



**RESULTS OF THE 1988  
OFF-RESERVATION TREATY  
DEER AND BEAR  
HUNTING SEASONS**

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Results of the 1988 Off-Reservation  
Treaty Deer and Bear Hunting Seasons  
in Wisconsin and Michigan

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## INTRODUCTION

The purpose of this report is to present the results of the 1988 off-reservation treaty deer and bear hunting seasons in northern Wisconsin, and a portion of the Upper Peninsula of Michigan, in the territories ceded in the Treaties of 1837 and 1842 (Fig. 1). Hunters were members of the six Wisconsin bands of Lake Superior Chippewa Indians (listed in Table 1) and the Mille Lacs Chippewa Tribe and Keweenaw Bay Indian Communities. This report does not cover the treaty hunting activities in Minnesota.

## DEER HUNTING REGULATIONS

Tribal deer hunting regulation differed between northern Wisconsin and Michigan. Hunting regulations for the Michigan zone were promulgated by the Keweenaw Bay and Mole Lake tribal governments for their respective members. On September 8, 1988 the Lac Vieux Desert Band became a federally recognized tribe. The membership of some residents was shifted from Keweenaw Bay or Mole Lake to Lac Vieux Desert. However, this did not change the regulations under which members were hunting. No other Band enacted regulations on deer hunting in Michigan, although a few members of other bands hunted there.

The major difference between Wisconsin and Michigan tribal hunting regulations was that in Michigan a season bag limit of 2 deer was imposed by Keweenaw Bay and Mole Lake. This eliminated the need for antlerless deer quotas and permits. Registration was mandatory for all deer harvested in both states.

### Wisconsin Zone

In 1988 tribal regulations were enacted in compliance with a sixth annual interim agreement negotiated between the Voigt Inter-tribal Task Force representing the Bands of Lake Superior Chippewa and the Wisconsin Department of Natural Resources (WDNR). The agreement provided for a 116 day season commencing September 6 and ending December 31, 1988, with a 1 day break on November 18. The treaty bow season coincided with the treaty gun deer season.

The permit and registration system implemented in 1986 was continued. Each hunter was provided 2 carcass tags and 1 antlerless deer permit with space on the permit to mark off 2 antlerless deer. Each deer killed, regardless of sex or age, was required to be tagged with the carcass tag and registered at a tribal registration station or with GLIFWC field wardens. Additional carcass tags could be obtained upon registration of any deer.

In order to shoot an antlerless deer a hunter had to

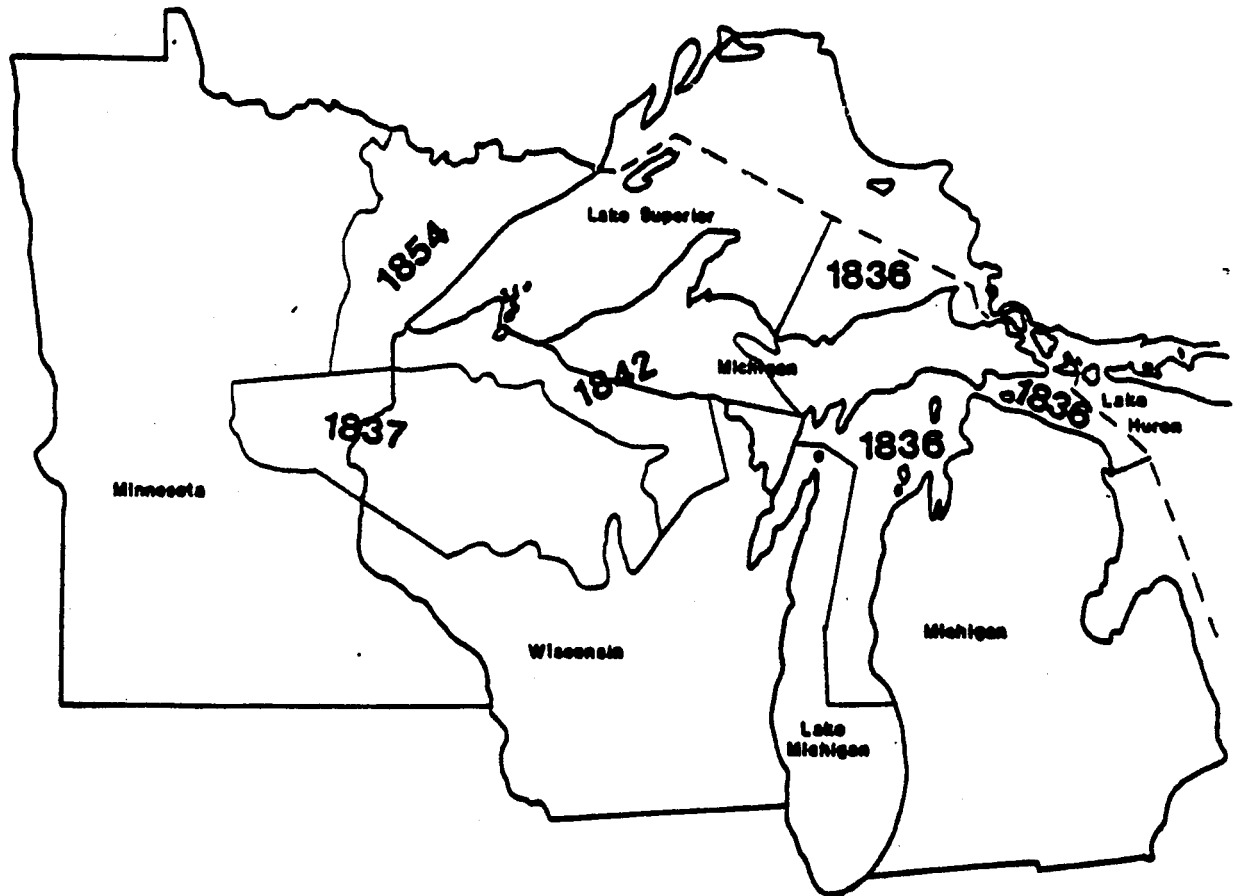


Figure 1. Treaty ceded areas of the Lake Superior Chippewa in the states of Michigan, Wisconsin and Minnesota.

obtain an antlerless deer permit. All permits were valid for all deer management units (Fig. 2) with antlerless deer quotas remaining. There was no limit on the number of antlerless permits issued for any unit until 75% of the quota had been harvested. Then permits were issued based on either a 50% or 25% success rate. The more popular units used a 50% success rate and all others a 25% success rate. Antlerless deer permits were valid up to 14 days. Upon shooting an antlerless deer the hunter was required to slit the permit to show the unit in which the deer was shot. Antlerless deer permits were surrendered upon registration of an antlerless deer.

The prohibitions on road hunting and hunting from a vehicle continued from 1986. Tribal members were required to wear back tags and blaze orange during Wisconsin's 9 - day gun season.

#### Michigan Zone

In Michigan the season ran from September 1 through December 31, 1988. Season regulations were enacted by Keweenaw Bay and Mole Lake governing their members hunting in Michigan whether the hunting occurred on or off the reservation. All deer killed were required to be tagged before transport and registered. Two carcass tags were issued to the hunter upon presentation of a tribal ID. No additional carcass tags could be obtained. The small number of hunters and a seasonal bag limit of two deer of either sex precluded the need for antlerless deer quotas or permits.

Shooting from vehicles and possessing loaded or uncased guns in vehicles were prohibited although road hunting and shining were allowed. Blaze orange was required during the entire tribal season.

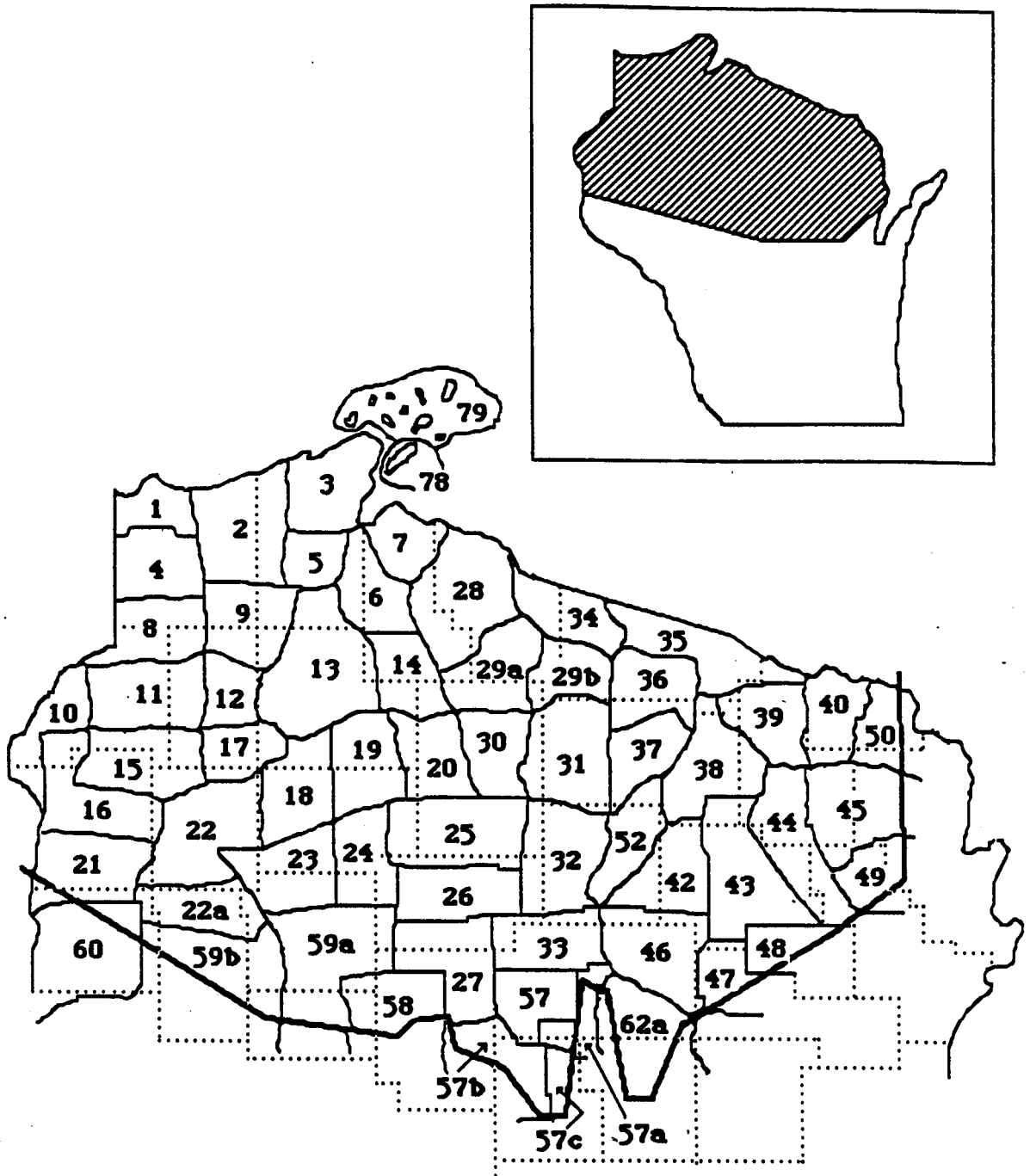


Figure 2. Map of deer management units in the ceded territory of Wisconsin. Counties are indicated by dotted lines.

**DEER SEASON RESULTS****Wisconsin Zone**

Table 1. Distribution of carcass tags and hunter success in Wisconsin during the 1988 off-reservation treaty deer season.

Registration Station	Carcass Tags Distributed	Carcass Tags Issued	Number of Deer Hunters	Number (%) of Successful Deer Hunters
Bad River	1200	1132	384	167 (43.5)
Keweenaw Bay	0	0	13	4 (30.8)
Lac Courte Oreilles	3000	2564	624	397 (63.6)
Lac du Flambeau	3000	2202	415	245 (59.0)
Mille Lacs	300	264	115	51 (44.3)
Mole Lake	1500	625	127	59 (46.5)
Red Cliff	1100	1024	340	118 (34.7)
St. Croix	800	771	129	73 (56.6)
<b>Totals</b>	<b>10,900</b>	<b>8582</b>	<b>2244</b>	<b>1114 (49.6)</b>

A total of 8582 carcass tags were issued to 2244 deer hunters in Wisconsin. Tags were authorized to be issued to any member of the 6 Wisconsin Bands, Mille Lacs Chippewa Tribe or Keweenaw Bay Indian Communities. The number of hunters indicates the number enrolled in each Band, regardless of their residence or where the tags were obtained. At Keweenaw Bay no carcass tags were issued for hunting in Wisconsin because of the distance from the reservation to Wisconsin. The 13 Keweenaw Bay members obtained tags from one of the Wisconsin registration stations or Mille Lacs.

The 2244 deer hunters who obtained a license in 1988 was more than in any other year. There were 374 more tribal members who obtained a deer hunting license in 1988 than in 1987. Most of the increase came from LCO, Bad River and St. Croix. The most likely reason for this increase is that members are becoming more comfortable with the off-reservation hunt and are increasing their participation.

The percent successful deer hunters increased slightly to almost 50% which meant there were 253 more successful hunters in 1988 than in 1987.



Table 2. Number of antlered and antlerless deer harvested during the 1988 off-reservation treaty deer season in Wisconsin by registration station.

Registration Station	Antlered Deer	Antlerless Deer	Total Harvest
Bad River	99	273	372
Lac Courte Oreilles	259	708	967
Lac du Flambeau	255	835	1090
Mille Lacs	24	46	70
Mole Lake	73	227	300
Red Cliff	81	175	256
St. Croix	111	204	315
Totals	902 (26.8%)	2468 (73.2%)	3370

As in the past years, the tribal deer hunt was an either sex hunt because all hunters who wished could obtain antlerless deer permits. Tribal hunters shot 902 antlered deer (mostly adult bucks) and 2468 antlerless deer (adult does and fawns of either sex) for a total of 3370 deer.

Since 1984, between 25% and 30% of the deer harvested have been antlered deer. Although it varies from unit to unit, approximately 25% of the deer herd is antlered deer and, therefore, tribal members are taking antlered deer nearly proportional to their abundance.

Table 3. Total deer harvests for each of the past 6 off-reservation treaty deer seasons in Wisconsin and the percent increase from the previous year.

Year	Antlered Deer	Antlerless Deer	Total Harvest	Percent Increase
1983 - 84	140	504	644	n/a
1984	218	474	687	6.7%
1985	435	945	1380	100.1%
1986	615	1530	2145	55.3%
1987	730	2099	2829	31.9%
1988	902	2468	3370	19.1%

This is the sixth season with an increase in harvest over the previous year. As can be seen from Table 3, the rate of increase has slowed from a doubling in harvest in 1985 to a 19% increase from 1987 to 1988.

Table 4. Number of antlered and antlerless deer harvested in Wisconsin during the 1988 off-reservation treaty deer season by deer management unit.

Unit	Antlered Deer	Antlerless Deer	Total Harvest
1	1	9	10
2	84	206	290
3	67	161	228
4	15	21	36
5	51	181	232
6	18	38	56
7	8	16	24
8	45	129	174
9	39	155	193
10	43	48	91
11	50	85	135
12	15	65	80
13	67	117	184
14	9	10	19
15	16	44	60
16	4	11	15
17	12	15	27
18	5	28	33
19	10	15	25
20	3	7	10
22	0	8	8
23	5	4	9
24	1	4	5
25	2	0	2
26	2	3	5
28	11	38	49
29a	9	25	34
29b	19	30	49
30	36	75	111
31	41	153	194
32	5	17	22
34	20	91	111
35	52	170	222
36	46	171	217
37	11	40	51
38	15	30	45
39	18	69	87
40	3	11	14
42	2	1	3
43	8	23	31
44	16	59	75
45	9	43	52
46	3	5	8
47	0	1	1
48	0	4	4
49	2	8	10
50	0	1	1
52	1	7	8
57a	1	1	2
58	0	1	1
59a	0	6	6
78	1	7	8
<b>Totals</b>	<b>902</b>	<b>2468</b>	<b>3370</b>

Most of the tribal harvest (3120 deer or 92.6%) occurred in 27 of the more heavily hunted units (harvest > 30 deer) of the 65 deer management units either entirely or partially in the ceded territory. Two units (14 and 40) declined from a harvest above 30 in 1987 to below 30 in 1988. Six units (4, 6, 15, 18, 28, and 43) increased from below 30 in 1987 to above 30 in 1988. Twelve units sustained a harvest of greater than 100 deer (2, 3, 5, 8, 9, 11, 13, 30, 31, 34, 35, 36) with units 11 and 30 added to the list of units with a deer harvest of more than 100 deer from 1987. The largest increases in harvest came in units 2, 3, 5, 9, 11, 30 and 31 which each had an increase of more than 50 deer over the 1987 harvest.

In past harvest reports I have described 3 factors which seem to influence harvest patterns. These 3 factors are; proximity to reservations, area of public land and number of quota deer available. Starting in 1987 the third factor (i.e. quotas) seemed to have an even stronger relationship to harvest levels. This was because adjustments were made so that the tribal portion of the quota was close to the demonstrated harvest in past years. Whereas in the past, the tribal quota had been related to the total quota and, was therefore, indicative of deer abundance. Since tribal quotas are now related to past demonstrated harvest they are not indicative of deer abundance. The Tribes now try to provide an adequate number of deer in areas which received much tribal hunting in the past rather than providing large numbers of deer throughout the ceded. This strong relationship between harvest and quota is an artifact of the method of determining the tribal portion of the quota rather than hunter selection of deer units.

In 1987 there seemed to be a greater willingness on the part of Tribal hunters to travel longer distances to find good hunting. Hunting patterns seemed to remain relatively constant from 1987 to 1988. Tribal hunters apparently have found their favorite hunting units and returned to these units in 1988.

The increases in harvests from units 2, 3, and 5 resulted from significant increases in the number of hunters from Bad River and Lac Courte Oreilles both of which, along with Red Cliff, utilize these units.

The one significant shift in hunting patterns from 1987 to 1988 occurred in unit 31. This unit is hunted by LDF residents. There was no increase in the number of hunters at LDF but the unit 31 harvest increased by 68 deer. The harvest in unit 35, the most heavily harvested unit in all previous years, declined by 41 deer from 1987 and now ranks third behind units 2 and 3. I believe that hunters shifted to unit 31 because of the large amounts of Forest Crop Lands or Open Managed Forest Lands in that unit (92,000 acres, the

largest in the state) which nearly doubled the area opened to hunting in 1988. Unit 31 is closer to LDF than unit 35 and the hunters, according to the relationship of the above 3 factors, shifted to the closer unit.

The increase in harvest in unit 30 is more problematic. There is some Forest Crop land in the unit (16,000 acres) which represents an 18% increase in the area of huntable land. Unit 30 is also close to LDF and hunters may have shifted from units further away to this closer unit.

Table 5. The number of antlered and antlerless deer harvested in Wisconsin during the 1988 off-reservation treaty deer hunting season by county.

County	Antlered Deer	Antlerless Deer	Total
Ashland	37	83	120
Barron	4	12	16
Bayfield	137	388	525
Burnett	119	212	331
Chippewa	0	6	6
Douglas	124	363	487
Eau Claire	0	1	1
Florence	3	13	16
Forest	34	127	161
Iron	2	15	17
Langlade	10	24	4
Lincoln	6	23	29
Marathon	4	6	10
Marinette	9	42	51
Menominee	0	4	4
Oconto	2	8	10
Oneida	68	227	295
Polk	10	20	30
Price	48	103	151
Rusk	9	20	29
Sawyer	92	172	264
Shawano	0	1	1
Taylor	2	5	7
Vilas	137	464	601
Washburn	44	129	173
<b>Totals</b>	<b>902</b>	<b>2468</b>	<b>3370</b>

The harvest during the 1988 deer season was distributed among 25 counties of the ceded territory, 2 more than in 1987. However, 3108 deer, or 92% of the harvest occurred in 10 counties with harvest greater than 100 deer (Ashland, Bayfield, Burnett, Douglas, Forest, Oneida, Price, Sawyer, Vilas and Washburn). Ashland County was added to the 1987 list of heavily harvested counties.

Table 6. Number of successful hunters and the number of deer they harvested during the 1988 off-reservation treaty deer season in Wisconsin.

Number of Deer Harvested	Number of Hunters	Percent of Successful Hunters	Total Number of Deer Harvested
1	448	40.2	448
2	263	23.6	526
3	123	11.0	369
4	81	7.3	324
5	55	4.9	275
6	28	2.5	168
7	18	1.6	126
8	24	2.6	192
9	18	1.6	162
10	14	1.3	140
11	11	1.0	121
12	7	0.6	84
13	4	0.4	52
14	6	0.5	84
15	1	0.1	15
16	2	0.2	32
17	2	0.2	34
18	3	0.3	54
19	1	0.1	19
22	2	0.2	44
27	1	0.1	27
29	1	0.1	29
45	1	0.1	45
<b>Totals</b>	<b>1114</b>	<b>100.0</b>	<b>3370</b>

The number of successful deer hunters increased for the fifth year so that in 1988 1114 deer hunters shot at least 1 deer. Most successful tribal deer hunters (59.8%) shot more than 1 deer during the 1988 season with individual hunters harvesting up to 45 deer. The number of tribal hunters harvesting 1 deer increased from 302 in 1987 to 448 in 1988. The average number of deer killed per successful hunter declined from 3.2 deer in 1987 to 3.0 deer in 1988. The tribal deer hunting system is designed to allow for multiple harvest of deer.

Table 7. Number of deer harvested, percent of harvest and percent of the season occurring during the early, middle and late portions of the 1988 off-reservation treaty deer season in Wisconsin.

Portion of Season	Number of Deer Harvested	Percent of Harvest	Percent of Season
Sept. 6 - Nov. 17	2527	75.0	62.9
Nov. 19 - Nov. 28	714	21.2	7.8
Nov. 29 - Dec. 31	129	3.8	29.3
<b>Totals</b>	<b>3370</b>	<b>100.0</b>	<b>100.0</b>

As in previous years, the harvest occurring during the early and middle portions of the season was disproportionately greater than the amount of hunting time during that portion of the season. This was especially true during the middle portion where 21% of the harvest occurred during 8% of the season. These relationships are consistent with those observed during the past off-reservation deer hunting seasons in Wisconsin.



Table 8. Antlerless deer quotas and harvest levels during the 1988 off-reservation treaty deer season in Wisconsin.

Unit	Antlerless Deer Quota	Antlerless Deer Harvest	Percent of Quota
1	25	9	40.9
2	189	206	109.0
3	136	161	118.4
4	50	21	42.0
5	175	181	103.4
6	50	38	76.0
7	25	16	64.0
8	175	129	73.7
9	150	155	103.3
10	100	48	48.0
11	75	85	113.3
12	75	65	86.7
13	162	117	72.2
14	88	10	11.4
15	50	44	88.0
16	25	11	44.0
17	35	15	42.9
18	35	28	80.0
19	25	15	60.0
20	25	7	28.0
22	25	8	32.0
23	25	4	16.0
24	25	4	16.0
25	25	0	0.0
26	25	3	12.0
28	35	38	108.6
29a	50	25	50.0
29b	37	30	81.1
30	75	75	100.0
31	161	153	95.0
32	25	17	68.0
34	100	91	91.0
35	300	170	56.7
36	250	171	68.4
37	150	40	26.7
38	75	30	40.0
39	100	69	69.0
40	65	11	16.9
42	25	1	4.0
43	50	23	46.0
44	75	59	78.7
45	50	43	86.0
46	25	5	20.0
47	25	1	4.0
48	0	4	----
49	25	8	32.0
50	25	1	4.0
52	25	7	28.0
57	25	0	0.0
57a	25	1	4.0
57b	25	0	0.0
57c	25	0	0.0
58	0	1	----
59a	25	6	24.0
59b	25	0	0.0
62a	25	0	0.0
62b	25	0	0.0
78	25	7	28.0
<b>Totals</b>	<b>3722</b>	<b>2468</b>	<b>66.3%</b>



More than 66% of the tribal quota was harvested in 1988 as compared with 71% in 1987. Two reasons for this lower percentage are that more units in the lightly hunted portion of the ceded territory had a tribal quota assigned to them and a minimum quota of 25 was assigned to any unit with a tribal quota regardless of past harvest patterns. The minimum quota in 1987 was 10 antlerless deer.

Generally, the tribal quotas provided adequate hunting opportunity to tribal members and were not substantially under harvested. Fourteen units were closed prior to the end of the tribal season, seven of which were the units which sustained the largest increases in harvest levels. Quotas in these 14 units should be increased to meet tribal needs. Sixteen units with quotas over 25 had less than 80% of the quota harvested. Quotas in these units should be reduced to bring them in line with demonstrated harvest capabilities.

Michigan Zone

Table 9. Number of deer harvested in Michigan during the 1988 deer hunting season by registration station.

Registration Station	Antlered Deer	Antlerless Deer	Total Harvest
Lac Vieux Desert	7	4	11
Keweenaw Bay	30	13	43
Totals	37	17	54

There were 54 deer registered in Michigan by the Lac Vieux Desert Band and the Keweenaw Bay Indian Community. Some of the Keweenaw Bay harvest occurred on reservation lands and some came from off the reservation. No distinction was made between on and off-reservation deer at registration. Michigan deer hunters selected heavily for antlered deer over antlerless deer.

Table 10. Number of antlered and antlerless deer harvested in Michigan during the 1988 deer hunting season by county.

County	Antlered	Antlerless	Total
Arvon	3	2	5
Baraga	21	6	27
Dickenson	1	0	1
Houghton	2	3	5
Gogebic	6	0	6
Iron	0	3	3
Ontonogon	2	3	5
Unknown	2	0	2
Totals	37	17	54

## BEAR HUNTING

In 1988 bear hunting regulations were enacted by Tribal governments based on the third annual State/Tribal interim agreement. The bear season opened concurrent with the deer season, on September 6 and closed on October 31, 1988. Bear hunting permits were required for all persons interested in hunting bears. All bears killed were required to be tagged using a tribal carcass tag and registered by 5:00 pm of the next working day. There was a quota assigned to each of the 3 bear zones in the ceded territory (Fig. 3); 50 bears in zone A, 15 bears in zone B, and 5 bears in zone C.

Table 11. Number of carcass tags, hunters and successful hunters during the 1988 off-reservation treaty bear season in Wisconsin.

Registration Station	Carcass Tags Distributed	Carcass Tags Issued	Number of Hunters
Bad River	100	75	175
Keweenaw Bay	0	0	2
Lac Courte Oreilles	100	61	78
Lac du Flambeau	150	150	158
Mille Lacs	50	5	18
Mole Lake	50	28	57
Red Cliff	120	111	101
St. Croix	100	2	26
Totals	670	432	615

A total of 432 carcass tags were issued to tribal members wishing to hunt bears. More people checked bear hunting on the Harvesting Permit than obtained carcass tags indicating that they had no intention of hunting bears. This pattern has been consistently observed in previous bear hunting seasons. One note of caution when reading the above table: the number of bear hunters indicates the number of enrolled tribal members who checked bear hunting on the Harvesting Permit, regardless of where they obtained their carcass tags. The number of carcass tags issued indicates the number issued by that registration station regardless of the hunters tribe of enrollment. Comparisons should not be made between these two columns.

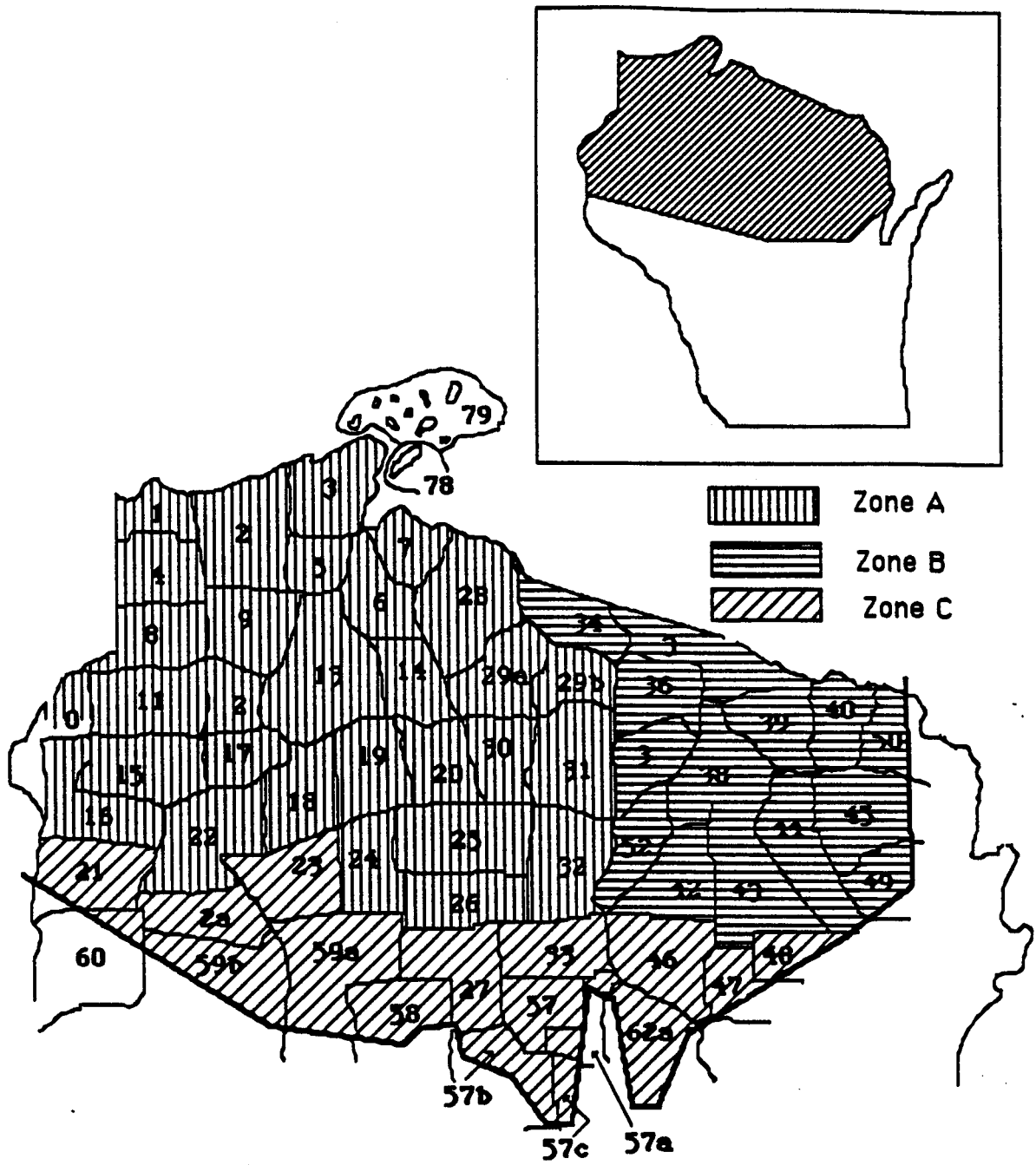


Figure 3. Map of bear hunting zones, comprised of deer management units, in the ceded territory of Wisconsin.

Table 12. The sex distribution of bears harvested during the 1988 off-reservation treaty bear season in Wisconsin by registration station.

Registration Station	Males	Females	Total
Bad River	0	2	2
Lac Courte Oreilles	1	2	3
Lac du Flambeau	0	3	3
Mille Lacs	0	0	0
Mole Lake	2	0	2
Red Cliff	4	1	5
St. Croix	0	0	0
<b>Totals</b>	<b>7</b>	<b>8</b>	<b>15</b>

Table 13. Sex distribution of bears harvested in Wisconsin during the 1988 off-reservation treaty bear hunting season by bear management zone and deer management unit.

Bear Zone	Deer Unit	Males	Females	Total
A	3	4	1	5
	4	0	1	1
	7	0	1	1
	8	0	1	1
	12	1	0	1
	13	0	1	1
	20	0	1	1
	29b	0	1	1
	31	0	1	1
<b>Subtotal</b>		<b>5</b>	<b>8</b>	<b>13</b>
B	38	1	0	1
	44	1	0	1
<b>Subtotal</b>		<b>2</b>	<b>0</b>	<b>2</b>
<b>Totals</b>		<b>7</b>	<b>8</b>	<b>15</b>

Most of the bears harvested came from zone A and most of those from the northwest part of the zone. There is a larger bear population in this zone than the other 2 zones and so a larger harvest is expected. No bears were harvested from zone C which is the fringe of the bear range in Wisconsin.

Table 14. Sex distribution of bears harvested during the 1988 off-reservation treaty bear hunting season in Wisconsin by county.

County	Males	Females	Total
Ashland	0	1	1
Bayfield	4	1	5
Douglas	0	2	2
Forest	1	0	1
Oneida	1	1	2
Price	0	2	2
Sawyer	0	1	1
Washburn	1	0	1
<b>Total</b>	<b>7</b>	<b>8</b>	<b>15</b>

Seven of the 15 bears harvested (46.7%) came from Bayfield or Douglas Counties.

#### Michigan Zone

There were no bears reported as harvested by Tribal members in Michigan.