

Sault Ste. Marie Tribe of Chippewa Indians

2023 Harvest and Effort Summary
Natural Resources Department - Wildlife Program



SAULT TRIBE NATURAL RESOURCES DEPARTMENT

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued 57,801 individual permits for hunting, fishing, gathering, and trapping within the 1836 Ceded Territory to 4,339 tribal members (see Appendix Table 1). The Sault Ste. Marie Tribe of Chippewa Indians maintains mandatory harvest reporting requirements for all members who exercise the Tribe's treaty rights. At the time when this report was developed, the Sault Tribe Natural Resources Department (STNRD) had received and processed 1,917 harvest reports. Throughout this report, uncertainty in estimated harvest is quantified by bootstrap resampling of the observed (i.e., reported) data 5,000 times.

INLAND WATERS FISH HARVEST

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,339 inland fishing licenses. STNRD has received and processed harvest reports from 44.1% (1,917) of those license holders. Of those harvest reports received, approximately 28.4% of license holders reported fishing effort in 2023. When developing harvest estimates, STNRD assumed the entire 44.1% who reported effort had equal effort for each individual species. It is also likely that some of the reported harvest was actually Great Lakes harvest. Although smelt is reported here in gallons, given high variation in reported harvest (wide confidence interval) it is possible that some reports listed the raw number of smelt caught. STNRD issued one permit for Black Lake sturgeon which was not filled.

Table 1. 2023 Inland Fish Harvest

	Report Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Brook Trout	1512	2.77	3422.31	[596.35, 4957.125]
Brown Trout	216	0.40	488.90	[54.22, 833.45]
Rainbow Trout	266	0.49	602.07	[118.84, 784.80]
Chinook	296	0.54	669.98	[88.40, 1081.40]
Coho	207	0.38	468.53	[76.00, 686.26]
Pink	25	0.05	56.59	[2.09, 105.45]
Pike	1712	3.14	3875.00	[816.93, 4936.42]
Muskellunge	45	0.08	101.85	[3.24, 211.84]
Walleye	4544	8.34	10285.04	[2271.62, 12457.93]
Perch	18623	34.17	42151.90	[9602.57, 50524.39]
Bluegill	10334	18.96	23390.31	[5011.75, 29474.56]
Smelt	207	0.38	468.53	[50.22, 784.28]
Sucker	354	0.65	801.26	[42.63, 1634.49]
Small Mouth	508	0.93	1149.82	[184.41, 1646.34]
Large Mouth	961	1.76	2175.16	[383.98, 2996.84]

*Smelt is reported in gallons

2023 TURTLE HARVEST

In 2023, approximately 0.1% of license holders reported pursuing turtles. With 7 turtles reported, each license holder pursuing turtles harvested an average of 3.5 turtles. It is estimated that approximately 14.61 turtles were harvested during the 2023 license year (95% bootstrap confidence interval from 3 to 32).

2023 FROG HARVEST

In 2023, approximately 0.15% of license holders reported pursuing frogs. With 56 frogs reported, each license holder pursuing frogs harvested an average of 18.6 frogs. It is estimated that approximately 116.93 frogs were harvested during the 2023 license year (95% bootstrap confidence interval from 16 to 263.87 frogs).

2023 SMALL GAME HARVEST

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,003 small game licenses, hunter participation rates varied widely between target species. Approximately 21.5% of license holders reported hunting gray squirrel, 9.2% reported hunting fox squirrel, 13.8%, reported hunting snowshoe hare, and 9.5%, reported hunting cottontail Rabbit.

Table 2. 2023 Small game harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Gray Squirrel	414	1.91	864.50	624.11	1133.28
Fox Squirrel	178	0.82	371.69	215.49	550.21
Snowshoe Hare	266	1.23	555.45	410.64	719.62
Cottontail Rabbit	183	0.84	382.13	251.86	532.83

2023 UPLAND BIRDS HARVEST

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,003 upland bird licenses, hunter participation rates varied widely between target species. Approximately 22.3% of license holders reported hunting the below species. Ruffed Grouse made up 90% of the upland species harvested, with the next most harvested species being woodcock which made up 3.9% of the upland species harvested. Sharp-tailed grouse made up 2.7% of the total upland species harvested with quail and mourning dove making up a total of 0.6% and 0.5% respectively.

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Mourning Dove	10	0.02	20.88	0.00	53.92
Quail	12	0.03	25.06	0.00	71.10
Ring Necked Pheasant	21	0.05	43.85	12.59	86.08
Sharp-tailed Grouse	51	0.12	106.50	47.53	178.37
Woodcock	73	0.17	152.44	69.57	255.77
Ruffed Grouse	1683	3.92	3514.37	3036.99	4047.48

2023 TURKEY HARVEST

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 9,568 turkey licenses across the spring and fall seasons. Hunters in the spring season had a limit of two bearded-only birds, and hunters in the fall season had a limit of two either-sex birds.

Table 3. 2023 Spring and fall turkey harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Spring	108	0.51	225.52	146.90	214.49
Fall	92	0.51	192.11	116.76	177.74

2023 FURBEARER HARVEST

In 2023, Tribal license holders had relatively low participation (6.6%) in furbearer harvest compared to other areas such as small game or deer harvest.

Table 4. 2023 Sault Tribe non-registered furbearer harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Beaver	131	1.03	273.55	336.00	940.13
Muskrat	91	0.72	190.02	166.80	752.17
Mink	14	0.11	29.23	15.96	129.50
Red Fox	3	0.02	6.26	0.00	37.74
Grey Fox	0	0.00	0.00	0.00	0.00
Coyote	58	0.46	121.11	156.41	409.53
Skunk	12	0.09	25.06	13.37	107.41
Raccoon	99	0.78	206.73	180.48	824.34

Table 5. 2023 Furbearer harvest sealed by the Sault Tribe Natural Resources Department and Law Enforcement

Species	Number Sealed*
Bobcat	15
Fisher	10
Marten	15
Otter	29

*These totals do not include harvest registered by the Michigan Department of Natural Resources. If that information is made available, the Wildlife Program will share it in future summaries.

2023 MIGRATORY BIRD HARVEST

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,003 migratory bird licenses with 0.2% percent of those license holders reporting hunting effort. Hunter participation was very low with no migratory birds being harvested this year.

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Virginia Rail	0	0	0	0	0
Sora	0	0	0	0	0
Snipe	0	0	0	0	0
Common Gallinule (Moorhen)	0	0	0	0	0
Coot	0	0	0	0	0

2023 WATERFOWL HARVEST

Approximately 11.1% of hunters reported pursuing waterfowl during the 2023 season. Of the waterfowl hunters, 4.2% reported hunting dabblers, 2.3% reported hunting divers, and 4.4% reported hunting geese. Tables 7, 8, and 9 summarizes the reported and estimated harvest for major waterfowl species.

Table 7. 2023 Off-reservation dabbler harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Mallard	378	4.61	789.32	551.87	1052.84
Black Duck	9	0.11	18.79	3.81	39.44
Gadwall	18	0.22	37.59	9.18	76.29
Blue Teal	104	1.27	217.17	78.84	433.19
Green Teal	80	0.98	167.05	56.99	329.79
Wood Duck	108	1.32	225.52	142.98	319.61
Pintail	11	0.13	22.97	1.85	62.34

Table 8. 2023 Off-reservation diver harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Canvasback	13	0.28	27.15	3.96	59.62
Redhead	33	0.72	68.91	26.94	126.51
Scaup	14	0.30	29.23	3.69	64.67
Bufflehead	94	2.04	196.29	80.88	338.49
Scoter	11	0.24	22.97	0.00	61.25
Long Tailed	6	0.13	12.53	0.00	33.92
Goldeneye	14	0.30	29.23	11.86	50.57
Ring Necked Pheasant	2	0.04	4.18	0.00	10.76
Merganser	80	1.74	167.05	81.39	275.10

Table 9. 2023 Off-reservation goose harvest

	Reported Harvest	Mean	Estimated Harvest	95% Confidence Interval (Lower Limit)	95% Confidence Interval (Upper Limit)
Canada Goose	624	7.26	1303.01	900.58	1782.37
Snow Goose	10	0.12	20.88	0.00	69.87

2023 BIG GAME HARVEST

2023 ELK

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of one 'either sex' elk tags and eight antlerless elk tags. After re-issuing one of the antlerless elk tags for one late season, and another antlerless tag for both late seasons, 5 elk were harvested with one tag being left unfilled.

Table 1. Elk licenses issued in 2023

License Issued	Quantity
2023 ANY ELK	1
2023 ANTLERLESS ONLY ELK	5
2023 LATE SEASON ANTERLESS ONLY ELK	2
2023 SECOND LATE SEASON ANTERLESS ONLY ELK	1

2023 BEAR

In 2023, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 477 bear permits across the seven bear management units in the 1836 Ceded Territory. In total, 52 bears were harvested during the 2023 season.

Table 2. 2023 Bear permits and harvest by management unit

BMU	Permits Issued	Bears Harvested
Baldwin	65	7
Baraga	16	0
Drummond	1	1
Gladwin	7	0
Gwinn	54	6
Newberry	153	24
Red Oak	181	14

2023 WHITE-TAILED DEER

The Sault Ste. Marie Tribe of Chippewa Indians issued a total of 19,710 deer licenses to 4,003 Tribal harvesters in 2023. At the time that this report was developed, STNRD had received and processed 1,917 harvest reports. Approximately 59.8% (1148) of those reported actually hunting deer. The total estimated harvest for 2023 is 2,026 deer (95% confidence interval from 1889.30 to 2170.59 deer). In 2023, an estimated 58.4% of harvested deer were bucks.

This estimate is based on a mean harvest per hunter of 0.84 deer. Actual harvest per hunter varies from 0 to 5 deer. Approximately 25.4% of reporting license holders did not hunt deer in 2023. Many hunters (approximately 42.4% or 1,017 hunters) that pursued deer in 2023 were unsuccessful in their efforts (Figure 1). Based on our estimate, approximately 37.5% (900 hunters) of hunters harvested 1 deer, 15% (355 hunters) harvested 2 deer, and 4.0% (96 hunters) harvested 3 deer (Figure 1). While Tribal hunters can fill five harvest tags, very few members who hunted deer actually harvested four (0.7% or 19 hunters) or five deer (0.4% or 10 hunters). See Figure 1.

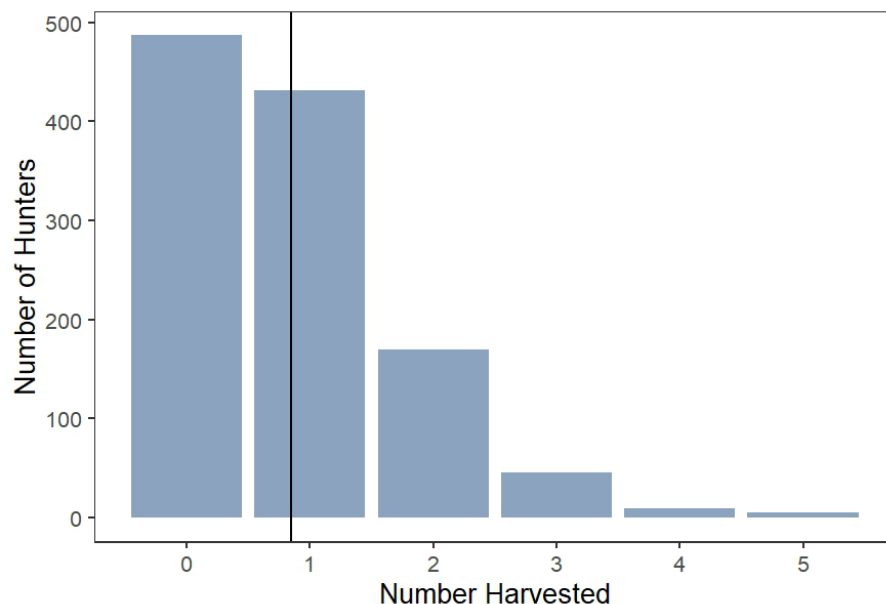


Figure 1. Reported number of hunters harvesting a given number of deer in 2023. Mean harvest per hunter (0.84) is plotted as a vertical line for reference.

The geographic distribution of white-tailed deer harvest by Sault Tribe members is detailed in Table 10. Most deer were harvested in the eastern Upper Peninsula, with 15.64% of harvest in Chippewa County, 12.0% in Mackinac County, and 12.1% in Schoolcraft County.

Table 3. 2023 White-tailed deer harvest by county

County	Reported Harvest	Percent of Harvest	Estimated Harvest	Estimated Buck Harvest	Estimated Doe Harvest	Harvest Per Mile
Alger	41	4.33	87.79	43.26	44.53	0.1
Alpena	6	0.63	12.85	4.28	8.56	0.06
Antrim	6	0.63	12.85	7.34	5.51	0.03
Benzie	9	0.95	19.27	14.82	4.45	0.06
Charlevoix	7	0.74	14.99	11.78	3.21	0.04
Cheboygan	80	8.46	171.29	95.72	75.57	0.24
Chippewa	148	15.64	316.89	166.4	150.49	0.2
Clare	8	0.85	17.13	9.99	7.14	0.04
Crawford	1	0.11	2.14	2.14	0	0
Delta	124	13.11	265.5	145.6	119.9	0.3
Emmet	40	4.23	85.65	42.34	43.3	0.18
Grand Traverse	1	0.11	2.14	2.14	0	0
Ionia	1	0.11	2.14	1.07	1.07	0.03
Isabella	4	0.42	8.56	1.43	7.14	0.04
Kalkaska	13	1.37	27.83	13.92	13.92	0.05
Kent	11	1.16	23.55	9.06	14.49	0.04
Lake	6	0.63	12.85	4.82	8.03	0.02
Leelanau	5	0.53	10.71	1.78	8.92	0.03
Luce	38	4.02	81.36	39.33	42.04	0.09
Mackinac	114	12.05	244.09	155.33	88.76	0.24
Manistee	8	0.85	17.13	11.42	5.71	0.03
Marquette	16	1.69	34.26	23.98	10.28	0.08
Mason	16	1.69	34.26	16.61	17.65	0.07
Mecosta	9	0.95	19.27	19.27	0	0.03
Missaukee	15	1.59	32.12	12.15	19.96	0.06
Montcalm	2	0.21	4.28	4.28	0	0.01
Montmorency	7	0.74	14.99	5.76	9.22	0.04
Muskegon	5	0.53	10.71	10.71	0	0.02
Newaygo	9	0.95	19.27	13.49	5.78	0.02
Oceana	11	1.16	23.55	3.49	20.06	0.04
Osceola	13	1.37	27.83	14.58	13.25	0.05
Oscoda	4	0.42	8.56	5.14	3.43	0.44
Otsego	8	0.85	17.13	10.9	6.23	0.03
Ottawa	2	0.21	4.28	2.85	1.43	0.02
Presque Isle	23	2.43	49.25	26.45	22.8	0.07
Roscommon	9	0.95	19.27	9.95	9.32	0.06
Schoolcraft	115	12.16	246.23	121.91	124.32	0.21
Wexford	11	1.16	23.55	8.72	14.83	0.04

Approximately 52.3% of the 2023 deer harvest took place in the month of November. Leading up to November, 4.8% of harvest took place in September and 20.0% occurred in October. Harvest in December accounted for 17.1% of harvest, while January harvest amounted to 1.1% of total harvest. A large proportion of deer harvest took place in the first two weeks after the quiet period (49.0%, Figure 2).

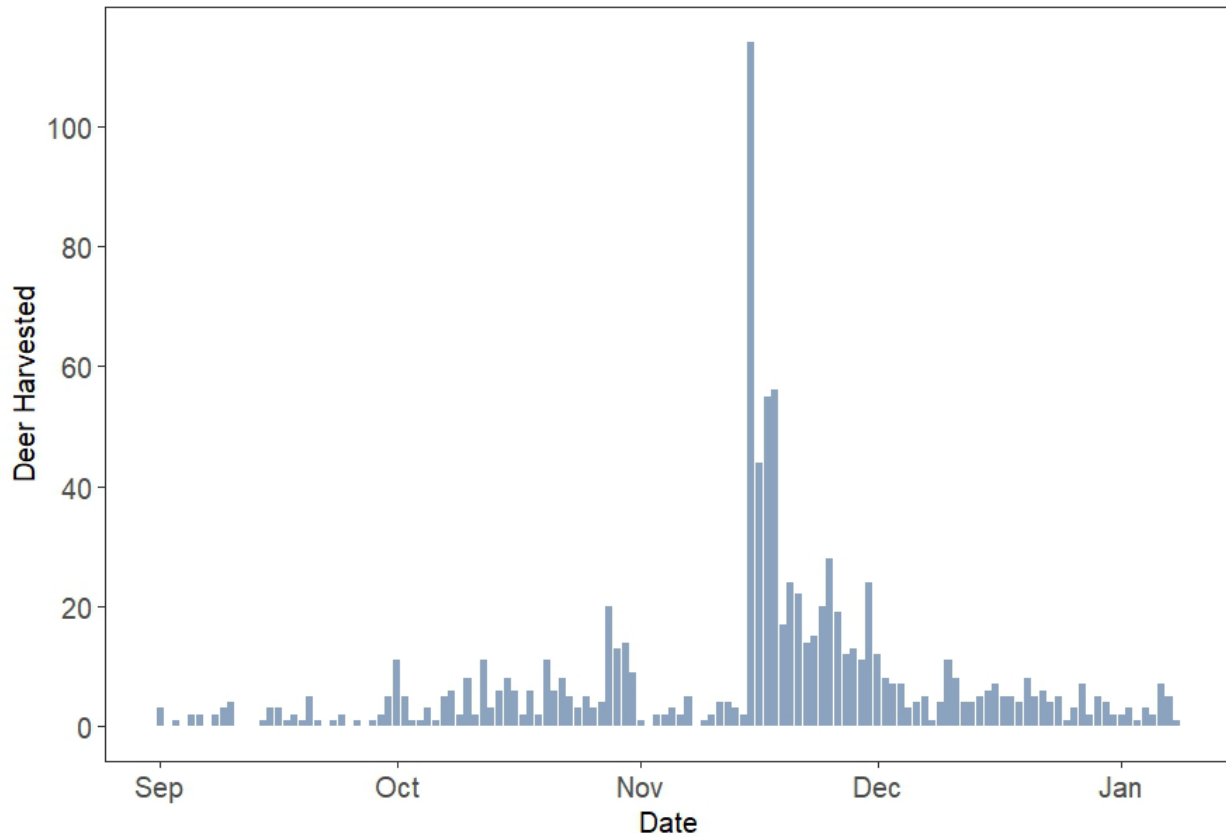


Figure 2. Number of deer harvested by date throughout the 2023 season

2023 GATHERING ACTIVITIES

In 2023, 334 license holders reported gathering activities in the 1836 Treaty Ceded Territory. On federal, state, and private land, members gathered blueberries, firewood, sweetgrass, blackberries, raspberries, hen of the woods, apples, choke cherries, fiddle heads, acorns, cranberries, asparagus, strawberries, chaga, pine bark, bear berry, as well as several others.

APPENDIX 1

License Type	Quantity Issued
Hunter Harvest License	4003
Disabled Hunter Harvest License	44
Youth Mentor License	15
Non-hunter Harvest License	336
Deer	19710
Turkey	9568
Otter	7740
Fisher	5805
Bobcat	3887
Marten	5805
Bear	477
Elk	9
Conifer Bough	15
Maple Sap Permit	7
Black Lake Sturgeon	2
Firewood	172
Camping Permit	15
Lost Harvest card	9
Lost Harvest Tags	22
Walleye Permits	160
Total	57,801

Appendix Table 1. Licenses issued by the Sault Ste. Marie Tribe of Chippewa Indians for the 2023 harvest season.

APPENDIX II: AT-A-GLANCE DEER HARVEST BY PENINSULA

In the following table, LP refers to counties within the 1836 Ceded Territory in the Lower Peninsula. Similarly, UP statistics refer to counties within the 1836 Ceded Territory in the Upper Peninsula of Michigan.

Total Reported Harvest	946
Total Estimated Harvest	2,026
LP Reported Harvest	350
LP Estimated Harvest	750
UP Reported Harvest	596
UP Estimated Harvest	1276
Total Buck Estimate	1094
Total Doe Estimate	931
% Buck Estimate Total	54%
% Doe Estimate Total	46%
UP Buck Estimate	696
UP Doe Estimate	580
LP Buck Estimate	398
LP Doe Estimate	351
UP Proportion Bucks	54%
LP Proportion Bucks	52%
UP Proportion of Total Estimate	63%
LP Proportion of Total Estimate	37%

APPENDIX III: DEER HARVEST PER SQUARE MILE BY COUNTY

