

# Sault Ste. Marie Tribe of Chippewa Indians

2017 Harvest and Effort Summary  
Natural Resources Department - Wildlife Management Program



## SAULT TRIBE NATURAL RESOURCES DEPARTMENT

In 2017, the Sault Ste. Marie Tribe of Chippewa Indians issued 57,354 individual permits for hunting, fishing, gathering, and trapping within the 1836 Ceded Territory to 4,573 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 1,677 harvest reports. Throughout this report, uncertainty in estimated harvest is quantified by bootstrap resampling of the observed data 5,000 times.

## 2017 INLAND WATERS FISH HARVEST

In 2017, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,573 inland fishing licenses. STNRD has received harvest reports from 36.7% (1,677) of those license holders. Of those harvest reports received, approximately 32.4% of those reported fishing effort in 2017. When developing harvest estimates, STNRD assumed the entire 32.4% 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 filled.

Table 1. 2017 Inland Fish Harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Brook Trout	3,054	5.62	8327.9	[5,595.4, 11,744.8]
Brown Trout	318	0.59	867.2	[398.6, 1,423.2]
Rainbow Trout	519	0.96	1,415.3	[971.0, 1,920.0]
Chinook Salmon	280	0.52	763.5	[416.7, 1,187.1]
Coho Salmon	257	0.47	700.8	[292.6, 1,229.6]
Pink Salmon	25	0.05	68.2	[13.8, 139.0]
Northern Pike	1,952	3.59	5,322.9	[3,991.8, 7,043.3]
Muskellunge	34	0.06	92.7	[18.4, 205.3]
Walleye	4,886	9.00	13,323.6	[10,156.5, 17,145.9]
Perch	16,249	29.92	44,309.3	[30,486.1, 61,645.1]
Bluegill	12,160	22.39	33,159.0	[23,963.7, 44,257.0]
Sucker	607	1.12	1,655.2	[802.9, 2,753.8]
Smallmouth Bass	1,407	2.59	3,836.7	[2,622.3, 5,345.0]
Largemouth Bass	850	1.57	2,317.9	[1,372.7, 3,420.2]
Smelt*	73	0.13	199.1	[90.1, 332.0]

\*Smelt is reported in gallons

## 2017 TURTLE HARVEST

In 2017, approximately 0.2% of license holders reported pursuing turtles. With 28 turtles reported, each member harvested an average of 7 turtles. It is estimated that 70.9 turtles were harvested during 2016 the license year (95% bootstrap confidence interval from 10.0 to 205.3).

## 2017 FROG HARVEST

In 2017, approximately 0.4% of license holders reported pursuing frogs. With 163 frogs reported harvested, each member harvested an average of 27.2 frogs. It is estimated that 412.6 frogs were harvested during the 2017 license year (95% bootstrap confidence interval from 153.6 to 858.2 frogs).

## 2017 SMALL GAME HARVEST

In 2017, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,245 small game licenses, with 39.5% percent of those license holders reporting. Hunter participation rates varied widely between target species. Approximately 30.6% of license holders reported hunting ruffed grouse, 9.7% reported hunting squirrel, 8.3% reported hunting snowshoe hare, 4.8% reported hunting cottontail rabbit, 2.3% reported hunting sharp-tailed grouse, 1.0% reported hunting pheasant, and 0.6% reported hunting quail.

Table 2. 2017 Small Game Harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Ruffed Grouse	2,257	4.39	5,713.2	[5,058.3, 6,428.4]
Sharp-tailed Grouse	16	0.42	40.5	[10.8, 83.2]
Pheasant	76	4.47	192.4	[47.3, 406.7]
Quail	9	0.90	22.8	[0, 60.0]
Squirrel	1,559	9.56	3,946.3	[2,873.1, 5,403.0]
Cottontail Rabbit	292	3.60	739.1	[463.9, 1,080.7]
Snowshoe Hare	485	3.49	1,227.7	[984.3, 1,492.4]

## 2017 TURKEY HARVEST

In 2017, the Sault Ste. Marie Tribe of Chippewa Indians issued 3,545 spring turkey and 5,750 fall turkey licenses. 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. Approximately 14.5% of those reporting hunted spring turkey and 13.2% hunted fall turkey.

Table 3. 2017 spring and fall turkey harvest

Season	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Spring	93	0.38	235.4	[189.2, 285.0]
Fall	65	0.29	164.5	[122.2, 208.3]

## 2017 FURBEARER HARVEST

In 2017, Sault Ste. Marie Tribe members had relatively low participation (5.6%) in furbearer harvest compared to other areas such as small game hunting or deer hunting. When developing these estimates, STNRD assumed that the 5.6% of members who reported trapping expended equal effort for all listed species.

Table 4. 2017 Sault Tribe non-registered furbearer harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Beaver	238	2.53	602.5	[259.8, 1,110.2]
Muskrat	698	7.43	1,766.9	[705.7, 3,177.9]
Mink	59	0.63	149.3	[22.6, 371.9]
Red Fox	28	0.30	70.9	[22.3, 144.0]
Gray Fox	2	0.02	5.1	[0, 16.7]
Coyote	167	1.78	422.7	[185.4, 737.1]
Skunk	42	0.45	106.3	[52.3, 169.4]
Raccoon	176	1.87	445.5	[223.0, 732.7]

Table 5. 2017 furbearer harvest sealed by the Sault Tribe Natural Resources Department and Law Enforcement

Species	Number Sealed*
Bobcat	13
Fisher	17
Marten	21
Otter	2

\*These totals do not include harvest registered by the Michigan Department of Natural Resources.

## 2017 MIGRATORY BIRD HARVEST

In 2017, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,245 migratory bird licenses with 39.5% percent of those license holders reporting. Hunter participation was low with rates varying between target species. Approximately 0.2% of license holders reported hunting Virginia rail and sora rail, 3.7% reported hunting American woodcock, 0.4% reported hunting Wilson's snipe, 0.5% reported hunting mourning dove, 0.02% reported hunting common gallinule (moorhen), and 0.4% reported hunting American coot.

Table 6. 2017 Off-reservation migratory bird harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Virginia Rail	0	-	-	-
Sora	0	-	-	-
American Woodcock	178	2.87	450.6	[237.0, 739.4]
Wilson's Snipe	0	-	-	-
Mourning Dove	22	2.44	55.7	[3.4, 135.5]
Common Gallinule (Moorhen)	0	-	-	-
American Coot	6	0.86	15.2	[0, 42.0]

## 2017 WATERFOWL HARVEST

Approximately 5.4% of hunters reported pursuing waterfowl during the 2017 season. When developing harvest estimates for waterfowl, STNRD assumed the entire 5.4% who reported effort had equal effort across species. Table 7 summarizes the reported and estimated harvest for major waterfowl species.

Table 7. 2017 off-reservation waterfowl harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Mallard	416	4.62	1,053.0	[748.0, 1,399.1]
Black Duck	20	0.22	50.6	[15.8, 93.5]
Gadwall	8	0.09	20.3	[0, 52.4]
Blue-winged Teal	30	0.33	75.9	[33.0, 128.3]
Green-winged Teal	46	0.51	116.4	[54.3, 192.8]
Canvasback	15	0.17	38.0	[2.6, 86.9]
Redhead	60	0.67	151.9	[56.5, 274.0]
Wood Duck	223	2.48	564.5	[331.4, 843.7]
Lesser Scaup	8	0.09	20.3	[2.7, 45.4]
Bufflehead	41	0.46	103.8	[49.5, 168.5]
Pintail	12	0.13	30.4	[0, 91.8]
Canada Goose	483	5.37	1,222.6	[674.0, 1,922.9]
Snow Goose	9	0.10	22.8	[0, 59.0]

## 2017 BIG GAME HARVEST

### 2017 ELK

In 2017, 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 'either sex' tags and one of the antlerless elk tags for the late season hunt, all five tags were filled by members selected during the 2017 elk lottery.

Table 8. Elk licenses issued in 2017

License Issued	Quantity
2017 ANY ELK	2
2017 ANTLERLESS ONLY ELK	3
2017 LATE SEASON ANY ELK	1
2017 LATE SEASON ANTLERLESS ONLY ELK	1

### 2017 BEAR

Table 9. 2017 bear permits and harvest by management unit

BMU	Permits Issued	Total Harvest
Baraga	16	-
Drummond	1	1
Gwinn	63	14
Newberry	170	34
Baldwin	18	3
Gladwin	3	-
Red Oak	119	26

## 2017 WHITE-TAILED DEER

Sault Ste. Marie Tribe of Chippewa Indians issued deer licenses to 4,189 Tribal members in 2017. At the time that this report was developed, STNRD had received 1,677 harvest reports back (approximately 39.5%). Approximately 73.8% (1,238) of those reporting actually hunted deer. The total estimated harvest for 2017 is 3,272 deer (95% confidence interval from 3,079.2 to 3,474.2 deer). In 2017, an estimated 57.7% (95% confidence interval from 54.9% to 60.4%) of harvested deer were bucks.

This estimate is based on a mean harvest per hunter of 1.06 deer. Actual harvest per hunter varies from 0 to 5 deer. Approximately 26.2% of our reporting hunters did not hunt deer in 2017. Many hunters (approximately 36.0% or 1,114.1 hunters) that pursued deer in 2017 were unsuccessful in their efforts (Figure 1). Approximately 37.8% (1,169 hunters) of hunters harvested 1 deer, 15.6% (482.1 hunters) harvested 2 deer, and 6.9% (212.3 hunters) harvested 3 deer (Figure 1). While Tribal hunters can receive five harvest tags, very few members who hunted deer actually harvested four (2.3%, 72.4 hunters) or five deer (1.3%, 42.5 hunters). See Figure 1.

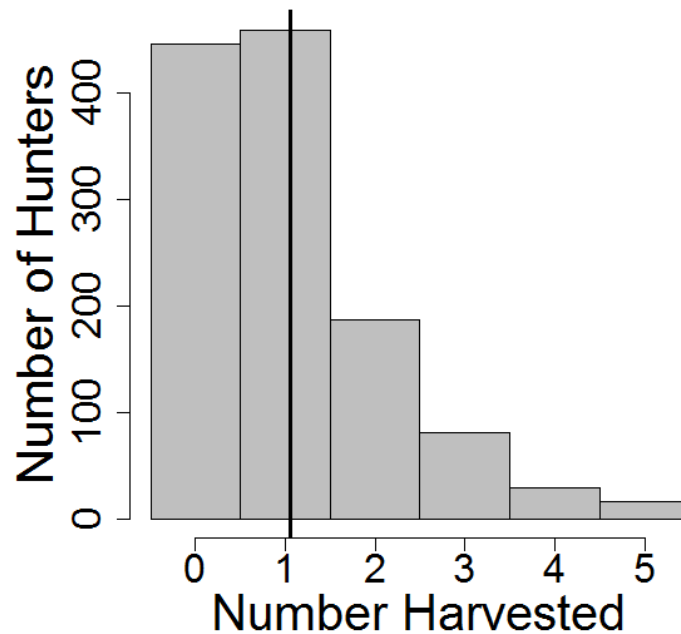


Figure 1. Reported number of hunters harvesting a given number of deer in 2017. Mean harvest per hunter (1.06) is plotted as a vertical line for reference.

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 16.67% of harvest in Mackinac County, 16.2% in Chippewa County, and 13.66% in Schoolcraft County.



Table 10. 2017 White-tailed deer harvest by county

County	Reported Harvest	Percent of Harvest	Estimated Harvest	Harvest per mile <sup>2</sup>	Estimated buck harvest	Estimated doe harvest
Alger	58	4.48	146.44	0.16	108.57	37.87
Alpena	0	0.00	0.00	0.00	0	0
Antrim	3	0.23	7.57	0.02	7.57	0.00
Benzie	9	0.69	22.72	0.07	7.57	15.15
Charlevoix	6	0.46	15.15	0.04	12.62	2.52
Cheboygan	94	7.25	237.34	0.33	121.25	116.09
Chippewa	210	16.20	530.23	0.34	343.39	186.84
Clare	4	0.31	10.10	0.02	7.57	2.52
Crawford	4	0.31	10.10	0.02	7.57	2.52
Delta	141	10.88	356.01	0.30	195.81	160.20
Emmet	33	2.55	83.32	0.18	40.40	42.92
Grand Traverse	15	1.16	37.87	0.08	15.15	22.72
Ionia	1	0.08	2.52	0.00	0.00	2.52
Isabella	3	0.23	7.57	0.01	7.57	0.00
Kalkaska	21	1.62	53.02	0.09	17.67	35.35
Kent	8	0.62	20.20	0.02	10.10	10.10
Lake	15	1.16	37.87	0.07	25.25	12.62
Leelanau	6	0.46	15.15	0.04	5.05	10.10
Luce	87	6.71	219.67	0.24	121.20	98.47
Mackinac	216	16.67	545.38	0.53	343.10	202.28
Manistee	13	1.00	32.82	0.06	12.62	20.20
Marquette	22	1.70	55.55	0.03	35.35	20.20
Mason	15	1.16	37.87	0.08	15.15	22.72
Mecosta	8	0.62	20.20	0.04	12.62	7.57
Missaukee	9	0.69	22.72	0.04	11.36	11.36
Montcalm	5	0.39	12.62	0.02	7.57	5.05
Montmorency	5	0.39	12.62	0.02	5.05	7.57
Muskegon	6	0.46	15.15	0.03	7.57	7.57
Newaygo	25	1.93	63.12	0.07	22.72	40.40
Oceana	14	1.08	35.35	0.07	20.20	15.15
Osceola	1	0.08	2.52	0.00	2.52	0.00
Oscoda	1	0.08	2.52	0.00	0.00	2.52
Otsego	13	1.00	32.82	0.06	12.62	20.20
Ottawa	2	0.15	5.05	0.01	0.00	5.05
Presque Isle	34	2.62	85.85	0.13	42.92	42.92
Roscommon	4	0.31	10.10	0.02	10.10	0.00
Schoolcraft	177	13.66	446.91	0.38	262.59	184.32
Wexford	8	0.62	20.20	0.04	10.10	10.10

Approximately 54.9% of the 2017 deer harvest took place in the month of November. Leading up to November, 3.6% of harvest took place in September and 16.4% occurred in October. Harvest in December accounted for 23.7% of harvest, while January harvest amounted to 1.3% of total harvest. Most of the deer harvest took place in the first two weeks after the quiet period (49.1%, Figure 2).

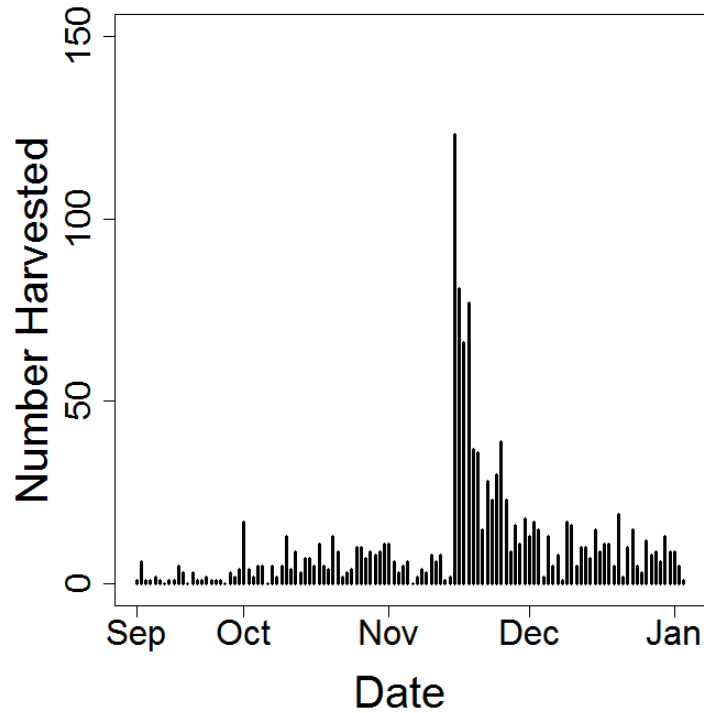


Figure 2. Number of deer harvested by date throughout the 2017 season

## 2017 GATHERING ACTIVITIES

In 2017, approximately 2.3% of members reported gathering activities in the 1836 Treaty Ceded Territory. On federal, state, or private land members gathered acorns, apples, ash sticks, asparagus, balsam, berries, wiigwaas (birch bark), blackberries, blueberries, giizhik (cedar), shkitaagan (chaga), chanterelle mushrooms, chicken mushrooms, chokecherries, cranberries, dandelions, fiddleheads, firewood, wild leeks/ramps, manoomin (wild rice), maple syrup, mashkodewashk (sage), morel mushrooms, mullein, mushrooms, oyster mushrooms, pine cones, princess pine, raspberries, red sticks, red willow, St. John’s wort, stones, strawberries, stump mushrooms, sweet fern, wiingashk (sweetgrass), tobacco, wiiksh, wild ginger, wintergreen, wood, yarrow, and Zesegaandagobigiw (black spruce pitch).

APPENDIX

License Type	Quantity
Deer	20,939
Turkey	9,295
Otter	8,033
Fisher	6,039
Hunter Harvest Card (incl. inland fishing, small game, waterfowl, migratory birds, furbearer, and gathering)	4,245
Bobcat	4,041
Marten	4,028
Bear	390
Non-hunter Harvest Card (incl. gathering and inland fishing)	328
Elk	7
Conifer Bough	5
Maple Sapling Permit	2
Black Lake Sturgeon	1
Birch Bark	1
<b>Total</b>	<b>57,354</b>

Appendix Table 1. Licenses issued by the Sault Ste. Marie Tribe of Chippewa Indians for the 2017 harvest season.