

Sault Ste. Marie Tribe of Chippewa Indians

2016 Harvest and Effort Summary



SAULT TRIBE NATURAL RESOURCES DEPARTMENT

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued 50,893 individual permits for hunting, fishing, gathering, and trapping within the 1836 Ceded Territory to 4,417 tribal members. 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 1,958 harvest reports. Throughout this report, uncertainty in estimated harvest is quantified by bootstrap resampling of the observed data 5000 times.

2016 INLAND WATERS FISH HARVEST

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,417 Inland Fishing Licenses. IFWD has received harvest reports from 44.3% (1,958) of those license holders. Of those harvest reports received, approximately 37.2% of those reported fishing effort in 2016. When developing harvest estimates, IFWD assumed the entire 37.2% 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 2 permits for Black Lake sturgeon; however, neither permit was filled during 2016.

Table 1. 2016 Inland Fish Harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Brook Trout	2717	3.73	6213.9	[4200.1,8118.7]
Brown Trout	205	0.28	468.8	[226.6,773.8]
Rainbow Trout	585	0.80	1337.9	[899.8,1854.8]
Chinook Salmon	220	0.30	503.1	[253.2,810.5]
Coho Salmon	135	0.19	308.7	[107.7,651.8]
Pink Salmon	49	51.0	112.1	[25.5,223.1]
Northern Pike	2590	3.6	5923.4	[4756.0,7250.5]
Muskellunge	65	0.1	148.7	[21.4,341.8]
Walleye	5441	7.5	12443.7	[10418.5,14726.5]
Perch	21313	29.2	48743.4	[37278.1,62696.6]
Bluegill	14638	20.1	33477.5	[25623.6,42419.0]
Sucker	566	0.8	1294.5	[689.4,2005.9]
Smallmouth Bass	1069	1.5	1294.5	[1799.1,3202.4]
Largemouth Bass	984	1.3	2250.4	[1433.1,3187.0]
Smelt*	122	0.2	98.6	[121.3,499.6]

*Smelt is reported in gallons

2016 TURTLE HARVEST

In 2016, the approximately 0.2% of license holders reported pursuing turtles. With 10 turtles reported, each member harvested an average of 2.5 turtles. It is estimated that 21.3 turtles were harvested during 2016 the license year (95% bootstrap confidence interval from 3.0 to 52.0).

2016 FROG HARVEST

In 2016, approximately 0.1% of license holders reported pursuing frogs. With 39 frogs reported harvested, each member harvested an average of 19.5 frogs. It is estimated that 83.1 frogs were harvested during the 2016 license year (95% bootstrap confidence interval from 19.5 to 171.0 frogs).

2016 SMALL GAME HARVEST

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,171 small game licenses with 46.9% percent of those license holders reporting. Hunter participation rates varied widely between target species. Approximately 33.2% of license holders reported hunting ruffed grouse, 10.0% reported hunting squirrel, 7.4% reported hunting snowshoe hare, 7.0% reported hunting cottontail rabbit, 1.9% reported hunting sharp-tailed grouse, 0.9% reported hunting pheasant, and 0.5% reported hunting quail.

Table 2. 2016 Small Game Harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Ruffed Grouse	3092	4.74	6586.7	[5876.9,7347.1]
Sharp-tailed Grouse	23	0.59	49.0	[23.3,80.8]
Pheasant	47	2.47	100.1	[2.26,273.8]
Quail	6	0.55	12.7	[0,40.0]
Squirrel	1387	7.11	2954.6	[2402.8,3619.6]
Cottontail Rabbit	351	2.54	747.7	[550.1,977.1]
Snowshoe Hare	494	3.43	1052.3	[786.0,1357.1]

2016 TURKEY HARVEST

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued 1,679 spring turkey and 2,801 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 14.2% of those reporting hunted spring turkey and 11.7% hunted fall turkey.

Table 3. 2016 spring and fall turkey harvest

Season	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Spring	94	0.33	200.2	[156.4,245.7]
Fall	56	0.24	119.3	[86.9,157.6]

2016 FURBEARER HARVEST

In 2016, Sault Ste. Marie Tribe members had relatively low participation (5.7%) in furbearer harvest compared to other areas such as small game hunting or deer hunting. When developing these estimates, IFWD assumed that the 5.7% of members who reported trapping expended equal effort for all listed species.

Table 4. 2016 Sault Tribe non-registered furbearer harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Beaver	211	1.88	449.5	[212.7,767.6]
Muskrat	904	8.07	1925.7	[839.9,3249.3]
Mink	48	0.42	102.3	[40.2,188.4]
Red Fox	24	0.21	51.1	[20.9,90.6]
Gray Fox	2	0.02	4.3	[0.0,11.2]
Coyote	163	1.46	347.2	[169.6,568.0]
Skunk	50	0.44	106.5	[52.2,172.1]
Raccoon	247	2.21	526.2	[207.0,1048.9]

Table 5. 2016 furbearer harvest sealed by the Sault Tribe Natural Resources Department

Species	Number Sealed
Bobcat	9*
Fisher	9*
Marten	11*

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

In addition to this estimated furbearer harvest, Sault Ste. Marie Tribe members harvested and registered 14 American marten, 10 fisher, 0 river otter and 13 bobcats.

2016 MIGRATORY BIRD HARVEST

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued 4,171 migratory bird licenses with 42.6% percent of those license holders reporting. Hunter participation was low with rates varying between target species. Approximately 0.05% of license holders reported hunting Virginia rail and sora, 3.8% reported hunting woodcock, 0.2% reported hunting snipe, 0.3% reported hunting mourning dove, 0.02% reported hunting common gallinule (moorhen) ,and 0.02% reported hunting coot. Table 6 summarizes the reported and estimated harvest for migratory bird species.

Table 6. 2016 off-reservation migratory bird harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Virginia Rail	0	-	-	-
Sora	0	-	-	-
American Woodcock	202	2.73	430.3	[290.3,590.0]
Wilson's Snipe	5	1.25	10.7	[0.0,40.0]
Mourning Dove	20	4.00	42.6	[0.0,102.0]
Common Gallinule (Moorhen)	0	-	-	-
American Coot	8	2.0	17.0	[0.0,41.2]

2016 WATERFOWL HARVEST

Approximately 5.5% of hunters reported pursuing waterfowl during the 2016 season. When developing harvest estimates for waterfowl, IFWD assumed the entire 5.5% who reported effort had equal effort across species. Table 7 summarizes the reported and estimated harvest for major waterfowl species.

Table 7. 2016 off-reservation waterfowl harvest

Species	Reported Harvest	Mean Harvest	Estimated Harvest	95% Confidence Interval
Mallard	590	5.51	1256.8	[896.3,1695.4]
Black Duck	51	0.32	103.2	[48.2,183.5]
Gadwall	14	0.13	29.8	[6.3,61.3]
Blue-winged Teal	54	0.50	115.0	[47.0,207.0]
Green-winged Teal	95	0.89	202.4	[97.7,326.5]
Canvasback	2	0.02	4.3	[0.0,14.0]
Redhead	63	0.46	147.8	[53.4,268.8]
Wood Duck	104	0.97	221.5	[250.6,573.1]
Lesser Scaup	21	0.20	44.7	[8.3,99.1]
Bufflehead	126	1.18	268.4	[137.7,434.3]
Pintail	1	0.01	2.13	[0.0,7.0]
Canada Goose	478	4.47	1018.3	[640.8,1476.5]
Snow Goose	4	0.03	8.5	[0,22.1]

2016 BIG GAME HARVEST

ELK

In 2016, the Sault Ste. Marie Tribe of Chippewa Indians issued one either sex elk tag and three antlerless elk tags. All these tags were filled by members selected during the 2016 elk hunt.

BEAR

Table 8. 2016 bear permits and harvest by management unit

BMU	Permits Issued	Total Harvest
Baraga	10	2
Drummond	1	1
Gwinn	56	8
Newberry	134	22
Baldwin	11	4
Gladwin	1	0
Red Oak	91	12

WHITETAIL DEER

Sault Ste. Marie Tribe of Chippewa Indians issued 4,122 deer licenses in 2016. At the time that this report was developed, IFWD had received 1,958 harvest reports back or about 48%. Approximately 72.3% (1,416) of those reporting actually hunted deer. The total estimated harvest for 2016 is 2,766 deer (95% confidence interval from 2,596.7 to 2,942.7 deer).

This estimate is based on a mean harvest per hunter of 0.93 deer. Actual harvest per hunter varies from 0 to 5 deer. Approximately 27.7% of our reporting hunters did not hunt deer in 2016. Many hunters (approximately 43.4%, or 1,787.4) that pursued deer in 2016 were unsuccessful in their efforts (Figure 1). Approximately 32.9% (1356.5 hunters) of hunters harvested 1 deer, 15.6% (643.3 hunters) harvested 2 deer, and 5.3% (218.3 hunters) harvested 3 deer (Figure 1). Therefore, although all hunters can receive 5 harvest tags, very few members who hunted deer actually harvested 5 (1.5% or 61.1 hunters), or even 4 (1.3% or 55.3 hunters), deer (Figure 1).

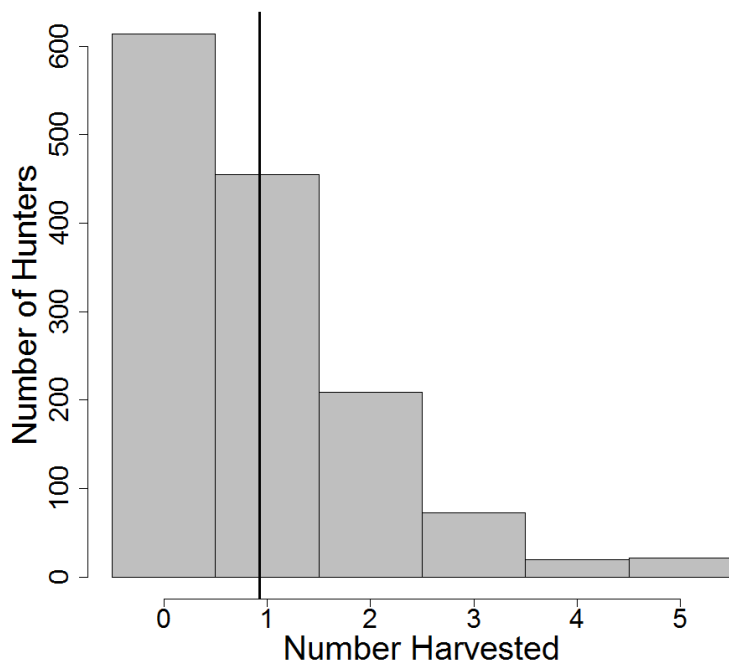


Figure 1. estimated number of hunters harvesting a given number of deer in 2016. Mean harvest per hunter (0.93) is plotted as a vertical line for reference.

In 2016, an estimated 54.5% (95% confidence interval from 21.8% to 49%) of harvested deer were bucks.

Overall harvest increased during the 2016 deer season, with the largest increases in the Upper Peninsula. The geographic distribution of Sault Ste. Marie Tribe of Chippewa Indians' 2016 harvest by county is listed in Table 8.

Table 9. 2016 whitetail deer harvest by county

County	Reported Harvest	Percent of Harvest	Estimated Harvest	Percent Change from 2015	Harvest per mile ²	Estimated doe harvest
Alger	43	3.3	90.8	22.88	0.10	40.1
Alpena	2	0.2	4.2	100.00	0.01	4.2
Antrim	6	0.5	12.7	7.17	0.03	8.4
Benzie	13	1.0	27.5	16.10	0.09	14.8
Charlevoix	7	0.5	14.8	-58.32	0.04	8.4
Cheboygan	124	9.5	261.8	-11.41	0.37	136.2
Chippewa	193	14.7	407.5	7.72	0.26	130.9
Clare	0	-	-	-100.00	-	-
Crawford	13	1.0	27.5	132.19	0.05	18.3
Delta	140	10.7	295.6	17.67	0.25	120.0
Emmet	67	5.1	141.5	-16.02	0.30	73.9
Grand Traverse	15	1.1	31.7	78.61	0.07	10.6
Ionia	1	0.1	2.1	-64.28	0.00	2.1
Isabella	2	0.2	4.2	-71.42	0.01	2.1
Kalkaska	25	1.9	52.8	-18.81	0.09	31.7
Kent	3	0.2	6.3	-28.56	0.01	0.0
Lake	16	1.2	33.8	90.52	0.06	14.8
Leelanau	5	0.4	10.6	-60.31	0.03	6.3
Luce	50	3.8	105.6	42.89	0.12	62.5
Mackinac	227	17.3	479.3	60.57	0.47	223.7
Manistee	6	0.5	12.7	-28.56	0.02	8.4
Marquette	20	1.5	42.2	104.13	0.02	29.6
Mason	19	1.5	40.1	-32.13	0.08	27.5
Mecosta	11	0.8	23.2	57.18	0.04	4.2
Missaukee	10	0.8	21.1	19.07	0.04	12.7
Montcalm	7	0.5	14.8	25.03	0.02	6.3
Montmorency	6	0.5	12.7	7.17	0.02	2.1
Muskegon	8	0.6	16.9	-4.74	0.03	6.3
Newaygo	27	2.1	57.0	-12.32	0.07	29.6
Oceana	19	1.5	40.1	-38.30	0.07	23.2
Osceola	12	0.9	25.3	185.78	0.04	8.4
Oscoda	1	0.1	2.1	100.00	0.00	0.0
Otsego	16	1.2	33.8	-23.79	0.07	14.8
Ottawa	2	0.2	4.2	-52.37	0.01	2.1
Presque Isle	28	2.1	59.1	11.14	0.09	25.3
Roscommon	7	0.5	14.8	-37.49	0.03	4.2
Schoolcraft	149	11.4	314.6	45.83	0.27	133.0
Wexford	10	0.8	21.1	-45.04	0.04	10.6

Approximately 52.6% of the 2016 deer harvest took place in the month of November. Harvest in October and December accounted for 16.5% and 24.4%, respectively. September and January harvest accounted for another 4.6% and 2.0%, respectively. Most of the deer harvest took place in the first two weeks after the quiet period (48.4%, Figure 2).

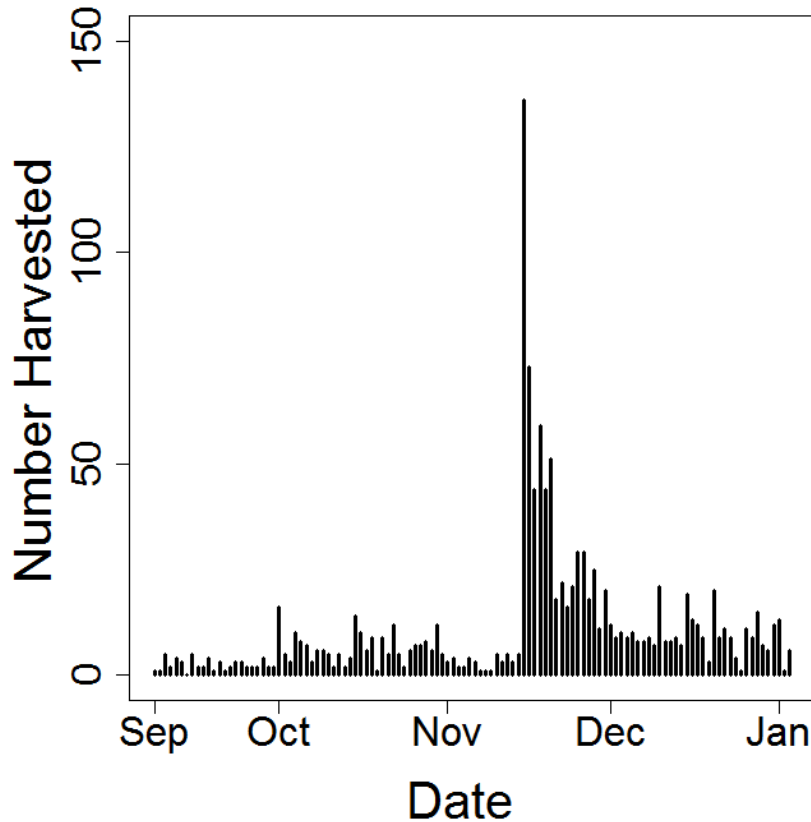


Figure 2. Number of deer harvested by day throughout the 2016 season

2016 GATHERING ACTIVITIES

In 2016, approximately 5.8% of members reported gathering activities in the 1836 Treaty Ceded Territory. On federal, state, or private land members gathered balsam, beech wood, beefsteak mushrooms, birch bark, blackberries, blueberries, blueberry root, cattail leaves, cedar, cedar bark, cedar boughs, chaga, chanterelle mushrooms, conifer boughs, cranberries, fiddlehead fern, firewood, fruits, fungus mushrooms, greens, hazelnuts, jack pine roots, leeks, lobster mushrooms, maple, maple sap, maple saplings, mushrooms, morel mushrooms, old man in the woods mushrooms, oyster mushrooms, pine boughs, pine cones, popular mushrooms, raspberries, sage, service berries, strawberries, stump mushrooms, sweet fern, sweetgrass, wild ginger, wild ginger root, wintergreen, white pine needles, and yarrow.