

Wisconsin Black Bear Harvest Report 2016

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Abstract

Wisconsin bear hunters killed 4,682 black bears during the 2016 season. This was 11.5% higher than the 2015 kill of 4,198 bears. The 2016 kill was comprised of 49% males and 51% females. The three leading counties of kill were Bayfield, Washburn, and Douglas.

Background

Wisconsin requires non-Chippewa hunters to obtain a bear harvest permit to kill a bear. The state is divided into four Bear Management Zones (BMZ, Figure 1), and hunters are required to apply for a permit within one of those zones. Kill permits are distributed through a preference point system giving unsuccessful applicants who applied, but did not receive a permit in previous years, the first chance to receive a kill permit the following year. Each kill permit allows the taking of one adult bear not accompanied by a cub or cubs in the specified zone.

Wisconsin's bear season has opened on the first Wednesday after Labor Day since the 2000 season. The 2016 bear season ran from 7 September through 11 October (35 days). In the northern 1/3rd of the state (BMZ A, B and D), hunting with the use of bait was allowed 7 September- 4 October while the use of dogs was allowed during 14 September – 11 October. Hunters in the southern 2/3rds of the state (BMZ C) could hunt the entire 35-day season with the use of bait and all methods not utilizing dogs.

Methods

Wisconsin requires non-Chippewa bear hunters to register all bear. Historically, bear were registered at designated DNR registration stations. Electronic registration of bear began in 2015 and continued again this year; all bear were registered through an automated telephone system or through the DNR registrations website. To complete legal registration, all hunters were required to submit via mail an upper first premolar for age analysis. Data on bear harvested by Chippewa tribal members on ceded lands were obtained from the Great Lakes Indian Fish and Wildlife Commission (GLIFWC). All kill data is summarized using the Statistical Analysis System (SAS).

Results

A total of 109,221 people applied for a record 11,520 black bear harvest permits in 2016. The number of applicants increased by 0.1% and the number of permits increased 7.8% between 2015 and 2016 (Tables 1 and 10). A total of 11,520 permits were offered to hunters prior to the season. A statewide tetracycline mark-recapture study in 2006 and 2011 resulted in an increased population estimate from previous population estimates for the state. While bear numbers have dropped in parts of the state, the bear population has not declined in response to management actions taken in the Northwest area of the state (Zone D). Quota and permits have remained high in these areas.

During the 2016 season, 11,520 hunters killed 4,682 black bears (40.6% success rate), compared to 4,198 taken in 2015. Males comprised 49.3% (2,310), females 50.6% (2,371) of the harvest (Table 2, Figure 2).

The Northern Region had the highest bear kill (3,643) followed by Northeast (532), and West Central (507, Table 2). The most bears were shot in Zone D (1,624) followed by Zones A (1,141), C (1,067), and B (850) (Table 3 and Figure 1). The five leading counties of kill were Bayfield (488), Washburn (291), Douglas (285), Price (283), and Rusk (279) (Table 4, Fig. 3). Black bear kill by game management unit can be found in Table 5 and Figure 4. This was the second year that bear hunters could register their kills without having to visit an in-person registration station. Many hunters still left the game management unit of harvest blank. This year's harvest was the second highest in the history of the state.

The number of bear taken over bait alone (3,464; Table 6) was greater than the number shot over dogs (1,060; includes bear shot over dogs and bait). One hundred twelve bear were taken without the use of dogs or bait. Gun hunters took a total of 3,874 bear, while archers killed 594; 169 bear were killed with a crossbow (Table 6). Table 7 and Figure 5 summarize the historical Wisconsin black bear kill from 1957 through 2016.

Chippewa hunters killed 45 bear in 2016 (Tables 8 and 9); this was five more than the 40 killed in 2015. More information on the Chippewa bear kill can be obtained by contacting the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), P.O. Box 9, Odanah, WI 54861.

A total of 790 black bear complaints were filed from January-December 2016. This was slightly less than the number of complaints (825) filed in 2015. As a result, 585 bear were captured and relocated from problem areas. This was more than the 519 that were moved in 2015.

Five nuisance bear shooting permits and forty-seven agricultural damage bear shooting permits were issued in twelve different counties during the spring, summer, and fall of 2016. Three hundred twenty eight kill tags were issued to these permit holders, tag numbers ranged from 1 to 11 for each permit. One hundred eighteen bear were killed under the agriculture damage shooting permits. No bear were killed on nuisance permits in 2016. In addition to agriculture damage and nuisance permits issued in 2016, seventy-five tags were issued with fourteen bear harvested under a 2-year pilot project focused on reducing bear conflicts around the Village of Grantsburg in Burnett County. The pilot project will be conducted in 2016 and 2017. In 2015, thirty agriculture damage bear shooting permits were issued with at least sixty-five bear being killed. One nuisance bear shooting permit was issued in 2015 with no bear being killed under that permit.

The Wisconsin corn crop was at or ahead of normal crop development in 2016. This meant that most areas had corn that was past the milk stage prior to the bear season opening. As is usual, a predominance of natural foods during the first part of the bear hunting season may have caused bears to visit bait sites with less regularity and/or reduced bear movements. Despite the abundance of natural foods, bait stations continued to be visited by bears with at least some degree of activity throughout much of the hunting season. Much of September saw above average temperatures and precipitation through much of the season. Warm and wet conditions may have limited

hunter efforts and bear movements, especially early in the season. Later in the season temperatures and precipitation events were more conducive to hunters pursuing bears. The 2016 bear kill of 4,682 was the second highest on record but below the DNR harvest goal of 4,750 bears. Hunter success in 2016 was 41%, below the long-term average of 54%.

The DNR Black Bear Advisory Committee, with support from GLIFWC, USFS, Wisconsin Bear Hunters Association, Wisconsin Wildlife Federation, and the Wisconsin Conservation Congress established a harvest goal of 5,000 bears for the 2017 season. A total of 12,850 Black Bear harvest permits will be available to hunters to achieve this goal.

Table 1. *Harvest goal, number of permits issued, bear kill and percent success, by zone for the 2016 black bear season.*

Zone	Harvest Goal	Permits Issued	Black Bear Kill	% of Quota
A	1,000	1,655	1,141	114.1%
B	850	1,195	850	100.0%
C	1,300	6,190	1,067	82.1%
D	1,600	2,480	1,624	101.5%
Unknown				
Total	4,750	11,520	4,682	98.6%

Table 2. *Black bear kill by DNR region, 2016.*

Region	Males	Females	Unreported	Total
Northeastern	272	260	0	532
Northern	1,776	1,866	1	3,643
West Central	262	245	0	507
Unknown	0	0	0	0
Total	2,310	2,371	1	4,682

Table 3. *Black bear kill by zone, 2016.*

Zone	Males	Females	Unreported	Total
A	592	549	0	1,141
B	364	485	1	850
C	565	502	0	1,067
D	789	835	0	1,624
Unknown	0	0	0	0
Total	2,310	2,371	1	4,682

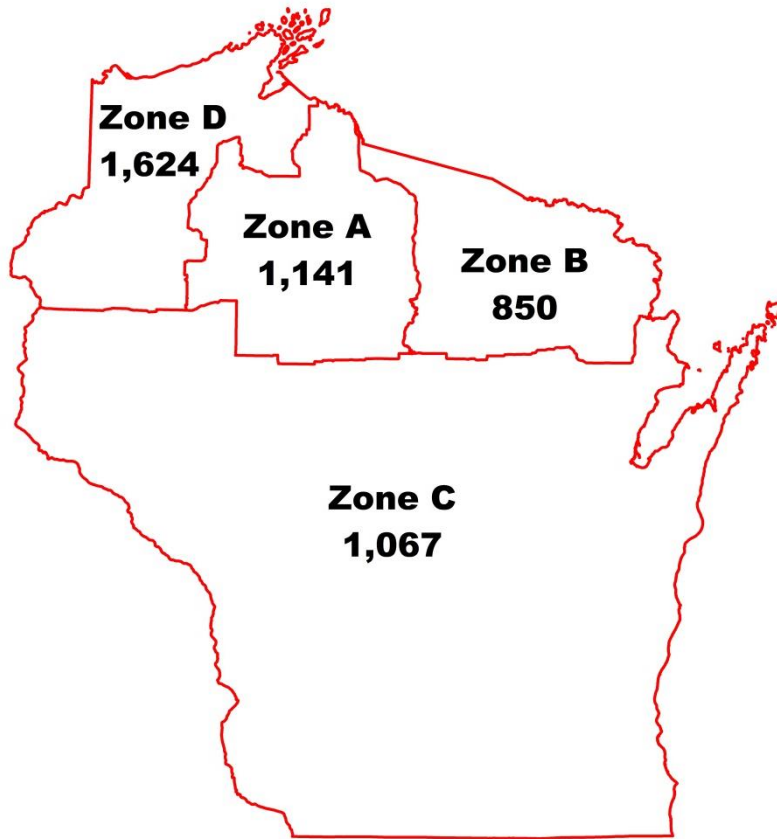


Figure 1. The 2016 black bear kill by zone.

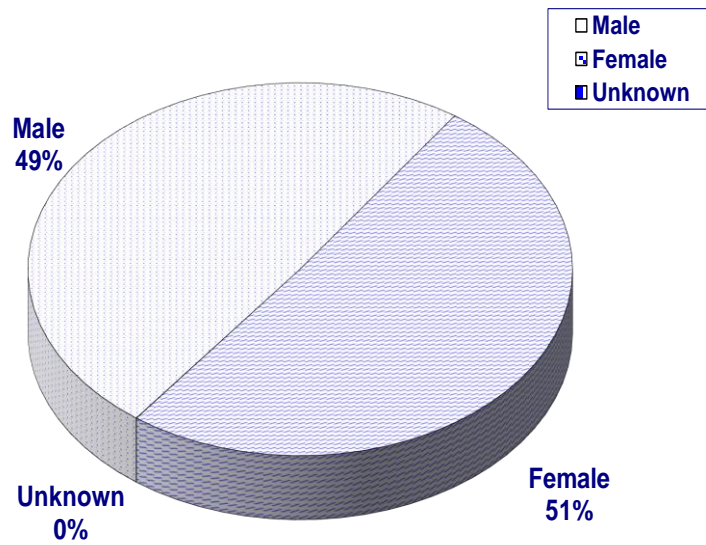


Figure 2. The 2016 black bear harvest by sex.

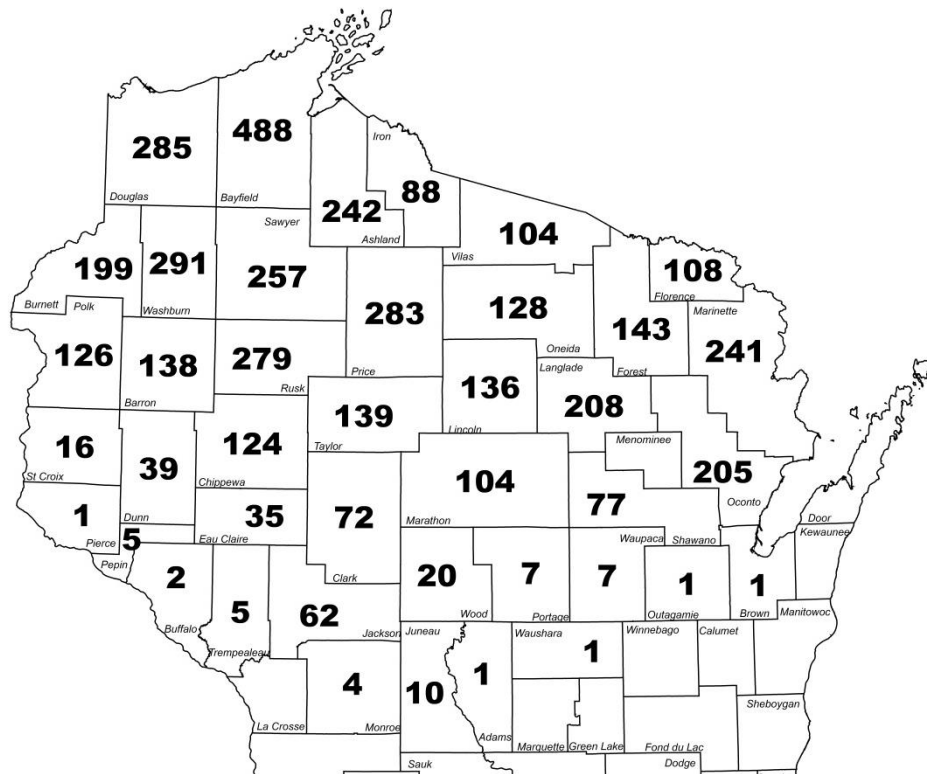


Figure 3. The 2016 black bear kill by county.

Table 4. The 2016 black bear kill by county and sex.

County	Un-				County	Un-			
	Males	Females	reported	Total		Males	Females	reported	Total
Adams	1	0	0	1	Oconto	98	107	0	205
Ashland	135	107	0	242	Oneida	54	74	0	128
Barron	76	62	0	138	Outagamie	1	0	0	1
Bayfield	236	252	0	488	Pepin	3	2	0	5
Brown	1	0	0	1	Pierce	0	1	0	1
Buffalo	2	0	0	2	Polk	60	66	0	126
Burnett	91	108	0	199	Portage	6	1	0	7
Chippewa	60	64	0	124	Price	138	145	0	283
Clark	26	46	0	72	Rusk	141	138	0	279
Douglas	136	149	0	285	St. Croix	15	1	0	16
Dunn	21	18	0	39	Sawyer	123	134	0	257
Eau Claire	10	25	0	35	Shawano	41	36	0	77
Florence	41	67	0	108	Taylor	82	57	0	139
Forest	69	74	0	143	Trempealeau	4	1	0	5
Iron	50	38	0	88	Vilas	51	52	1	104
Jackson	38	24	0	62	Washburn	134	157	0	291
Juneau	7	3	0	10	Waupaca	5	2	0	7
Langlade	89	119	0	208	Waushara	0	1	0	1
Lincoln	70	66	0	136	Wood	10	10	0	20
Marathon	57	47	0	104	Total	2,310	2,371	1	4,682
Marinette	126	115	0	241					
Monroe	2	2	0	4					

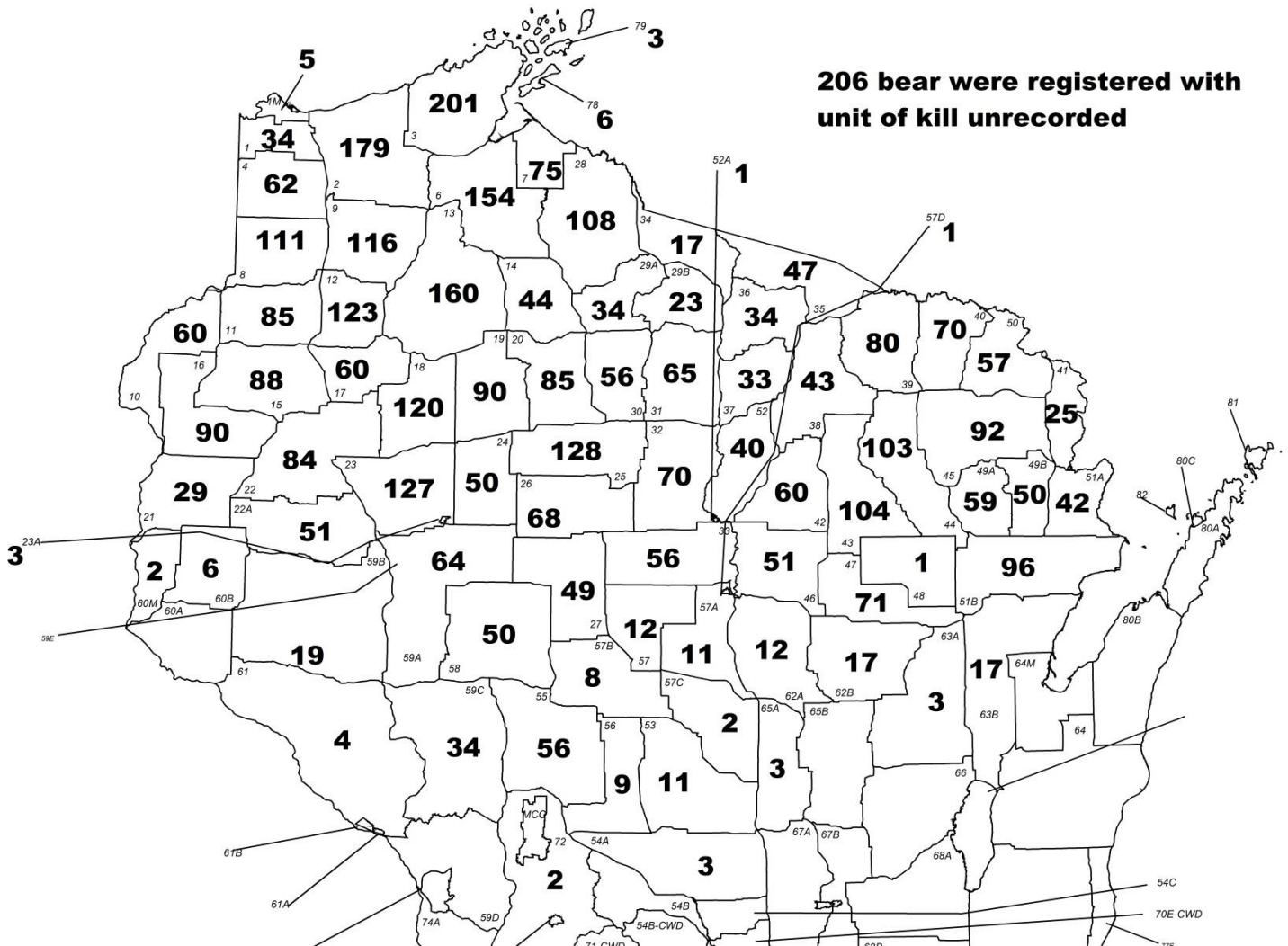


Figure 4. The 2016 black bear kill by game management unit.

Table 5. *The 2016 black bear harvest by game management unit and sex.*

Unit	Males	Females	Unks	Total	Unit	Males	Females	Unks	Total
1	22	12	0	34	40	25	45	0	70
01M	3	2	0	5	41	11	14	0	25
2	90	89	0	179	42	27	33	0	60
3	85	116	0	201	43	50	54	0	104
4	32	30	0	62	44	53	50	0	103
5	1	0	0	1	45	37	55	0	92
6	83	71	0	154	46	27	24	0	51
7	49	26	0	75	47	35	36	0	71
8	55	56	0	111	48	0	1	0	1
9	49	67	0	116	49A	19	40	0	59
10	24	36	0	60	49B	29	21	0	50
11	42	43	0	85	50	28	29	0	57
12	49	74	0	123	51A	28	14	0	42
13	75	85	0	160	51B	53	43	0	96
14	27	17	0	44	52	14	26	0	40
15	41	47	0	88	52A	0	1	0	1
16	45	45	0	90	53	5	6	0	11
17	25	35	0	60	54A	2	1	0	3
18	68	52	0	120	55	27	29	0	56
19	45	45	0	90	56	5	4	0	9
20	49	36	0	85	57	7	5	0	12
21	18	11	0	29	57A	6	5	0	11
22	41	43	0	84	57B	7	1	0	8
22A	30	21	0	51	57C	1	1	0	2
23	61	66	0	127	57D	0	1	0	1
23A	3	0	0	3	58	13	37	0	50
24	25	25	0	50	59A	33	31	0	64
25	51	77	0	128	59B	7	12	0	19
26	39	29	0	68	59C	22	12	0	34
27	23	26	0	49	60B	6	0	0	6
28	56	52	0	108	60M	2	0	0	2
29A	21	13	0	34	61	4	0	0	4
29B	12	11	0	23	61C	1	0	0	1
30	29	27	0	56	62A	6	6	0	12
31	34	31	0	65	62B	10	7	0	17
32	45	25	0	70	63A	2	1	0	3
33	33	23	0	56	63B	9	8	0	17
34	10	7	0	17	65A	1	2	0	3
35	22	25	0	47	72	0	2	0	2
36	15	19	0	34	78	3	3	0	6
37	10	23	0	33	79	2	1	0	3
38	19	24	0	43	Unknown	97	108	1	206
39	40	40	0	80	Total	2,310	2,371	1	4,682

Table 6. The 2016 black bear kill by hunting method and weapon type (does not include Chippewa harvest of 45 bear).

Method	Weapon			Total
	Bow	Crossbow	Gun	
Dogs	10	2	663	675
Bait	569	162	2,733	3,464
Dogs and Bait	10	5	370	385
None	5	0	107	112
Unknown	0	0	1	1
Total	594	169	3,874	4,637

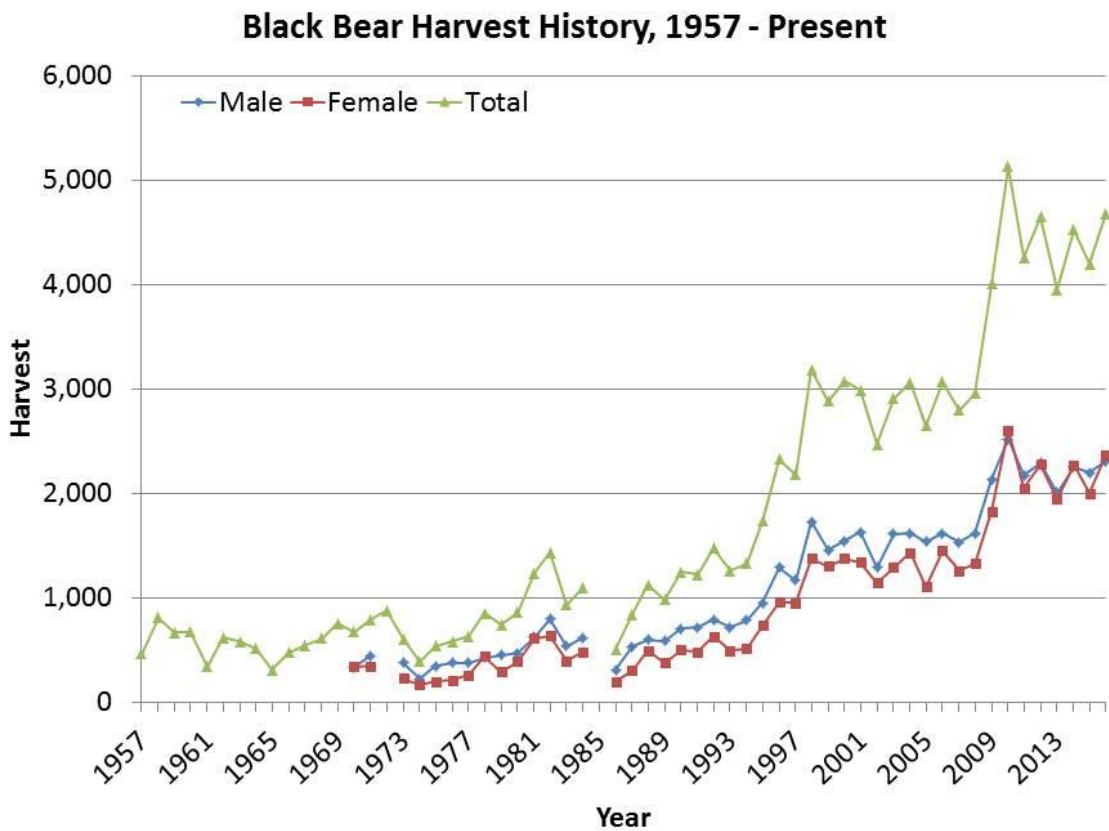


Figure 5. Black bear kill, 1957-2016.

Table 7. Black bear kill by sex, 1957-2016.

Year	Male	Female	Unk	Total	Year	Male	Female	Unk	Total
1957	---	---		460	2008	1,616	1,324	15	2,955
1958	---	---		811	2009	2,135	1,828	46	4,009
1959	---	---		665	2010	2,519	2,602	12	5,133
1960	---	---		675	2011	2,171	2,047	39	4,257
1961	---	---		337	2012	2,287	2,275	84	4,646
1962	----	---		617	2013	2,005	1,888	59	3,952
1963	---	---		579	2014	2,255	2,210	61	4,526
1964	---	---		511	2015	2,198	2,000	0	4,198
1965	---	---		308	2016	2,310	2,371	1	4,682
1966	---	---		475					
1967	---	---		541					
1968	---	---		613					
1969	---	---		752					
1970	331	341		672					
1971	444	347		791					
1972	---	---		878					
1973	376	230		606					
1974	224	166		390					
1975	344	195		539					
1976	373	206		579					
1977	375	256		631					
1978	426	436	10	872					
1979	449	288		737					
1980	469	386		855					
1981	624	610		1,234					
1982	797	636		1,433					
1983	539	395		934					
1984	617	480		1,097					
1985	No	Season							
1986	308	195		503					
1987	533	304		837					
1988	601	494	30	1,125					
1989	584	375	19	978					
1990	705	501	41	1,247					
1991	715	480	24	1,219					
1992	789	631	54	1,474					
1993	715	494	49	1,258					
1994	781	513	34	1,328					
1995	953	735	49	1,737					
1996	1,288	955	82	2,325					
1997	1,165	950	63	2,178					
1998	1,727	1,378	79	3,184					
1999	1,456	1,301	124	2,881					
2000	1,543	1,376	156	3,075					
2001	1,632	1,336	18	2,986					
2002	1,290	1,143	38	2,471					
2003	1,613	1,288	4	2,905					
2004	1,618	1,433	12	3,063					
2005	1,537	1,107	1	2,645					
2006	1,615	1,448	5	3,068					
2007	1,528	1,261	8	2,797					

Table 8. *The 2016 Tribal black bear kill by game management unit and sex¹.*

Unit	Male	Female	Unknowns	Total
01	1	0	0	1
02	2	1	0	3
03	5	2	0	7
04	1	0	0	1
05	1	0	0	1
06	2	0	0	2
08	0	1	0	1
10	0	1	0	1
11	1	2	0	3
12	1	0	0	1
14	0	1	0	1
15	0	1	0	1
26	2	0	0	2
29B	1	0	0	1
30	1	0	0	1
36	1	1	0	2
37	1	2	0	3
38	1	1	0	2
40	1	0	0	1
43	1	1	0	2
44	1	3	0	4
45	1	2	0	3
Unknown	0	0	1	1
Total	25	19	1	45

¹ These data are included in the statewide totals.

Table 9. *The number of black bear harvest permits issued and the number of applicants, 1974-2017.*

Year	Residents	Non-residents	No. Permits Issued	No. of Applicants
1974	3,459		3,459	3,459
1975	4,116		4,116	4,116
1976	4,899		4,899	4,899
1977	5,025		5,025	5,025
1978	6,283		6,283	6,283
1979	5,612	179	5,791	5,791
1980	6,352	171	6,523	6,523
1981	7,247	241	7,488	7,488
1982	8,142	224	8,366	8,366
1983	7,077	218	7,295	7,295
1984	6,439	320	6,759	6,759
1985		Season	Closed	
1986			840	8,289
1987			1,730	10,203
1988			1,663	10,208
1989			2,020	13,734
1990			2,825	15,988
1991			2,560	17,668
1992			2,620	19,415
1993			2,110	22,555
1994			2,175	25,799
1995			2,710	30,086
1996			4,570	35,356
1997			4,700	41,969
1998			5,860	44,928
1999			6,014	50,938
2000			6,598	50,601
2001			5,681	53,508
2002			4,985	54,879
2003			4,710	56,944
2004			4,741	61,726
2005			4,549	66,777
2006			4,277	68,821
2007			4,405	80,213
2008			4,660	86,138
2009			7,310	95,384
2010			8,910	97,467
2011			9,005	103,854
2012			9,015	104,391
2013			8,560	106,573
2014			10,340	108,271
2015			10,690	109,088
2016			11,520	109,221
2017			12,850	112,993 ¹

¹ Preliminary data