

MICHIGAN DEPARTMENT OF CONSERVATION
Game Division

Report No. 2200

REGION I

ANNUAL DEER REPORT

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I. DEER POPULATIONS

A. Pellet Survey

In the spring of 1957 a Region-wide deer population survey was run based on pellet group counts on plots picked at random. This survey was designed to give population figures accurate to $\pm 20\%$ for the Region with somewhat wider limits of confidence when divided into 3 areas. The survey indicated a spring population of 345,000 deer for an average of 22.4 per square miles. When dividing the Region into units the average number of deer per square mile was: East 24.6, Central 25.4, West 17.8.

In the spring of 1958 a second survey was run on a more intensive basis. This time it was decided that the work would be confined to two areas, one being the tri-county area of Alger, Delta & Schoolcraft counties and the other the Dickinson County area. A spring population of 31.5 deer per square mile in the first and 51.9 in the latter was the result. The high figure of 51.9 deer per square mile in Dickinson County is due to winter concentrations of deer that normally range over a much larger summer range. This figure, along with an examination of the range should be ample evidence that a herd management program in this area is necessary. (See Report #2189 attached).

B. Deer Drives

There are now a total of 19 deer drive areas in ten of fifteen counties of the Region. Four were constructed in 1957. In addition one established area was not run in 1957 so comparable figures for 1956 and 1957 are available for 14 areas. The average deer per square mile on the 18 areas run in 1957 was 30.9. However, of the 14 comparable areas the average number of deer per square mile was 37.9 for both 1956 and 1957. The number of deer counted in each half section varied from 0 to 39 or 78 per square mile.

These areas have not been picked at random and therefore cannot be projected to indicate a region-wide population although good, bad and indifferent areas were selected. They do, however, show year to year trends and that a large number of deer are present.

C. Employees Deer Counts

The results of observations by all field employees and some National foresters indicate no major change in deer numbers during the past year.

These employees spent 38,363 hours in deer territory during the period July-October and saw an average of 35 deer per 100 hours, exactly the same as was seen in 1956.

The herd composition has remained fairly stable and in 1957 was 18.85% bucks; 46.60% does; 34.55% fawns. (See attached Report - Deer Herd Composition).

D. Highway Deer Kill

Although there are too many variables to consider highway kills an index to population it gives figures on deer losses and should be recorded as follows:

<u>Districts</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
1	132	131	143	180	174
2	121	185	202	215	297
3	73	217	231	330	324
4	<u>116</u>	<u>233</u>	<u>334</u>	<u>515</u>	<u>323</u>
Total	442	766	910	1240	1118

II. HUNTING SEASONS

A. Archery Season

The number of archers in the Region was down slightly last year. Although weather conditions were considered favorable, the kill of approximately 405 deer was down 19% from that of 1956.

B. Regular Gun Season

The regular deer season was the poorest since 1952. The new Mackinac bridge increased the number of hunters by about 4,000 which was not nearly as many as anticipated. 108,385 hunters killed 21,740 bucks (down 10% from 1956) for a success of 20%. This poor kill no doubt was a reflection of two things: A delayed result of the critical winter of 1955-56 and the heavy snows that came early in the hunting season. The high kill was in 1955 with 29,160. Starvation the following winter was instrumental in reducing the kill to 24,220 in 1956. The accumulative effects of starved deer and decreased fawn production the spring of 1956 set the stage for the further decline in 1957.

1. Weather - On the opening day, November 15th, weather was fair to good over most of the peninsula although some rain fell in the east end. A hard rain all day on the 16th made hunting almost an impossibility. The 17th was better but the rain made many roads difficult or impassable. Heavy snow and blizzards especially in the west end starting on the 18th tied hunters up completely over much of the peninsula. Over three feet of snow was on the ground in parts of the Baraga District. This is the third year in a row that weather conditions have been extremely unfavorable for hunting and this was generally conceded to be the worst one. Before the end of the season deer in many places had moved into the vicinity of the yards and in some cases into the yards themselves. Many hunters left prematurely because of weather conditions.

After three seasons in a row with adverse weather setting in early we are hearing a lot about opening the deer season at an earlier date.

2. Hunting Pressure - Most people expected a big influx of hunters into the Region as a result of the new bridge. Estimates ran from 30 to 100 percent. The actual increase in total U. P. hunters was approximately 4% or a total of 108,385. This increase was not noticeable except in a few limited areas. In fact in all districts except IV and a small part of III most people thought that hunters were the same to slightly down in numbers.

Although hunting pressure was up slightly (4%) the total hunting effort was no doubt down because of unusually poor weather and the early departure of many hunters.

3. Success - Hunter success was down substantially. The final estimate of the total kill is 21,740, down 10% from the 24,220 last year.

Hunters success at various check points follows:

a. Straits of Mackinac (bridge count)

	<u>Deer</u>	<u>Bear</u>
1957	9,224	157
1956	9,410	210

b. Drummond Island (ferry count)

	<u>Deer</u>	<u>Hunters</u>
1957	404*	2,161 (approx.)
1956	411	1,674

*Not including 143 antlerless deer from the special season (96 does, 25 buck fawns, 22 doe fawns).
Drummond Island counts also included 9 bear, 5 coyotes, 3 bobcats.

c. Blaney Park

Blaney proper	140 hunters & guides	59 bucks 7 does 1 bear 1 coyote
Simmons Woods (one week only)	37 hunters & guides	16 bucks
Totals 1957	177 hunters	75 bucks (42% success)
Totals 1956	154 hunters	75 bucks (49% success)

d. Hiawatha Club

1957	368 hunters	84 bucks est. (23% success)
1956	400 hunters	100 deer est. (25% success)

e. Tahquamenon Boat Service

1957	95 hunters	25 deer	(26% success)
1956	110 hunters	43 deer	(39% success)

f. Permits thru Wisconsin

1957	151
1956	528

This figure on deer permits through Wisconsin probably reflects the influence of the bridge more than it does the drop in deer kill.

These check points all show a drop in hunters success. Undoubtedly the weather was a factor but I can't believe it is the whole story. Severe weather during the winter of 1955-56 resulted in a drop in the percentage of $1\frac{1}{2}$ year old deer during the 1956 deer season and a big drop in the deer kill that fall. I believe the continued drop this year reflected the delayed effect of that winter, i. e., lowered production and poor fawn survival from does surviving that winter. A second hard winter in parts of District I the following year (1956) have aggravated this situation.

Because of two starvation years in a row in District I Rafferty continued to make a concerted effort to get age data of deer in his District. In addition to checking deer at the checking station he checked several at locker plants, etc.

The 47 deer checked is a small sample but gives some interesting figures as follows:

<u>Age Class</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Fawn	1	7	8
$1\frac{1}{2}$	13	2	15
$2\frac{1}{2}$	4	3	7
$3\frac{1}{2}$	12	2	14
$4\frac{1}{2}$	1	1	2
$9\frac{1}{2}$		1	1

The implication is obvious. Very few $2\frac{1}{2}$ year old deer are in the woods. These were fawns in the starvation winter of 55-56. The $3\frac{1}{2}$ year group has nearly the largest representation of any age group in the herd. This was the last fawn crop before the winter of 55-56 and should normally be very much in the minority with $1\frac{1}{2}$'s predominating. The $1\frac{1}{2}$ year groups should have by far the largest representation but is only one deer greater than the $3\frac{1}{2}$ year group. Starvation and reduced fawn production and survival as a result of severe winters is clearly indicated.

C. Special Season

Four special areas were open concurrently with the buck season. The fifth area, U-2 was taken out by the Legislative Interim Committee after protest by individuals and groups in Dickinson County. These four areas covered 1,314 square miles. Quotas were set so that a maximum of 2,300 extra deer would be taken. Because of poor hunting weather we fell somewhat short of this mark. The estimated actual kill was 1,515 or 1.15 per square mile. (For details see appended Report #2181).

The special season went fairly smooth after U-2 was removed from the list. The only other resistance was on Drummond Island where local residents tried to influence visiting hunters not to shoot does and fawns. Leaflets were passed out on the ferry, followed up by verbal pressure on the island. This was not entirely successful however as evidenced by the fact that a total of 190 extra deer were taken. (By post card poll). 143 of these deer were removed from Island. The concurrent feature seemed to be accepted and preferred over the subsequent season.

D. Drummond Island

Because of the physical characteristics of Drummond Island nearly complete records of hunting pressure, kill, etc. can be obtained and for this reason it will be treated separately here. In the regular and special seasons 2,150 hunters took 547 deer for an average success of 25.4%. This is comparable to 1957's figure of 1,747 hunters taking 430 deer of both sexes during the regular and special season.

Total figures for the Island follow:

Bow and Arrow season kill	52
Regular season Buck kill firearms	404
Special season kill, antlerless	143
	<hr/> 599

(These figures are from the ferry game tally and only include deer removed from the Island. The post card poll gave a total of 190 antlerless deer.)

A break-down by age and sex follows:

	<u>Bucks</u>	<u>Does</u>	<u>Buck fawn</u>	<u>Doe fawn</u>	<u>Total</u>
Bow & Arrow	3	22	17	10	52
Regular Buck	404				404
Special antlerless		96	25	22	143

Above figures from ferry check. Does not include kill by local hunters.

III. DEER YARDING SEASON

A. Climatic conditions

The winters of 1957-58 were relatively mild over most of the peninsula. Little starvation resulted except in a somewhat localized area in the west end, the most serious specific spot being in Ontonagon County north of Merriweather.

Snow depths reading 3' came before the first of December in some of the west end areas and was generally heavy along the Lake Superior shore. This early snow gave prediction of a hard winter but it never quite materialized. Snow fall the rest of the winter was somewhat below normal.

Except for one short period in mid-February when temperatures dropped into the -30's the temperatures were moderate. After mid-February thawing days were quite frequent.

In the central and southern part of the Region the winter was quite favorable from the standpoint of deer survival. A serious condition developed in February in an area bounded by Marquette, Munising and Treenary. A series of snow storms and low temperatures accompanied by strong winds began on February 6 and continued for 18 days. During this time temperatures dropped into the -20's and snow accumulated to 3.8' near Chatham. However about as soon as the storm ended thawing weather formed a hard crust and the deer were free to move nearly anywhere for food. The deep snow and hard crust actually made more food available.

In summary it could be said that there was an unusually wide range of snow depths in the Region. It varied from nearly 4' in relatively limited areas of the west end and Alger County to relatively little in the south one-third, particularly in the extreme south. The winter of 1957-58 was on the average favorable for deer survival.

B. Yarding Season

With early heavy snows deer were in their yards in limited areas of the west end before the first of December. This extreme of 140 days was offset by parts of the south where deer didn't yard at all. Over much of the central 1/3 of the Region approximately 70 days was the maximum while the southern 1/3 saw little yarding and part of it none at all with deer merely moving into heavier cover.

Again the average was a shorter yarding season than average for this Region.

C. Cuttings

The general impression was that the recession had resulted in less over-all cutting during the past year. Winter deeryard cuttings on state land dropped from 22,573 acres in 1957 to 21,312 in 1958. However

the total for State Private and Federal was up from 61,149 to 74,470 in the Region. Total regional stumpage values for the present year for state cuttings were down slightly from the \$583,566.80 for 1957.

D. Winter Losses

More than the usual number of cases of predator losses were reported this winter. The reason was thought to be the heavy crust condition that prevailed for a considerable length of time because of thawing days and freezing nights. Coyotes and wolves had no trouble running on the crust while deer often broke through making them more vulnerable than usual. Dist. 1 had the majority of these reports. The only serious starvation was in Dist. 1 where 17 starved fawns were confirmed. Other cases were 1 possible in Dist. 2, 1 old doe in Dist. 3, and 2 in Dist. 4. This should very definitely be considered a mild winter. All of the 17 from Dist. 1 were outside special area U-1. Six were found in a single cutting north of Merriweather, 5 in the Porcupine Mt. Park and the rest from the Middle Branch, Kenton, Lake Gogebic and Watersmeet Yards.

IV MANAGEMENT

A. Range Management

Management through cuttings of merchantable timber is still our best tool for preserving and improving the range. Every effort should be made to maintain as short a rotation of timber as is possible consistent with other multiple uses of the land. This is not only necessary for deer but for many other species of wildlife.

Other tools for range management show promise on a more intensive basis. These include herbicide spraying, controlled burning, and disk-ing along deeryards to increase suckering. These possibilities should be thoroughly explored and evaluated even though the cost on an extensive basis may prove prohibitive.

B. Herd Management

A necessary companion to range management is control of the deer herd itself. Neither can be successful without the other for a balance between the two is essential.

Only two years ago the first special season was established in Region I. Since then we feel that we have made good progress toward eventually working into a good herd management program. While it cannot be said that the first two years accomplished a great deal from a biological standpoint, it was exceedingly valuable as an educational tool. The scope of the program to date follows:

<u>Year</u>	<u>Area</u>	<u>Kill</u>
1956	1,173 sq. mi.	1,070
1957	1,314 sq. mi.	1,515
Proposed for 1958	3,582 sq. mi.	7,108 (quota)

As could be expected considerable opposition was present and it was necessary to gain public support before the program could be successful. The picture is improving in this regard. In 1956 scattered opposition was present throughout the peninsula and organized resistance in some localities. The most effective was on Drummond Island where local residents succeeded in removing the ferry from operation, virtually eliminating this area. In 1957 there were slight increases in areas and quotas but the important gain was in initiating concurrent seasons to replace the subsequent seasons. In that year local opposition from Dickinson County persuaded the Legislative Interim Committee to eliminate that area (U-2) from the program.

Gradually, however, we can see a changing trend toward more and more acceptance by the public. This has come about by persistently presenting the facts to the public by attendance at sportsmen's and other meetings, radio, T. V., and individual contacts. This has been a united effort by many members of the department regardless of Division. Other State and Federal agencies including the U. S. Forest Service have been helpful. A sympathetic and active press has also been an important factor.

This doesn't mean that the problem is solved. Actually we are hardly over the hump, but it begins to look encouraging at last.

WEL:cb
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