

Sault Ste. Marie Tribe of Chippewa Indians

2020 Harvest and Effort Summary
Natural Resources Department - Wildlife Program



SAULT TRIBE NATURAL RESOURCES DEPARTMENT

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued 58,893 individual permits for hunting, fishing, gathering, and trapping within the 1836 Ceded Territory to 4,498 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 2,053 harvest reports. Throughout this report, uncertainty in estimated harvest is quantified by bootstrap resampling of the observed (i.e., reported) data 5,000 times.

2020 INLAND WATERS FISH HARVEST

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,498 inland fishing licenses. STNRD has received and processed harvest reports from 45.6% (2,053) of those license holders. Of those harvest reports received, approximately 36.5% of license holders reported fishing effort in 2020. When developing harvest estimates, STNRD assumed the entire 36.5% 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. 2020 Inland Fish Harvest

	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Brook Trout	2,164	2.89	4,741.2	[2,968, 7,257]
Brown Trout	302	0.40	661.7	[298, 1,195]
Rainbow Trout	665	0.89	1,457.0	[1,081, 1,869]
Chinook Salmon	271	0.36	593.7	[295, 998]
Coho Salmon	464	0.62	1,016.6	[462, 1,729]
Pink Salmon	104	0.14	227.9	[70, 437]
Northern Pike	2,829	3.77	6,198.2	[5,102, 7,425]
Muskellunge	128	0.17	280.4	[88, 534]
Walleye	6,644	8.86	14,556.6	[12,165, 17,207]
Perch	24,302	32.40	53,244.2	[43,178, 64,472]
Bluegill	14,964	19.95	32,785.2	[24,222, 42,318]
Smelt*	269	0.36	589.4	[270, 1,034]
Sucker	808	1.08	1,770.3	[840, 3,045]
Smallmouth Bass	1,161	1.55	2,543.7	[1,864, 3,350]
Large Mouth Bass	675	0.90	1,478.9	[1,029, 2,016]

*Smelt is reported in gallons

2020 TURTLE HARVEST

In 2020, approximately 0.7% of license holders reported pursuing turtles. With 33 turtles reported, each license holder pursuing turtles harvested an average of 2.2 turtles. It is estimated that approximately 67 turtles were harvested during the 2020 license year (95% bootstrap confidence interval from 30.5 to 113.6).

2020 FROG HARVEST

In 2020, approximately 0.4% of license holders reported pursuing frogs. With 157 frogs reported, each license holder pursuing frogs harvested an average of 17.4 frogs. It is estimated that approximately 319 frogs were harvested during the 2020 license year (95% bootstrap confidence interval from 107.8 to 605.7 frogs).

2020 SMALL GAME HARVEST

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,175 small game licenses. Hunter participation rates varied widely between target species. Approximately 27% of license holders reported hunting ruffed grouse, 2.1% reported hunting sharp-tailed grouse, 1.1% reported hunting pheasant, 0.3% reported hunting quail, 8.5% reported hunting squirrel, 5.3% reported hunting squirrel, and 6.9% reported hunting snowshoe hare.

Table 2. 2020 Small game harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Ruffed Grouse	2,563	4.6	5,212.1	[4,514.1, 5,963.6]
Sharp-tailed Grouse	27	0.6	54.9	[25.7, 90.8]
Pheasant	36	1.6	73.2	[21.9, 143.5]]
Quail	3	0.4	6.1	[0, 17.5]
Squirrel	1,634	9.3	3,322.9	[2,563.1, 4,253.9]
Cottontail Rabbit	401	3.7	815.5	[565.9, 1,102.4]
Snowshoe Hare	602	4.2	1,224.2	[908.4, 1,599.3]

2020 TURKEY HARVEST

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 9,382 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. 2020 Spring and fall turkey harvest

Season	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Spring	123	0.06	250.1	[197.2, 304.9]
Fall	85	0.04	172.9	[129.7, 219.5]

2020 FURBEARER HARVEST

In 2020, Tribal license holders had relatively low participation (6.5%) in furbearer harvest compared to other areas such as small game or deer harvest. When developing these estimates, STNRD assumed that the 6.5% of members who reported trapping expended equal effort for all listed species.

Table 4. 2020 Sault Tribe non-registered furbearer harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Beaver	321	2.4	652.8	[263.2, 1,198.9]
Muskrat	338	2.5	687.4	[310.5, 1,127.9]
Mink	45	0.3	91.5	[14.6, 207.2]
Red Fox	31	0.2	63.0	[16.9, 124.5]
Gray Fox	1	0.0	2.0	[0, 6.7]
Coyote	222	1.7	451.5	[268.2, 685.5]
Skunk	46	0.3	93.5	[46.0, 151.8]
Raccoon	175	1.3	355.9	[181.2, 589.1]

Table 5. 2020 Furbearer harvest sealed by the Sault Tribe Natural Resources Department and Law Enforcement

Species	Number Sealed*
Bobcat	24
Fisher	15
Marten	20
Otter	25

*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.

2020 MIGRATORY BIRD HARVEST

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,183 migratory bird licenses with 66.6% 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 or sora rail (0%), 3.6% reported hunting American woodcock, 0.1% reported hunting Wilson’s snipe, 0.2% reported hunting mourning dove, 0% reported hunting common gallinule (moorhen), and 0.2% reported hunting American coot.

Table 6. 2020 Off-reservation migratory bird harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Virginia Rail	0	-	-	-
Sora	0	-	-	-
American Woodcock	234	3.16	475.9	[332.0, 651.2]
Wilson’s Snipe	3	1	6.1	[0, 16.5]
Mourning Dove	27	6.75	54.9	[15, 120]
Common Gallinule (Moorhen)	0	-	-	-
American Coot	6	1.2	12.2	[3.3, 24.4]

2020 WATERFOWL HARVEST

Approximately 6.5% of hunters reported pursuing waterfowl during the 2020 season. When developing harvest estimates for waterfowl, STNRD assumed the entire 6.5% who reported effort had equal effort across species. Table 7 summarizes the reported and estimated harvest for major waterfowl species.

Table 7. 2020 Off-reservation waterfowl harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Mallard	747	5.62	1,519.1	[1,127.5, 1,982.4]
Black Duck	72	0.54	146.4	[53.2, 271.9]
Gadwall	12	0.09	24.4	[0, 57.6]
Blue-winged Teal	102	0.77	207.4	[105.4, 328.0]
Green-winged Teal	103	0.77	209.5	[122.5, 319.7]
Canvasback	17	0.13	34.6	[1.9, 87.7]
Redhead	39	0.29	79.3	[28.5, 143.4]
Wood Duck	366	2.75	744.3	[463.1, 1,080.9]
Lesser Scaup	47	0.35	95.6	[20.1, 203.7]
Bufflehead	200	1.50	406.7	[171.1, 712.0]
Pintail	20	0.15	40.7	[13.0, 75.6]
Canada Goose	883	6.64	1,795.7	[1,197.3, 2,514.2]
Snow Goose	6	0.05	12.2	[0, 33.3]

2020 BIG GAME HARVEST

2020 ELK

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued two 'either sex' elk tags and three antlerless elk tags. After re-issuing one of the antlerless elk tags for the late season hunt, all five tags were filled by members selected during the 2020 elk lottery.

Table 8. Elk licenses issued in 2020

License Issued	Quantity
2020 ANY ELK	2
2020 ANTLERLESS ONLY ELK	3
2020 LATE SEASON ANTLERLESS ONLY ELK	1

2020 BEAR

In 2020, the Sault Ste. Marie Tribe of Chippewa Indians issued a total of 442 bear permits across the seven bear management units in the 1836 Ceded Territory. In total, 76 bear were harvested during the 2020 season.

Table 9. 2020 Bear permits and harvest by management unit

BMU	Permits Issued	Total Harvest
Baraga	24	2
Drummond	1	1
Gwinn	61	8
Newberry	166	25
Baldwin	47	10
Gladwin	3	1
Red Oak	140	29

2020 WHITE-TAILED DEER

The Sault Ste. Marie Tribe of Chippewa Indians issued a total of 20,462 deer licenses to 4,092 Tribal harvesters in 2020. At the time that this report was developed, STNRD had received and processed 2,053 harvest reports. Approximately 63.9% (1,312) of those reporting actually hunted deer. The total estimated harvest for 2020 is 2,342 deer (95% confidence interval from 2,181.0 to 2,507.3 deer). In 2020, an estimated 49.6% of harvested deer were bucks.

This estimate is based on a mean harvest per hunter of 0.88 deer. Actual harvest per hunter varies from 0 to 5 deer. Approximately 36.1% of reporting license holders did not hunt deer in 2020. Many hunters (approximately 45.7% or 1,220.2 hunters) that pursued deer in 2020 were unsuccessful in their efforts (Figure 1). Based on our estimate, approximately 32.2% (860 hunters) of hunters harvested 1 deer, 14.5% (386.4 hunters) harvested 2 deer, and 5.0% (132.2 hunters) harvested 3 deer (Figure 1). While Tribal hunters can fill five harvest tags, very few members who hunted deer actually harvested four (1.2% or 32.5 hunters) or five deer (1.4% or 36.6 hunters). See Figure 1.

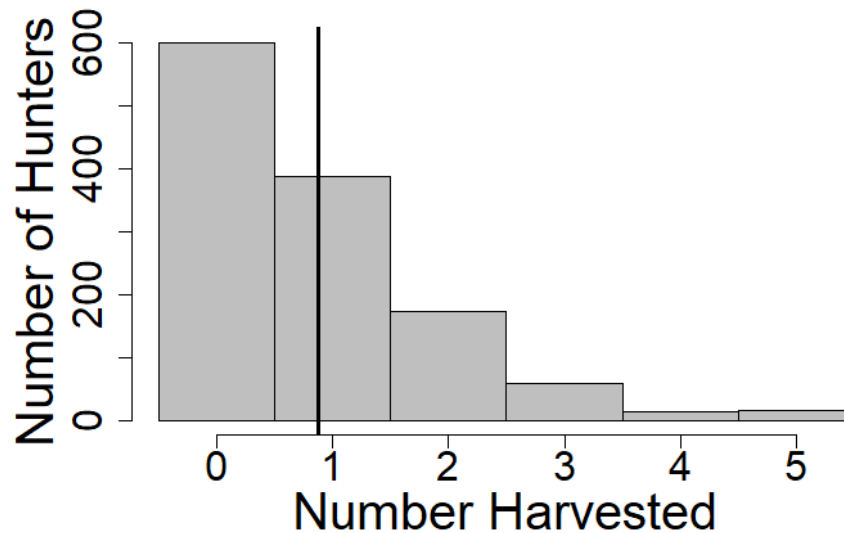


Figure 1. Reported number of hunters harvesting a given number of deer in 2020. Mean harvest per hunter (0.88) is plotted as a vertical line for reference.

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 15.9% of harvest in Mackinac County, 12.9% in Chippewa County, and 12.8% in Schoolcraft County.

Table 10. 2020 White-tailed deer harvest by county

County	Reported Harvest	Percent of Harvest	Estimated Harvest	Estimated Buck Harvest	Estimated Doe Harvest	Harvest per mile ²
Alger	49	4.28	100.17	48.00	52.17	0.11
Alpena	1	0.09	2.04	2.04	0.00	0.01
Antrim	6	0.52	12.27	8.18	4.09	0.03
Benzie	6	0.52	12.27	4.09	8.18	0.04
Charlevoix	12	1.05	24.53	16.35	8.18	0.06
Cheboygan	139	12.13	284.15	130.83	153.32	0.40
Chippewa	148	12.91	302.55	137.71	164.84	0.19
Clare	3	0.26	6.13	4.09	2.04	0.01
Crawford	1	0.09	2.04	2.04	0.00	0.00
Delta	128	11.17	261.66	169.67	91.99	0.29
Emmet	39	3.40	79.73	47.02	32.71	0.17
Grand Traverse	7	0.61	14.31	8.18	6.13	0.03
Ionia	1	0.09	2.04	0.00	2.04	0.03
Isabella	4	0.35	8.18	4.09	4.09	0.04
Kalkaska	22	1.92	44.97	20.44	24.53	0.08
Kent	8	0.70	16.35	12.27	4.09	0.03
Lake	8	0.70	16.35	8.18	8.18	0.03
Leelanau	4	0.35	8.18	2.04	6.13	0.02
Luce	53	4.62	108.35	37.50	70.84	0.12
Mackinac	182	15.88	372.05	173.76	198.29	0.37
Manistee	7	0.61	14.31	2.04	12.27	0.03
Marquette	17	1.48	34.75	16.35	18.40	0.08
Mason	19	1.66	38.84	10.22	28.62	0.08
Mecosta	9	0.79	18.40	10.22	8.18	0.03
Missaukee	6	0.52	12.27	8.18	4.09	0.02
Montcalm	8	0.70	16.35	12.27	4.09	0.04
Montmorency	6	0.52	12.27	4.09	8.18	0.03
Muskegon	8	0.70	16.35	2.04	14.31	0.03
Newaygo	23	2.01	47.02	20.44	26.58	0.06
Oceana	18	1.57	36.80	22.49	14.31	0.07
Osceola	7	0.61	14.31	8.18	6.13	0.03
Oscoda	0	0.00	0.00	NA	NA	0.00
Otsego	8	0.70	16.35	12.27	4.09	0.03
Ottawa	3	0.26	6.13	6.13	0.00	0.03
Presque Isle	16	1.40	32.71	16.35	16.35	0.05
Roscommon	5	0.44	10.22	4.09	6.13	0.03
Schoolcraft	147	12.83	300.51	158.49	142.02	0.26
Wexford	18	1.57	36.80	12.27	24.53	0.07

Approximately 51.6% of the 2020 deer harvest took place in the month of November. Leading up to November, 4.1% of harvest took place in September and 18.2% occurred in October. Harvest in December accounted for 24.9% of harvest, while January harvest amounted to 1.2% of total harvest. A large proportion of deer harvest took place in the first two weeks after the quiet period (47.4%, Figure 2).

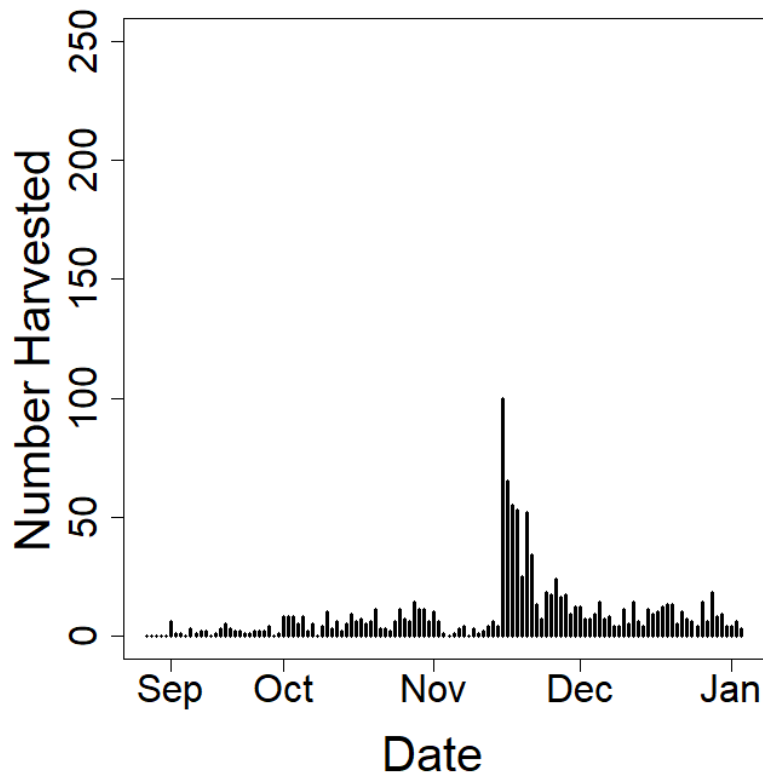


Figure 2. Number of deer harvested by date throughout the 2020 season

2020 GATHERING ACTIVITIES

In 2020, 119 license holders reported gathering activities in the 1836 Treaty Ceded Territory. On federal, state, and private land, members gathered acorns, apples, asparagus, balsam, balsam fir, bearberry, beefsteak mushrooms, berries (miinan), birch bark (wiigwaas), blackberries, blackcaps, black raspberries, blueberries (miinan), burls, cedar, chaga, chokecherries, fiddlehead ferns, firewood, golden oyster mushrooms, greens, hen of the woods mushrooms, horseradish, Labrador tea (swamp tea), lambsquarters, wild leeks/ramps, Lion's mane mushroom, maple wood, maple sap, morel mushrooms, mullein, mushrooms, oyster mushrooms, raspberries (miskomin), red willow, sage, Spruce root, St. Johns Wort, strawberries, stump mushrooms, sweet fern, sweetgrass (wiingashk), water mint, white pine, wild rice, wintergreen, wood, and yarrow.

APPENDIX 1

License Type	2020 Quantity Issued
Hunter Harvest Card	4,103
Disabled Hunter Harvest License	47
Youth Mentor License Holder	25
Non-hunter Harvest Card	323
Deer	20,462
Special Needs Deer	2
Turkey	9,382
Otter	8,020
Fisher	6,018
Bobcat	4,012
Marten	6,021
Bear	443
Elk	11
Conifer Bough	23
Sapling Permit	0
Black Lake Sturgeon	1
Birch Bark	0
Total	58,893

Appendix Table 1. Licenses issued by the Sault Ste. Marie Tribe of Chippewa Indians for the 2020 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 in the 1836 Ceded Territory in the Upper Peninsula of Michigan.

Total Reported Deer Harvest	1,146
Total Estimated Deer Harvest	2,342.7
LP Reported Harvest	422
LP Estimated Harvest	862.7
UP Reported Harvest	724
UP Estimated Harvest	1,480.0
Total Buck Estimate	1,162.6
Total Doe Estimate	1,180.1
% Buck Estimate Total	49.6%
% Doe Estimate Total	50.4%
UP Buck Estimate	741.5
UP Doe Estimate	738.6
LP Buck Estimate	421.1
LP Doe Estimate	441.6
UP Proportion Bucks	50.1%
LP Proportion Bucks	48.8%
UP Proportion of Total Estimate	63.2%
LP Proportion of Total Estimate	36.8%

APPENDIX III: DEER HARVEST PER SQUARE MILE BY COUNTY

