------------|---------|--------|------------------------|------------------------|------|--------------------|------|------|
| NOV. | DAYLIGHT | | | DEGREES F | | AT DAYLIGHT | | IN FEET AT | | | | IN DAY | | TOTAL HOURS | | |
| | | | | 8 A.M. | 2 P.M. | Depth | Condition | 8 A.M. | 12 NOON | 6 P.M. | | Snow | Rain | Good | Med. | Poor |
| 15 | Good | | | 21 | 29 | 0.4 | Good | 0.4 | 0.4 | 0.4 | 9 | 1 | 0 | 9 | 0 | 0 |
| 16 | Good | | | 18 | 29 | 0.3 | Good | 0.3 | 0.3 | 0.3 | 9 | 0 | 0 | 9 | 0 | 0 |
| 17 | Fair | | | 25 | 36 | 0.3 | Medium | 0.3 | 0.3 | 0.3 | 9 | 2 | 0 | 4 | 5 | 0 |
| 18 | Medium | | | 34 | 42 | 0.3 | Medium | 0.3 | 0.2 | 0.2 | 9 | 0 | 0 | 9 | 0 | 0 |
| 19 | Medium | | | 31 | 36 | 0.2 | Medium | 0.2 | 0.1 | 0.1 | 9 | 0 | 0 | 7 | 2 | 0 |
| 20 | Medium | | | 33 | 35 | 0.2 | None | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 5 | 2 | 2 |
| 21 | Medium | | | 30 | 35 | 0.2 | None | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 9 | 0 | 0 |
| 22 | Medium | | | 30 | 30 | 0.2 | Medium | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 4 | 5 | 0 |
| 23 | Good | | | 21 | 27 | 0.2 | Good | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 5 | 4 | 0 |
| 24 | Good | | | 24 | 29 | 0.2 | Good | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 6 | 3 | 0 |
| 25 | Good | | | 19 | 28 | 0.2 | Good | 0.2 | 0.2 | 0.2 | 9 | 0 | 0 | 9 | 0 | 0 |
| 26 | Good | | | 29 | 34 | 0.2 | Good | 0.2 | 0.1 | 0.1 | 9 | 0 | 0 | 9 | 0 | 0 |
| 27 | Medium | | | 28 | 16 | Trace | Medium | T r a c e | | | 0 | 0 | 0 | 9 | 0 | 0 |
| 28 | Good | | | 24 | 30 | 0.1 | Medium | 0.1 | 0.1 | 0.1 | 9 | 1 | 0 | 9 | 0 | 0 |
| 29 | Medium | | | 24 | 31 | 0.1 | Good | 0.1 | 0.1 | 0.1 | 9 | 0 | 0 | 9 | 0 | 0 |
| 30 | Medium | | | 30 | 34 | Trace | Medium | T r a c e | | | 0 | 0 | 0 | 9 | 0 | 0 |
| TOTALS | 7 | 9 | 0 | 421° | 502° | 3.1 | G - 7 | 3.1 | 2.8 | 2.8 | 126 | 4 | 0 | 141 | 21 | 2 |
| AVERAGE OR PERCENT | 43% | 57% | 0% | 26° | 31° | 0.2 | M - 7 None - 2 | 0.2 | 0.2 | 0.2 | 7.8 | | | 8 | 1 | |

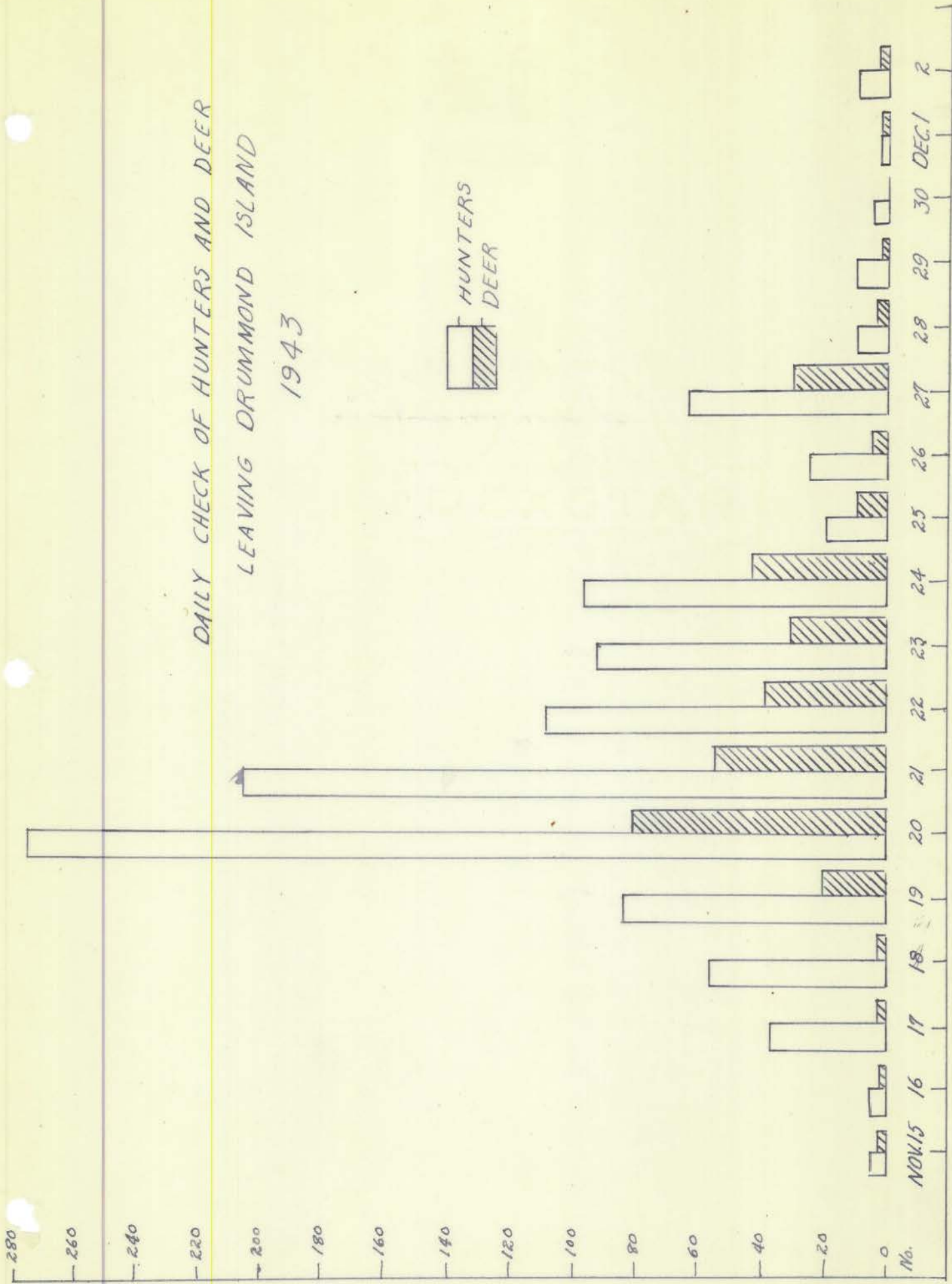
DRUMMOND ISLAND1943Table 4. Table of Seasonal Statistics

| Data | Year | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | Averages |
|----------------------------------------------|------|-------|-------|-------|-------|-------|-------|----------|
| Total number of days hunted | | 5,466 | 6,894 | 6,276 | 7,058 | 5,346 | 6,768 | 6,303 |
| No. of hunting days by average hunter | | 6 | 6 | 6 | 5.6 | 5.01 | 6.01 | 5.75 |
| No. of hunting days to see a buck per hunter | | 3.4 | 3.6 | 3.9 | 3.8 | 3.5 | 1.9 | 3.3 |
| Total bucks reported seen | | 1,616 | 1,906 | 1,609 | 1,873 | 994 | 1,325 | 1,554 |
| % of observed bucks that were killed | | 25% | 28% | 27% | 25% | 39% | 26% | 32% |
| Man days hunted per buck killed | | 14.7 | 15.6 | 14.2 | 15.1 | 13.6 | 19.9 | 15.1 |
| Deer per square mile reported seen | | 145 | 200 | 143 | 181 | 137 | 100 | 151 |
| Bucks killed per square mile | | 3.2 | 3.5 | 3.4 | 3.6 | 3.1 | 2.4 | 3.2 |
| Bucks seen per square mile | | 14.6 | 14.6 | 12.4 | 14.4 | 7.6 | 10.2 | 12.3 |
| Deer seen per hunter per day | | 3.2 | 3.8 | 2.9 | 3.3 | 7.3 | 1.2 | 3.6 |

MICHIGAN DEPARTMENT OF CONSERVATION

GAME DIVISION

Deer Hunting Investigations



Michigan Department of Conservation Game Division

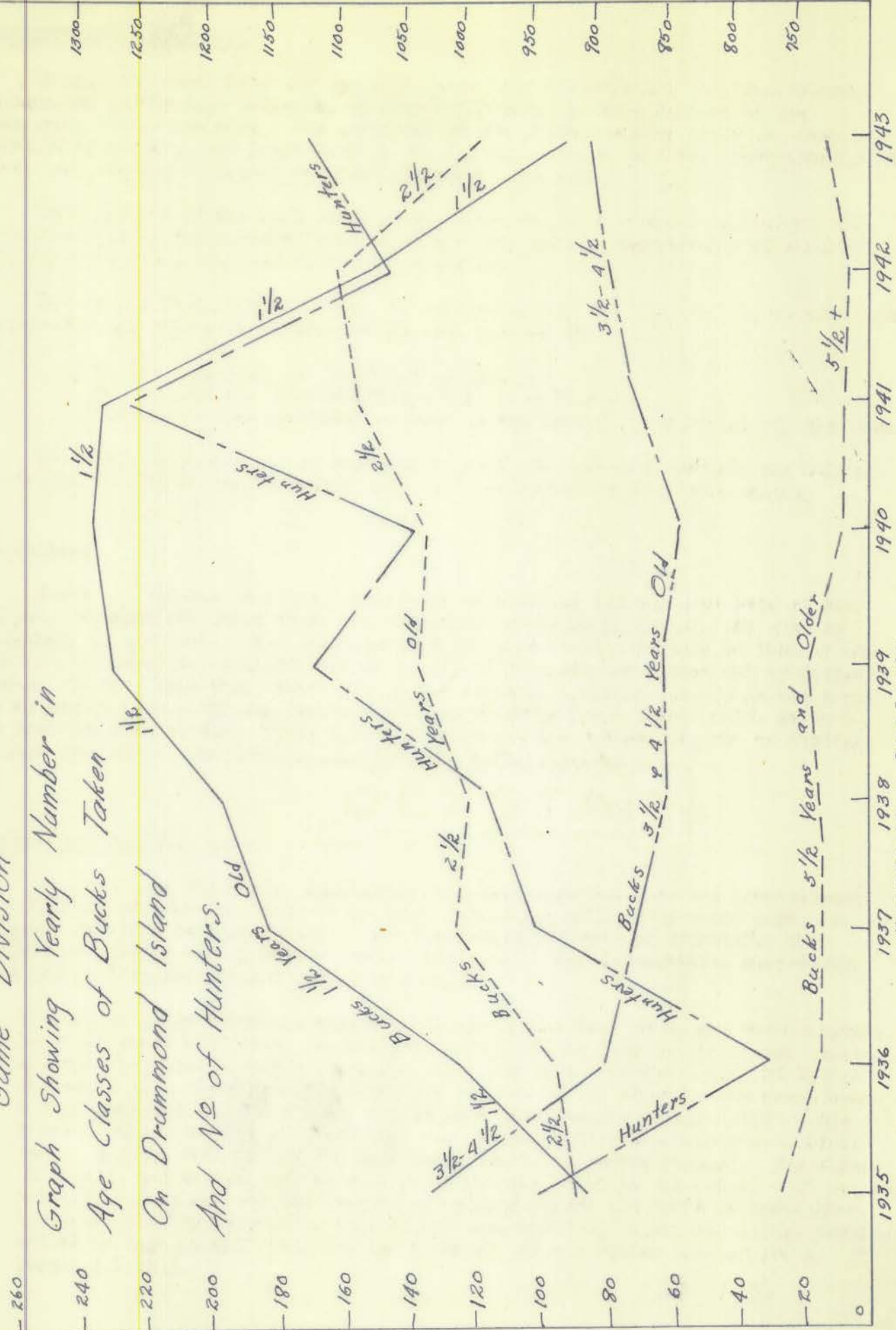
Graph Showing Yearly Number in
Age Classes of Bucks Taken

On Drummond Island

And No of Hunters.

NUMBER OF BUCKS KILLED

NUMBER OF HUNTERS



COMMENTS AND CONCLUSIONS:

During the past three and one half years this investigator has been actively interested in the deer situation on Drummond Island, as this is part of the Munuscong State Game Area. The condition of the winter yarding areas has been of particular concern, and every yard on the Island, particularly the overbrowsed yards, have been examined a number of times throughout the year.

This portion of the 1943 hunting season report is to comment and answer, if possible some of the hunters' questions, and give this investigator's opinion of the deer situation and conditions of the Island.

During the 1942 hunting season, as well as during the 1943 season, we were told repeatedly that the lack of hunters' success was due to:

1. To the camp deer, or "doe" law of 1941.
2. The coyotes are killing off the deer herd this year.
3. Violators, that is those resident on the Island, have killed off the herd.

The complaints were not so numerous in 1942, for hunters' success was holding up fairly well that year, but they were certainly numerous this past season.

Violations:

There are stories that local violators have killed off the deer herd on the Island. Without any doubt there are violations on Drummond Island, the same as elsewhere in the state. The puzzling part of these stories is that so many of the complaints seemed to estimate that 20 to 25% of the herd was killed off by violations. If that were true, every man, woman and child resident on the Island would be eating an average of one deer a month per person all year long - which seems to be just too much venison. This is not to minimize the violations, but to indicate rather that other, and more important, factors are involved.

Coyotes and the Deer Herd:

This year, particularly, complaints have been numerous that the coyotes have been killing off the deer herd on Drummond Island, as well as in other parts of Chippewa County. Certain remedies have been suggested such as increasing the bounty, or setting up a predator Control Division in the Conservation Department. This can be discussed from a number of angles.

1. Coyotes do cause a certain amount of damage to the deer herd, and their numbers have increased this year. An intensive study of the food habits of the coyote was made by Olaus J. Murie, biologist with the Bureau of Biological Research. His conclusions were based on intensive studies of 778 stomachs and feces over a four year period. This study showed that deer remains formed 0.83% of the items of the coyote diet - less than one percent. This also includes carrion deer. Coyotes will kill a few deer particularly in severe winters. The winter of 1942-43 was severe, and we will refer to this later in the report. If coyotes actually killed half of the deer whose remains formed the 0.83% of their diet the total kill by coyotes in this entire area would not equal the number yearly killed by cars on M-28 from the Soo to Seney, or the number that starve on Drummond Island.

2. Practically all complaints were based on numerous coyote signs, particularly signs where coyote fed on dead deer. No one, and we talked to hundreds of hunters just this year, saw a coyote actually kill a deer. There might be some question as to the number of deer actually killed, and perhaps the coyote is getting blamed for a kill that he did not make.

Coyote populations seem to follow the ups and downs of the rabbit population. The coyote trend does not follow the Drummond Island deer herd, for the herd has been going down, probably as low as it was after the heavy losses of the winter of 1934.

3. Conservation Officers throughout the area do not agree with the hunters that coyotes are doing so much damage, if fact they insist that the damage is really small. These men are in the woods day after day, winter and summer, and not just during the two weeks of the hunting season. Their observations during the winter months are particularly important. It would appear that if the coyotes were causing all this damage that some of the conservation officers would agree that they were.
4. The areas from which most of the coyote complaints were reported are in the region of the Tahquamenon River, Strongs, the vicinity of Trout Lake and on Drummond Island (referring only to the Munuscong Game Area). Super-imposing these areas on the Deeryard Map we note a coincidence. All these areas, without an exception fall into areas in which the deeryards are in poor condition. The big Hulbert Yard has been overbrowsed for years, and as long ago as 1917 a report was made of deer starving in this area. The Trout Lake Yard is in poor condition as well as the Black Creek and Waiska River Yards. The west side of the Naomikong Yard is in only fair condition while the east side is improving. On Drummond Island we find Bass Cove Yard and Pats Lake Yard are, and have been in poor condition. The Potagannissing River Yard and the Huron Bay Yards have been only fair, and are getting worse. Only the small Fort Drummond and Dawson Lake Yards are in good condition. The fact that coyote predator complaints appear worst in those areas in which the deeryards are in poor condition suggests that possibly the coyote is not to blame for the decrease in the deer herd.

There is another angle from which this can be studied, that is, compare the number of coyotes sealed in various areas. It is rather surprising to note that nearly as many coyotes have been sealed in from the Goggomain deeryard area and the Pine River area as in the Hulbert area. Apparently the coyote populations are almost the same, yet there are not the complaints in these areas of so much damage to the deer, because the Goggomain and Pine River yards are in good condition and there are no winter losses in these areas.

Before judging the coyote as a serious predator we should also try to determine if he is of value in the scheme of things.

1. One particular important role of predators is that they remove the surplus. For years the game men have insisted that there are too many deer on Drummond Island for the amount of winter food available. This is proven by the number of starved deer that have been found year after year. Therefore, predators are important in utilizing the surplus number of deer that are not taken during the regular hunting season. It does not appear that there could be enough coyotes on Drummond Island to take care of the annual losses, for not a single dead deer that was

found last spring showed any signs of predator activity.

2. What about those hunters who like to hunt coyotes? Should they stop their sport because the deer herd is down in overbrowsed areas? Of increasing interest has been the sport of hunting coyotes from aero-sleighs, particularly around Drummond Island. The war has curtailed this sport. Three years ago six aero-sleighs from this area were to stage a coyote hunt on Drummond Island. Unfortunately the hunt was never made because of the big storm that came up and only two sleighs reached DeTour. In all probability there should be an increase of this kind of hunting after the war.
3. There is also a monetary value to consider. The trappers and hunters receive some \$4,000.00 annually in this area. This is nearly a fifth of the amount received by beaver trappers in their best year.

Therefore, it is possible that the coyotes are not doing so much damage, that if we study the picture better we will find that our decreasing deer herd is not due to predators, but to the condition of our winter deeryards; that we should remove the surplus deer in these overbrowsed areas by legalized hunting. The bounty system has been used for years and has been found not effective in keeping down predators. A State trapper system was used for a number of years, and the sportsmen themselves were instrumental in abolishing this system. Finally, time and perhaps money could be better spent in studying the inter-relationship of predators and game, particularly deer, before we conclude what should be done in the situation.

THE DRUMMOND ISLAND DEER HERD

Looking back over the history of Drummond Island, back to the days of the British occupation, we note that in 1816 the soldiers were able to secure but a few fish for food. There is no evidence that the British made any attempt to secure wild game, nor did any of the hunters attempt to provide any. There may have been deer on the Island but no mention is made of them. In fact, the statement was made that fresh meat ran out altogether.

There is also the fact that since there were no suitable areas for cattle, the British pastured their cattle on St. Joseph's Island during the summer, and then drove them across the ice to Drummond Island. This also indicates that the Island was in big timber and there were no suitable deer herd conditions, particularly winter areas.

The Hitchcock Company began logging the Island in 1888 and logged there until 1908. There were a few deer there at the time, possibly certain areas were made favorable for deer by fires, which created openings and brought in young growth. Only an occasional deer was seen while this company was logging but the herd gradually increased during the latter part of the operation. At that time the herd apparently yarded in the Marblehead and Shelter Island areas where ground hemlock was so thick that it was difficult to walk through it. Deer increased so rapidly that the ground hemlock was eaten back.

The first report of a deer being killed on Drummond Island, that I have been able to trace down, was in December 1899. According to the story it was so unusual to see deer tracks on the Island that three people went out to see the tracks.

Remember that the Island was largely in big timber at that time.

Then the Kreetan Company began logging the Island, in 1908, when the Hitchcock

Company moved out. The Kreetan Company finished their operation in 1925. These logging operations created openings and brought in young growth, and the deer herd increased rapidly, as with the history of the rest of the state.

In April 1935, game men reported that the deer herd was beginning to overbrowse the range and that the herd was consuming the natural supply of winter food faster than it was being replaced by new growth. This survey was made by I. H. Bartlett, Officer Haken, and Roland Pierson of Muskegon, and was the first survey made by plane.

In May, 1936, the report on the Drummond Island deer herd showed that 300 to 500 deer died of starvation on the 4,000 acre Johnswood yard. All were fawns less than a year old. Game men found 34 starved deer in 275 acres and on the basis of the area covered estimated that at least 300 and not more than 500 deer died of starvation in that area. It was believed that this was not the first winter that deer had starved on the Island, and that the 1933-34 losses were even heavier. This despite the fact that there had been an open season for 25 years.

In 1941 another spring survey was made and fifteen dead deer were found by three men in less than two days. The fawns again made up the bulk of this loss.

There were surveys between 1936 and 1941 in which dead deer were found.

In the spring of 1943 we again made another survey of deer losses and worked in the Bass Cove and Pats Lake yarding areas. We found 28 dead deer, one buck had died of a wound, probably shot, one doe had a broken hip and one doe was killed by a dog - not a coyote, for even the identity of the dog was learned. The remaining 25 deer died of starvation as near as we could determine. There were no signs of predators on these deer. Twenty one of the twenty five were fawns, 7 were buck fawns and 18 were doe fawns. On the basis of the area covered, as compared to the total area we estimated that the total losses last winter were 300 to 350 deer. Now the interesting thing was that 21 of the deer were found in the yarding areas, not along the yard borders. This leads to the conclusion that these deer died during the winter, probably during or immediately after the heavy March storm, and that the amount of available food was approximately 35 days short of the winter yarding season. Comparing this last figure and the total yarding season days, with the number of dead deer and the total herd, we again get an estimated loss of about 325 deer, which compares favorably with the estimate made on the basis of area covered to total area.

The important thing to the hunter, the sportsmen, the management of a natural resource is what has been done to alleviate, or manage, the situation? There are only three things that can be done; first, control of food; second, control of herd; and, third, combine the above two. By control of food we can either feed directly, or make food available by cutting operations, or improve food and cover by managed cuttings.

Feeding directly has been tried in various places, at private hunting clubs, and even to a small extent on Drummond Island when collections were taken up from the hunters. It has been proven, time and time again, that feeding deer is not practical, and creates, in general, a bad situation tending to defeat its own purpose.

One of the tools of managing an area is timber cutting on a managed timber cutting program. Some areas can be cut, if it will improve the area for game, at

any time during the year. Other areas can be cut only during the deer yarding season when the tops and slash can be utilized by the herd. Drummond Island is so situated that pulpwood and cedar posts have to be taken out by boat. It is too costly to ferry across, and the ferry is not large enough, and it is 50 miles from the west end of the Island to a railroad. Until last year we have had little success in getting areas cut to improve the stand and furnish tops for feed. In 1940 there were eleven permits issued to cut timber on state-owned land, but only one operator cut on part of 40 acres, simply because there was no way to remove timber products. Any one familiar with the Island will realize that the chances of getting annual cuttings are not likely under ordinary economic conditions, due to transportation problems. When Mr. Lutes began logging last year he had the equipment to take timber products off the Island, so that now we have issued permits to cut timber on thirteen state owned descriptions to improve the deer yarding conditions, and plan to cut six more descriptions. However, the chances of cedar reproduction coming in, where the number of deer is too great for the yard, is not very good. Therefore, the control of the herd is the best and only method under these circumstances.

Last winter there was a logging job in Warners Cove area and the deer herd concentrated in these cutting areas. This happens whenever there is a winter cutting operation. There are both private and state cutting operations on the Island this year, and deer sign and browsing is numerous in these areas. If managed cuttings could be carried on winter after winter on the Island, they would tend to ease the situation, but we have pointed out that this has been economically impossible.

However, manipulation of food and cover is not going to solve the starvation losses alone. Each yarding area can produce only so much growth a year. When the herd numbers are such that they eat this annual growth and still starve, then herd control must be resorted to. We can blame a decreasing herd on violators, on predators and on whatever we like - but each yarding area will produce only so much food for so many deer, and no more. A managed removal of the surplus when shown that such a removal is necessary must be undertaken. However, this does not mean that we will not find dead deer every spring, winter conditions, and other factors are involved, but over a period of years a planned removal of the surplus, plus managed control of food and cover by selective cuttings will do much to alleviate the situation. Until we combine herd control with food and cover control I cannot see that we are managing our resources properly.

Michigan is not alone in its deer herd problem. Wisconsin has had the same problem and found that the reduction of the herd had been delayed too long and that they would have fewer deer for many years because they had not been able to act five years ago. Also, the condition of the reproduction in the overbrowsed areas has been set back because the herd had not been managed properly. This same situation according to Mr. Earle of the Blaney Park, is found that the herd has increased so rapidly that cedar growth is in danger of complete extermination, as well as the deer herd. Pennsylvania long ago acted on their problem, and Wisconsin, favored reduction of the herd in critical areas. It appears that unless we combine herd control on Drummond Island with timber cutting, we are not managing our present herd, and making it that much more difficult to manage in the future, both from the standpoint of the deer, as well as the yarding areas.

/s/ Albert Reynolds

Albert Reynolds
2/2/44

copied 4/7/44 m.w.