

Sault Ste. Marie Tribe of Chippewa Indians

2022 Harvest and Effort Summary
Natural Resources Department - Wildlife Program



SAULT TRIBE NATURAL RESOURCES DEPARTMENT

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued 56,664 individual permits for hunting, fishing, gathering, and trapping within the 1836 Ceded Territory to 4,293 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 1,614 harvest reports. Throughout this report, uncertainty in estimated harvest is quantified by bootstrap resampling of the observed (i.e., reported) data 5,000 times.

2022 INLAND WATERS FISH HARVEST

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued 3,990 inland fishing licenses. STNRD has received and processed harvest reports from 40.5% (1,614) of those license holders. Of those harvest reports received, approximately 31.5% of license holders reported fishing effort in 2022. When developing harvest estimates, STNRD assumed the entire 40.5% 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. 2022 Inland Fish Harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Brook Trout	1612	3.17	3360.83	[2177.89, 4818.89]
Brown Trout	199	0.39	414.89	[164.76, 787.01]
Rainbow Trout	418	0.82	871.48	[465.35, 1397.97]
Chinook	353	0.69	735.96	[362.27, 1193.94]
Coho	190	0.37	396.13	[171.25, 715.02]
Pink	33	0.06	68.80	[21.49, 128.99]
Pike	1665	3.27	3471.33	[2781.16, 4251.90]
Muskellunge	88	0.17	183.47	[11.89, 510.72]
Walleye	4125	8.10	8600.14	[7068.11, 10356.36]
Perch	18371	36.09	38301.37	[29791.91, 48088.94]
Bluegill	10661	20.94	22226.93	[16673.75, 28437.90]
Smelt	134	0.26	279.37	[124.04, 475.89]
Sucker	222	0.44	462.84	[163.99, 895.97]
Small Mouth	785	1.54	1636.63	[938.74, 2670.34]
Large Mouth	820	1.61	1709.60	[1023.17, 2585.02]

*Smelt is reported in gallons

2022 TURTLE HARVEST

In 2022, approximately 0.56% of license holders reported pursuing turtles. With 9 turtles reported, each license holder pursuing turtles harvested an average of 1.8 turtles. It is estimated that approximately 22.24 turtles were harvested during the 2022 license year (95% bootstrap confidence interval from 8.35 to 44.33).

2022 FROG HARVEST

In 2022, approximately 0% of license holders reported pursuing frogs. With 0 frogs reported, each license holder pursuing frogs harvested an average of 0 frogs. It is estimated that approximately 0 frogs were harvested during the 2022 license year (95% bootstrap confidence interval from 0 to 0 frogs).

2022 SMALL GAME HARVEST

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued 3,990 small game licenses, Hunter participation rates varied widely between target species. Approximately 25% of license holders reported hunting ruffed grouse, 1.8% reported hunting sharp-tailed grouse, 0.9%, reported hunting pheasant 0.2%, reported hunting quail 6.5%, reported hunting squirrel, 3.7% reported hunting cottontail rabbit, and 5.3% reported hunting snowshoe hare.

Table 2. 2022 Small game harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Ruffed Grouse	2563	4.62	5212.14077	[4514.13, 5963.60]
Sharp-tailed Grouse	27	0.60	54.90745251	[25.66, 90.76]
Pheasant	36	1.57	73.20993668	[21.93, 143.54]
Quail	3	0.43	6.100828057	[0, 17.52]
Squirrel	1634	9.34	3322.917681	[2563.14, 4253.92]
Rabbit	401	3.68	815.4773502	[565.85, 1102.37]
Hare	602	4.24	1224.23283	[908.44, 1599.32]

2022 TURKEY HARVEST

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 9,400 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. 2022 Spring and fall turkey harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Spring	105	0.07	259.57	[197.57, 328.90]
Fall	66	0.04	163.16	[118.52, 214.55]

2022 FURBEARER HARVEST

In 2022, Tribal license holders had relatively low participation (5.2%) in furbearer harvest compared to other areas such as small game or deer harvest. When developing these estimates, STNRD assumed that the 5.2% of members who reported trapping expended equal effort for all listed species.

Table 4. 2022 Sault Tribe non-registered furbearer harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Beaver	213	2.54	526.56	[190.30, 956.50]
Muskrat	194	2.31	479.59	[166.08, 912.01]
Mink	11	0.13	27.19	[7.27, 52.54]
Red Fox	11	0.13	27.19	[4.63, 60.74]
Grey Fox	2	0.02	4.94	[0, 12.10]
Coyote	177	2.11	437.57	[226.67, 726.02]
Skunk	26	0.31	64.28	[17.26, 130.69]
Raccoon	134	1.60	331.26	[148.50, 570.10]

Table 5. 2022 Furbearer harvest sealed by the Sault Tribe Natural Resources Department and Law Enforcement

Species	Number Sealed*
Bobcat	14
Fisher	13
Marten	11
Otter	16

*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.

2022 MIGRATORY BIRD HARVEST

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued 3,990 migratory bird licenses with 3.8% percent of those license holders reporting. Hunter participation was low with rates varying between target species. While license holders did not report hunting Virginia rail, Wilson's snipe, or common gallinule, 0.06% reported hunting Sora, 3.3% reported hunting American woodcock, 0.19% reported hunting mourning dove, and 0.24% reported hunting American coot.

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Virginia Rail	0	-	-	-
Sora	2	2	4.94	[0,12]
Woodcock	182	3.37	449.92	[275.18, 670.80]
Snipe	0	-	-	-
Mourning Dove	20	6.66	49.44	[5, 135]
Common Gallinule (Moorhen)	0	-	-	-
Coot	22	5.5	54.38	[20, 108.57]

Table 6. 2022 Off-reservation migratory bird harvest

2022 WATERFOWL HARVEST

Approximately 6.3% of hunters reported pursuing waterfowl during the 2022 season. When developing harvest estimates for waterfowl, STNRD assumed the entire 6.3% who reported effort had equal effort across species. Table 7 summarizes the reported and estimated harvest for major waterfowl species.

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Mallard	576	5.65	1,423.94	[941.76, 1981.51]
Black Duck	110	1.08	271.93	[47.50, 689.84]
Gadwall	12	0.12	29.67	[2.39, 65.88]
Blue Teal	141	1.38	348.57	[188.23,543.95]
Green Teal	110	1.08	271.93	[133.86, 434.94]
Canvasback	7	0.07	17.30	[2.47, 36.47]
Redhead	82	0.80	202.71	[89.31, 349.13]
Wood Duck	252	2.47	622.97	[355.14,946.84]
Lesser Scaup	22	0.22	54.39	[2.57, 132.02]
Bufflehead	77	0.75	190.35	[67.21, 349.50]
Pintail	7	0.07	17.30	[3.76, 35.10]
Canada Goose	573	5.62	1,416.52	[834.37,2098.14]
Snow Goose	9	0.09	22.25	[0, 59.27]

Table 7. 2022 Off-reservation waterfowl harvest

2022 BIG GAME HARVEST

2022 ELK

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of three 'either sex' elk tags and eight antlerless elk tags. After re-issuing one of the 'either sex' elk tags for the late season hunt, and five of the antlerless elk tags for both late seasons, all five tags were filled by members selected during the 2022 elk lottery.

Table 1. Elk licenses issued in 2022

License Issued	Quantity
2022 ANY ELK	2
2022 ANTLERLESS ONLY ELK	3
2022 LATE SEASON ANY ELK	1
2022 LATE SEASON ANTERLESS ONLY ELK	5

2022 BEAR

In 2022, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 421 bear permits across the seven bear management units in the 1836 Ceded Territory. In total, 63 bears were harvested during the 2022 season.

Table 2. 2022 Bear permits and harvest by management unit

BMU	Permits Issued	Bears Harvested
Baldwin	60	9
Baraga	17	1
Drummond	1	2
Gladwin	5	0
Gwinn	62	9
Newberry	130	28
Red Oak	146	19

2022 WHITE-TAILED DEER

The Sault Ste. Marie Tribe of Chippewa Indians issued a total of 19,681 deer licenses to 3,990 Tribal harvesters in 2022. At the time that this report was developed, STNRD had received and processed 1,614 harvest reports. Approximately 63.2% (1,020) of those reporting actually hunted deer. The total estimated harvest for 2022 is 2,423 deer (95% confidence interval from 2,253.3 to 2,593.017 deer). In 2022, an estimated 48.7% of harvested deer were bucks.

This estimate is based on a mean harvest per hunter of 0.96 deer. Actual harvest per hunter varies from 0 to 5 deer. Approximately 36.9% of reporting license holders did not hunt deer in 2022. Many hunters (approximately 40.4% or 1,019 hunters) that pursued deer in 2022 were unsuccessful in their efforts (Figure 1). Based on our estimate, approximately 35.7% (902 hunters) of hunters harvested 1 deer, 16% (405 hunters) harvested 2 deer, and 4.2% (106 hunters) harvested 3 deer (Figure 1). While Tribal hunters can fill five harvest tags, very few members who hunted deer actually harvested four (2.1% or 54 hunters) or five deer (1.4% or 35 hunters). See Figure 1.

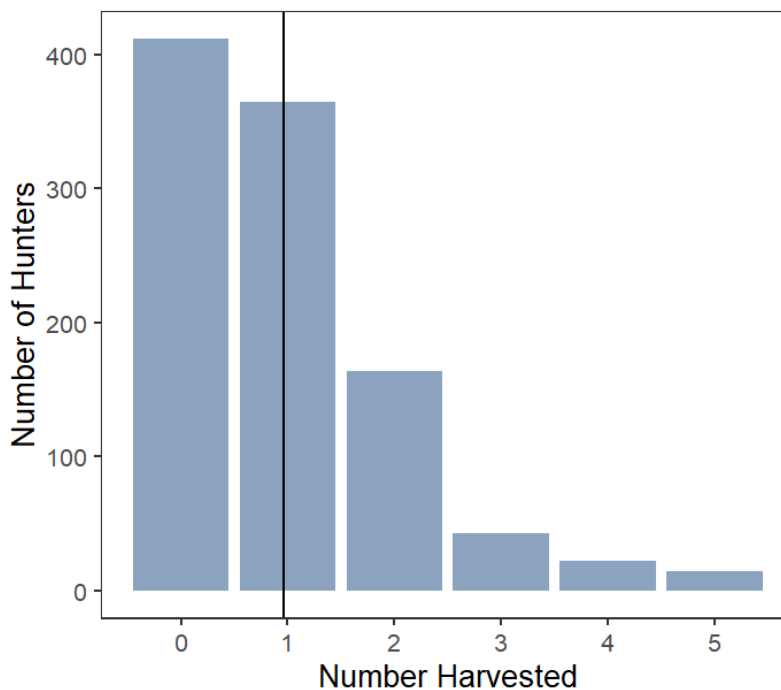


Figure 1. Reported number of hunters harvesting a given number of deer in 2022. Mean harvest per hunter (0.96) is plotted as a vertical line for reference.

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 15.4% of harvest in Mackinac County, 13.0% in Chippewa County, and 13.85% in Schoolcraft County.

Table 3. 2022 White-tailed deer harvest by county

County	Reported Harvest	Percent of Harvest	Estimated Harvest	Estimated Buck Harvest	Estimated Doe Harvest	Harvest Per Mile
Alger	33	3.38	82	62.7	19.29	0.09
Alpena	1	0.1	2.48	2.48	0	0.01
Antrim	3	0.31	7.45	2.98	4.47	0.02
Benzie	9	0.92	22.36	6.49	15.87	0.07
Charlevoix	7	0.72	17.39	11.07	6.32	0.04
Cheboygan	101	10.36	250.96	135.39	115.58	0.35
Chippewa	127	13.03	315.57	151.52	164.05	0.2
Clare	2	0.21	4.97	4.97	0	0.01
Crawford	2	0.21	4.97	1.66	3.31	0.01
Delta	114	11.69	283.27	131.89	151.38	0.32
Emmet	36	3.69	89.45	44.73	44.73	0.19
Grand Traverse	6	0.62	14.91	5.42	9.49	0.03
Ionia	0	0	0	0	0	0
Isabella	0	0	0	0	0	0
Kalkaska	10	1.03	24.85	13.46	11.39	0.04
Kent	9	0.92	22.36	10.32	12.04	0.04
Lake	8	0.82	19.88	15.9	3.98	0.04
Leelanau	3	0.31	7.45	1.49	5.96	0.02
Luce	41	4.21	101.88	51.6	50.28	0.11
Mackinac	150	15.38	372.72	188.29	184.43	0.37
Manistee	11	1.13	27.33	19.01	8.32	0.05
Marquette	14	1.44	34.79	25.42	9.37	0.08
Mason	19	1.95	47.21	11.62	35.59	0.1
Mecosta	5	0.51	12.42	12.42	0	0.02
Missaukee	13	1.33	32.3	15.34	16.96	0.06
Montcalm	3	0.31	7.45	4.14	3.31	0.02
Montmorency	5	0.51	12.42	7.45	4.97	0.03
Muskegon	4	0.41	9.94	7.95	1.99	0.02
Newaygo	10	1.03	24.85	17.2	7.65	0.03
Oceana	14	1.44	34.79	10.82	23.96	0.06
Osceola	9	0.92	22.36	11.77	10.59	0.04
Oscoda	5	0.51	12.42	6.58	5.85	0.64
Otsego	9	0.92	22.36	8.39	13.98	0.04
Ottawa	3	0.31	7.45	2.48	4.97	0.04
Presque Isle	33	3.38	82	20.79	61.21	0.12
Roscommon	10	1.03	24.85	4.28	20.56	0.08
Schoolcraft	135	13.85	335.45	143.76	191.68	0.29
Wexford	11	1.13	27.33	8.41	18.92	0.05

Approximately 42.0% of the 2022 deer harvest took place in the month of November. Leading up to November, 3.4% of harvest took place in September and 14.2% occurred in October. Harvest in December accounted for 17.2% of harvest, while January harvest amounted to 0.96% of total harvest. A large proportion of deer harvest took place in the first two weeks after the quiet period (39.3%, Figure 2).

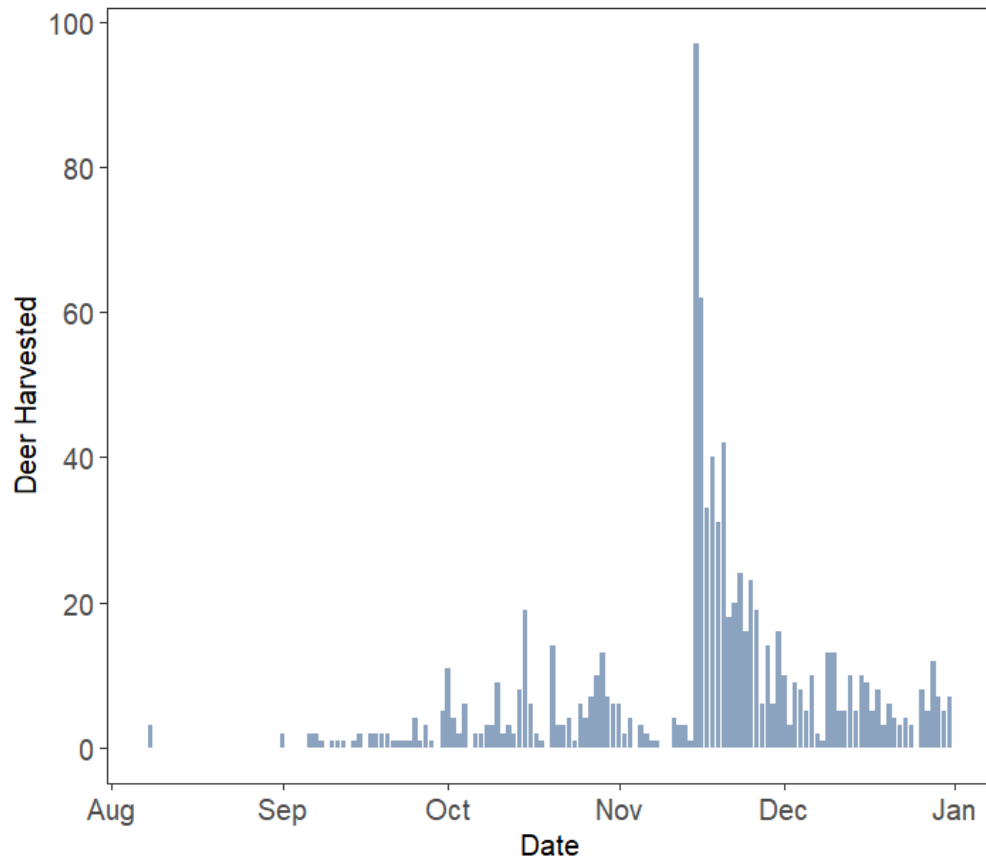


Figure 2. Number of deer harvested by date throughout the 2022 season

2022 GATHERING ACTIVITIES

In 2022, 83 license holders reported gathering activities in the 1836 Treaty Ceded Territory. On federal, state, and private land, members gathered blueberries, morel mushrooms, chaga, ramps, pine cones, moss, leeks, wintergreen, firewood, cedar, raspberries, maple sap, mushrooms, balsam branches, sage, sweet grass, blackberries, honey mushrooms, fiddle head ferns, choke cherry, yarrow, wild asparagus, wild strawberries, sweet fern, Chantal mushrooms, acorns, and Japanese knotweed Labrador tea (Mashkiigobag) as well as several others.

APPENDIX 1

License Type	Quantity Issued
Hunter Harvest License	3936
Disabled Hunter Harvest License	38
Youth Mentor License	16
Non-hunter Harvest License	303
Deer	19681
Turkey	9400
Otter	7732
Fisher	5799
Bobcat	3018
Marten	5799
Bear	421
Elk	11
Conifer Bough	20
Maple Sap Permit	2
Black Lake Sturgeon	1
Firewood	222
Camping Permit	48
Lost Harvest card	18
Lost Harvest Tags	27
Walleye Permits	172
Birch Bark	0
Sapling Permit	0
Total	56,664

Appendix Table 1. Licenses issued by the Sault Ste. Marie Tribe of Chippewa Indians for the 2022 harvest season.

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

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	975
Total Estimated Harvest	2423
LP Reported Harvest	361
LP Estimated Harvest	897
UP Reported Harvest	614
UP Estimated Harvest	1526
Total Buck Estimate	1180
Total Doe Estimate	1242
% Buck Estimate Total	49%
% Doe Estimate Total	51%
UP Buck Estimate	755
UP Doe Estimate	770
LP Buck Estimate	425
LP Doe Estimate	472
UP Proportion Bucks	49%
LP Proportion Bucks	47%
UP Proportion of Total Estimate	63%
LP Proportion of Total Estimate	37%

APPENDIX III: DEER HARVEST PER SQUARE MILE BY COUNTY

