

MICHIGAN DEPARTMENT OF CONSERVATION  
Game Division

Report No. 2627  
May 22, 1968

NORTH MANITOU ISLAND DEER  
1967-January, 1968  
D. A. Arnold I. H. Bartlett

A total of 312 deer were harvested from the North Manitou herd in the 1967 hunt (see attached data sheets). This is the largest hunting kill ever made on the Island exceeding by ten the kill of 302 made in the fall of 1944.

Manager Fluelling is back on the Island after an absence of six months or so and has retained his intense interest in the Island wildlife.

Logging is continuing to remove about a million board feet of timber each summer and deer continue to feed on the tops and reproduction (except beech) as fast as it grows in the logged over areas. The northern portion of the Island is generally cutover (a light selective cut) and loggers are now working the central portion.

Ground juniper continues to be heavily browsed and most of the larger bushes took a beating this last winter having been chewed down to the surface of the shallow snow cover.

Another 60 tons of deer food pellets were distributed in the 34 feed troughs this past winter continuing the policy of feeding two 50-pound bags of feed per trough twice a week. With snow gone this year, by late March deer were still cleaning up the bi-weekly 100-pound ration in most troughs before the next feeding. An extra 50-pound bag was spread on the ground at the two troughs where the turkeys were feeding.

Two flocks of turkeys were reported. One flock of about 20, like a year ago, was staying in the vicinity of the Stormer Camps (the Mill), the other flock--possibly ten had been regularly seen by the Far South Cherry Orchard. At the time of our trip (March 27, 28, 29, 1968) this flock had broken up into smaller groups.

Scattered 4" - 6" maples have been barked by fox squirrels, but the incidence is not great. Ruffed grouse have not been reported for three to five years. Fox are plentiful but not at a peak.

A phantom "animal"--wolf, coyote, dog--had been reported seen on the Island at various times in the last five to seven years, but it had never been positively identified. While working with Manager Fluelling on March 28, David Arnold (Game Biologist, Michigan Department of Conservation) saw "Mr. X" (as it had been designated) in Section 30 about  $\frac{1}{2}$  mile SW of the old Davenport Camps and positively identified the animal as a large coyote.

The animal was plainly seen by both Fluelling and Arnold as it chased a deer by the car, and both agreed on the major distinguishing characteristics. Coyotes kill deer, but one coyote on a 22 square mile island with a thousand deer probably will have little effect on the herd.

Fluelling feels that considering all the indicators--browsing, exclosure, number seen, winter losses, food consumed, hunter success, etc., the Island herd numbers 1,200 to 1,500 deer. Because of the mild winter, winter losses were "light"--estimated by Fluelling not to exceed 50. Our (Bartlett-Arnold) observations in three days (March 27, 28, 29) on the Island gave us no reason to disagree with him.

It is strongly suggested that the regulated take of deer for 1968 be increased by 50 animals (an increase of 16% or 2.2 deer per square mile) to improve the deer-food balance.

IHB:ch

NORTH MANITOU ISLAND DEER  
Deer Hunting Kill, Starvation, and Other Losses

Year	WINTER LOSSES*		HUNTING KILL					
	Sample count	Estimated total	Adult		Fawn		Uniden- tified	Total
			Males	Females	Males	Females		
1937	5	10	15	1		2		18
1938			25	12	2	2		41
1939	5	10	40	5				45
1940			55	29	8	3		95
1941	8	20	91	40	4	4		139
1942	25	50	91	70	11	4		176
1943	32	50	89	116	39	48		292
1944	20	50	155	104	20	23		302
1945	4	10	33	9	6	2		50
1946	22	50	113	23	2			138
1947	164	300	133	58	7	4		202
1948	47	100	77	41	1	1		120
1949	25	50	117	52	5			174
1950	116	200	112	75	4	5		196
1951	37	70	78	127	10	13		228
1952	20**	75	83	139	23	29		274
1953	9	30	68	120	27	23		238
1954	27	100	152	113	13	11		289
1955	7	50	138	135	7	6		286
1956	43	70	94	116	21	14		245
1957	3	20	139	84	20	11	12***	266
1958	17	40	134	75	11	8	5	233
1959	72	100****	149	80	10	4		243
1960	46	75	121	91	4	8		224
1961	10	20	144	53	7	3		207
1962	390	500	80	108	5	9		202
1963	58	100	164	88	10	5		267
1964		50	102	121	15	12		250
1965		50	137	134	13	5		289
1966		50	143	116	3	10	10	282
1967		50	163	115	20	14		312
1968		50						
1969								
1970								
1971								
Total	1,212	2,400	3,235	2,450	328	283	27	6,323

\* Approximately 80% due to lack of sufficient food (many could not get to it), about 20% due to crippling during hunt, and other causes.

\*\* Reported by Hadra as having been seen in vicinity of feeding stations. No extensive searches were made.

\*\*\* Eight males and four females killed but not weighed or aged.

\*\*\*\* Readjusted.

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WEIGHTS OF DEER KILLED ON  
NORTH MANITOU ISLAND

October, 1967 thru January, 1968

MALES							FEMALES					
36	87	103	115	125	135	148	179	40	85	95	105	109
39	88	103	116	125	136	148	182	45	85	97	105	109
43	89	104	116	127	137	149		46	86	97	105	110
44	90	104	116	127	138	149		47	87	97	105	110
45	90	105	117	127	138	151		49	88	98	105	110
46	90	105	118	127	138	151		49	89	98	105	110
47	90	105	119	127	139	152		50	90	99	105	110
49	92	105	120	128	139	152		51	90	100	105	110
50	93	105	120	128	140	154		51	90	100	105	111
50	93	106	120	128	140	155		53	90	100	106	111
50	93	106	120	128	140	155		54	90	100	106	111
50	95	107	120	128	141	156		60	90	100	106	112
51	96	108	120	128	142	156		71	92	100	106	112
52	97	108	120	129	143	156		<u>72</u>	92	101	106	114
54	97	108	121	129	143	157			92	101	107	115
56	98	108	121	129	144	157		73	93	101	107	115
58	98	109	122	130	144	157		74	93	102	107	115
59	99	110	122	130	144	160		76	93	103	108	115
62	100	110	123	130	145	160		77	93	103	108	117
<u>64</u>	100	110	123	131	145	160		79	93	104	108	118
	100	111	123	131	145	160		81	94	104	108	118
76	100	113	123	131	146	160		82	94	105	108	118
82	100	113	124	133	146	161		82	95	105	108	118
83	101	114	125	133	147	162		83	95	105	108	122
84	101	114	125	134	147	170		85	95	105	108	124
85	102	115	125	134	147	170		85	95	105	108	127

Total Wt. 20,534

Total Wt. 12,348

Males

Up to and inc. 75# - fawns  
76# and over - adults  
Total Males

Number	% of Total Kill	Av. Wt.
20	6	50.3
163	52	119.8
183	58	112.2

Females

Up to and inc. 72# - fawns  
73# and over - adults  
Total Females

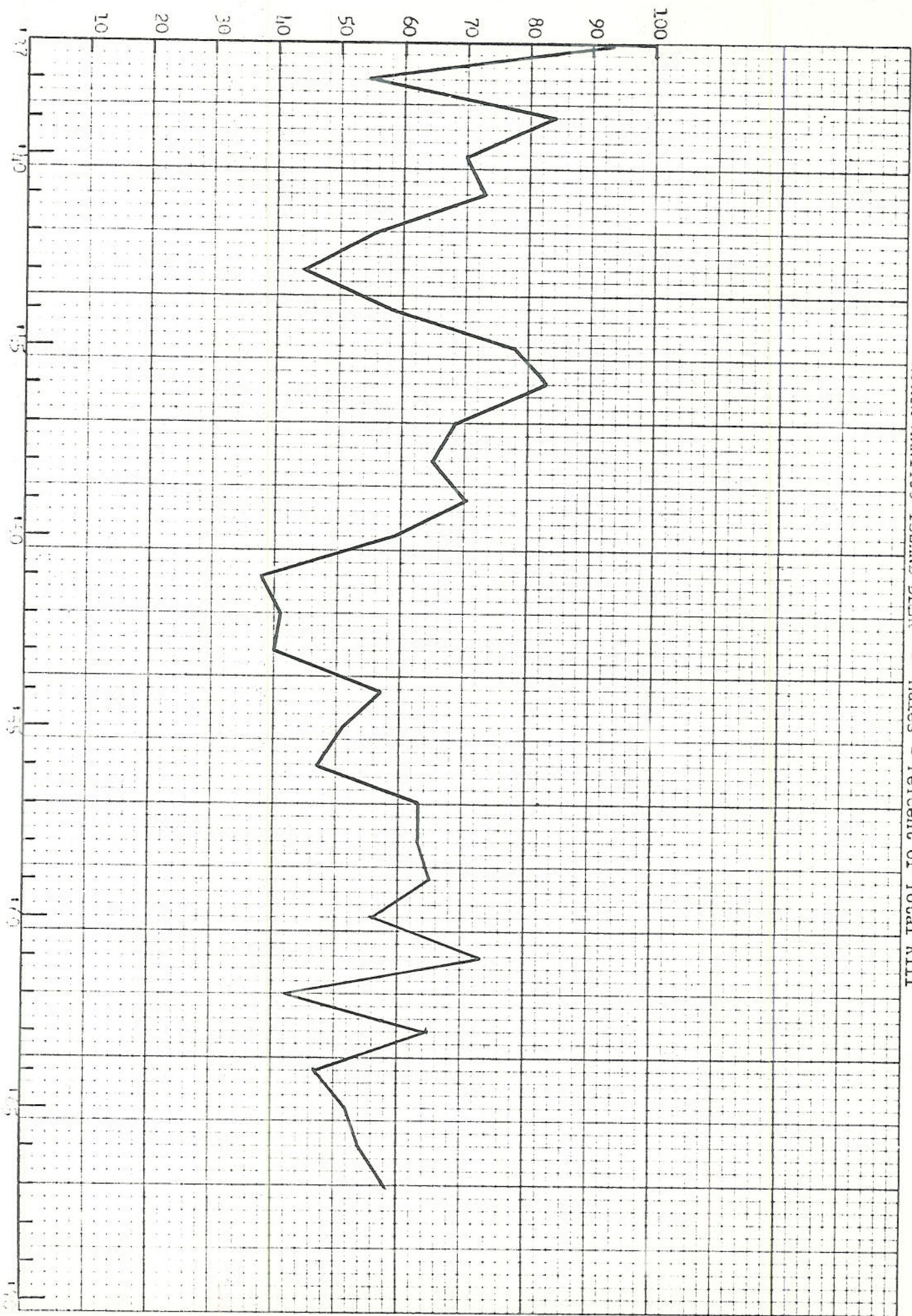
14	5	52.7
115	37	100.9
129	42	95.7

Total Deer

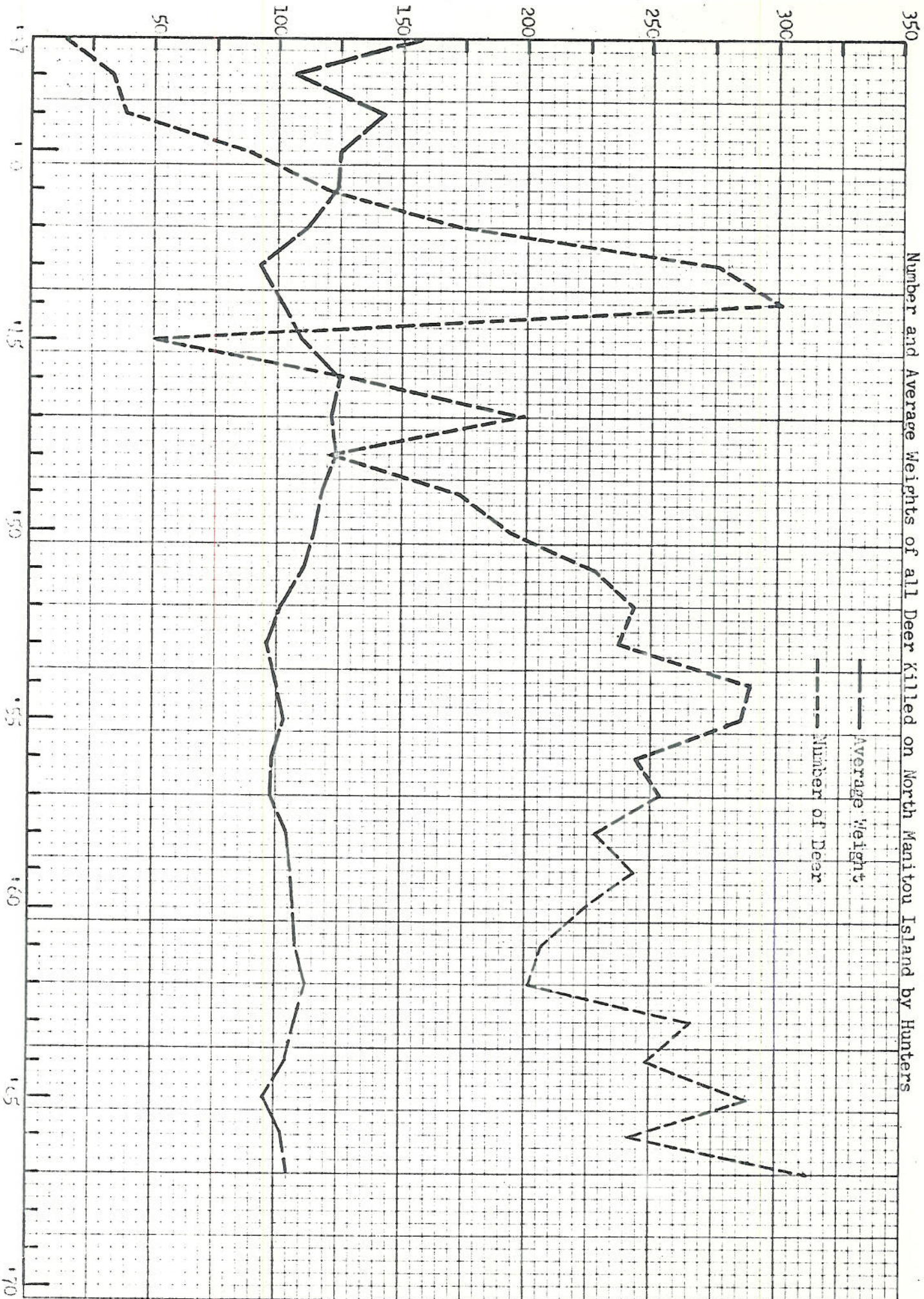
312	100	105.4
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IHB:clh

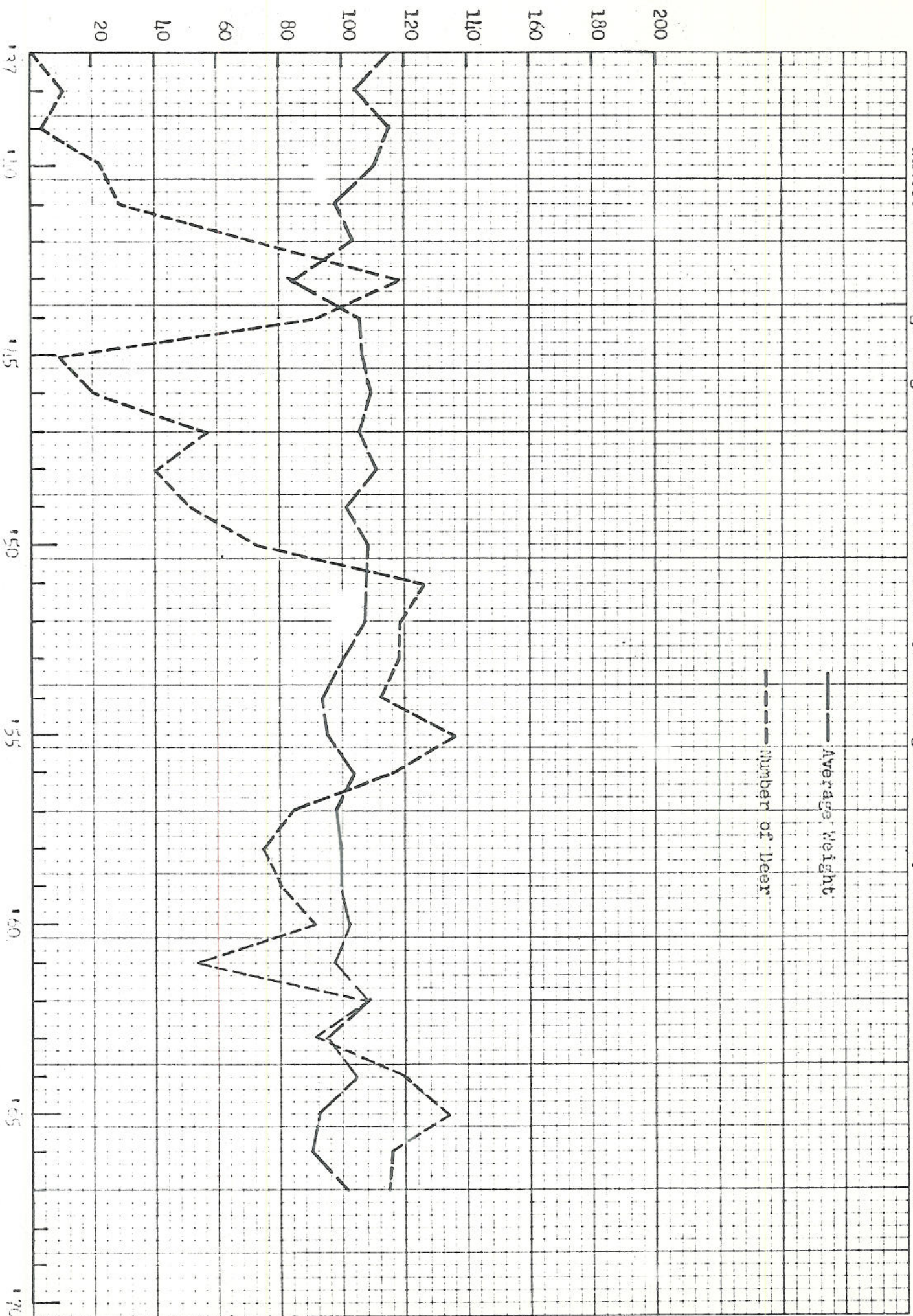
NORTH MANITOU ISLAND DEER - Males - Percent of Total Kill



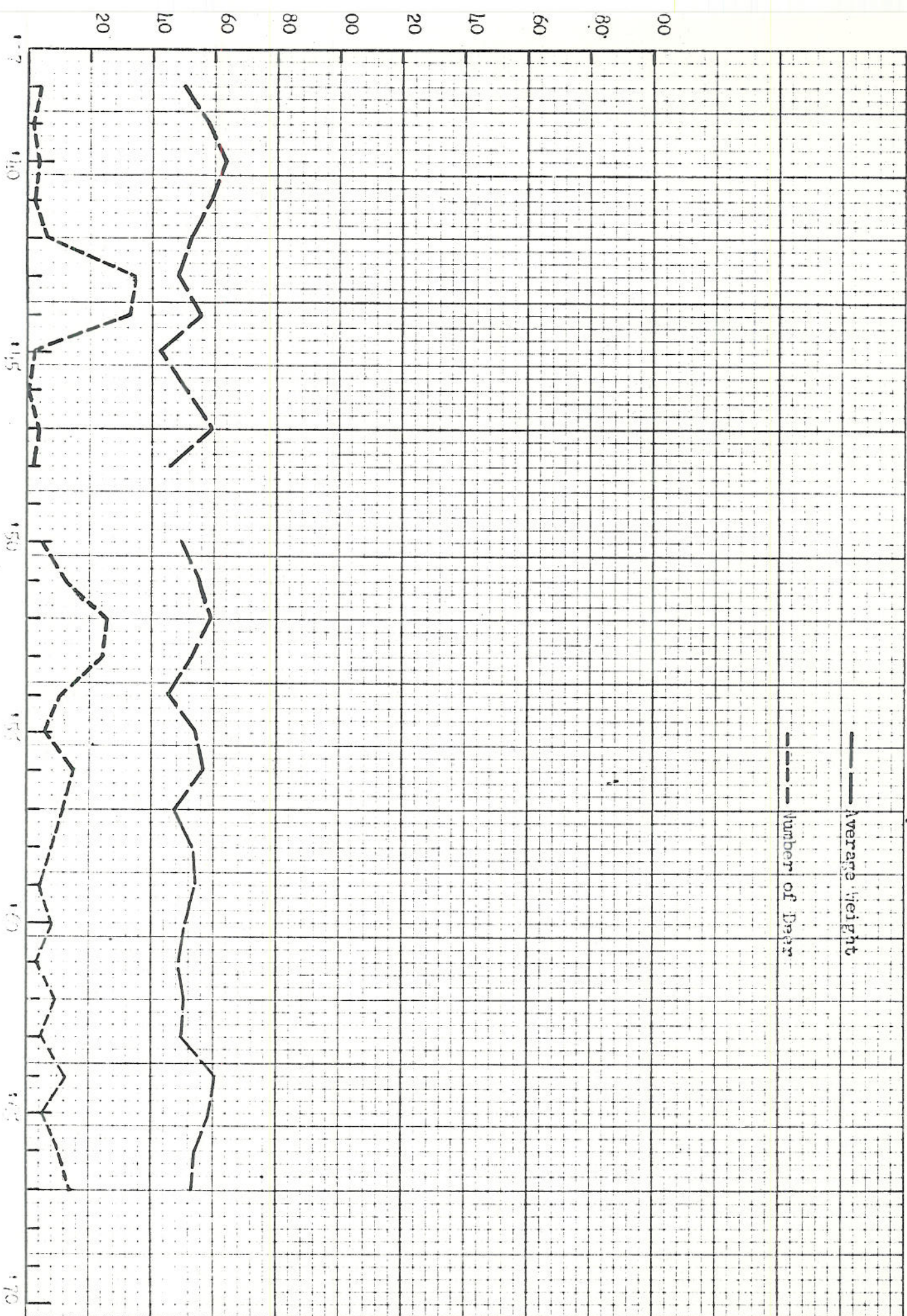
Number and Average Weights of all Deer Killed on North Manitou Island by Hunters



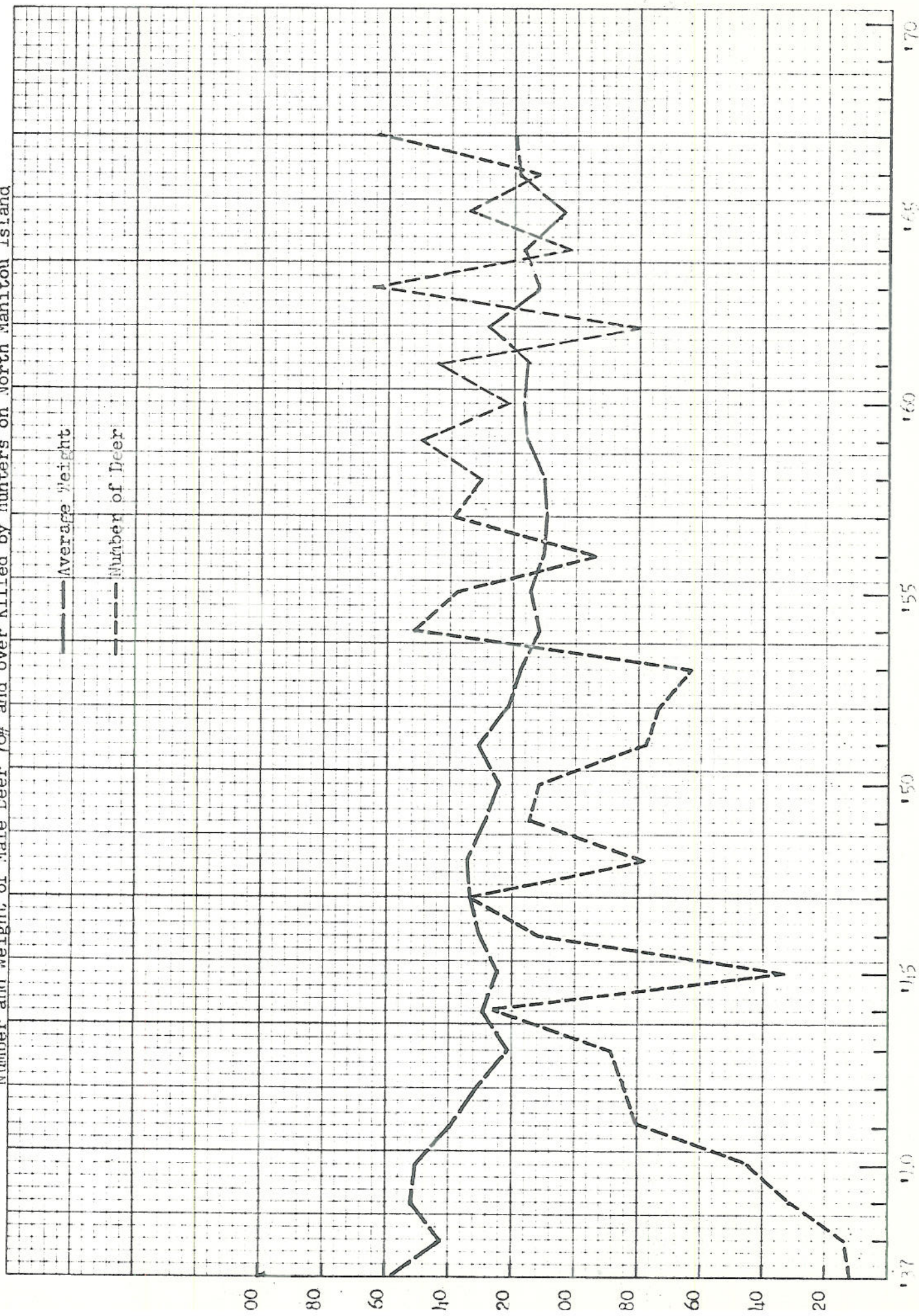
Number and Average Weight of Female Deer over 73# in Weight Killed by Hunters on North Manitou Island



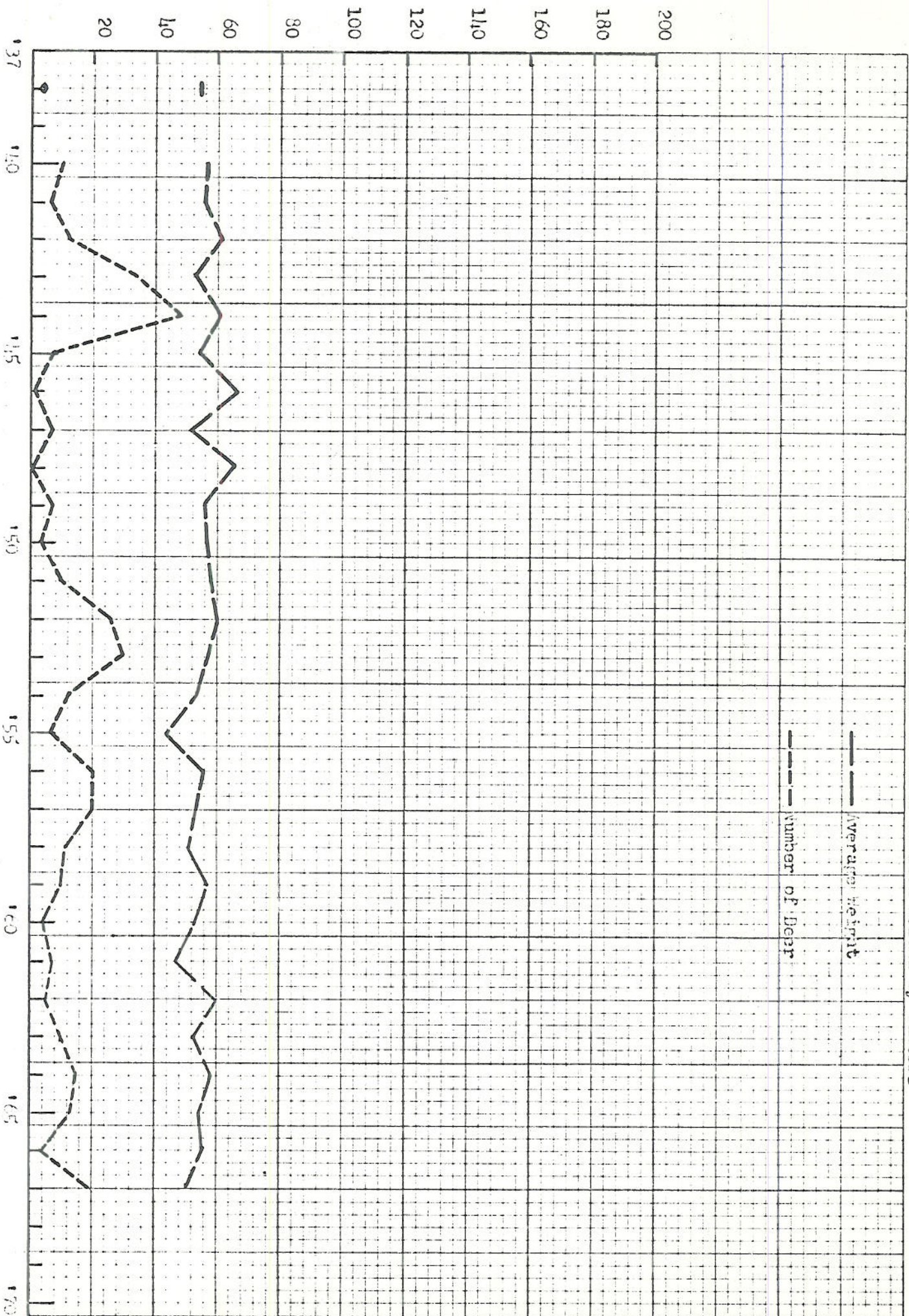
Number and Weight of Female Deer 72# and Under Killed by North Manitou Island Hunters



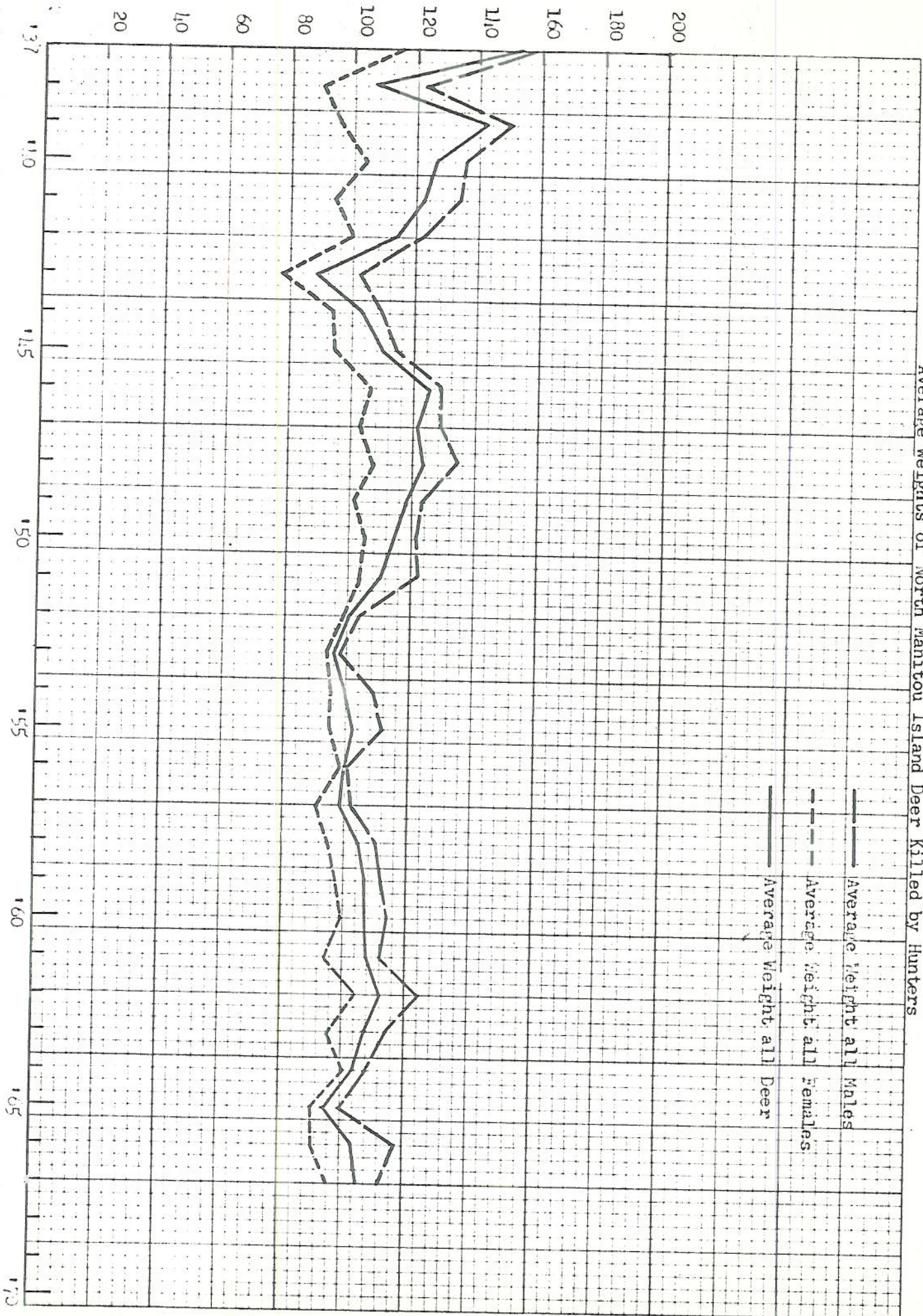
Number and Weight of Male Deer 76# and over Killed by Hunters on North Manitou Island



Number of Male Deer 75# and under Killed on North Manitou Island by Hunters



Average Weights of North Manitou Island Deer Killed by Hunters



# NORTH MANITOU ISLAND

LEELANAU COUNTY

MICHIGAN



1968

— FEEDING ROUTE

● FEED TROUGHS

34 TROUGHS

## LEGEND

- GOOD DIRT ROAD
- - - POOR DIRT ROAD
- - - TRAIL
- SPRING
- ~ STREAM
- OCCUPIED BUILDING
- VACANT BUILDING
- ▲ SAW MILL
- FRUIT TREE
- ★ GROUND JUNIPER
- CLEARING
- BEACH SAND AND DUNES
- ↑ OLD LUMBER CAMPS

SCALE  
0 1/2 1 2  
MILES

T-32N

T-31N.

R-15W

R-14W

GA-57

5-44-60  
6-47-20

# NORTH MANITOU ISLAND DEER MORTALITY

## 22 SQUARE MILES

