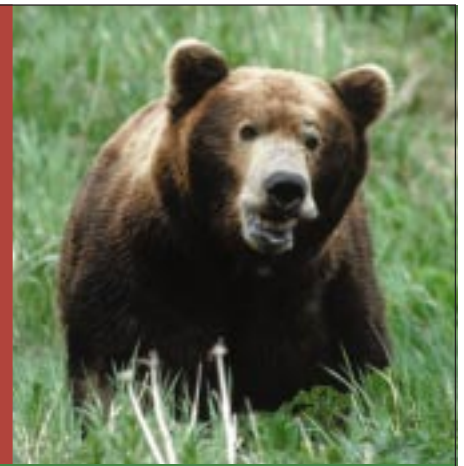




*Wildlife
Management
Division*

1997-98 Black Bear Harvest Report



Prepared by David Goad, Black Bear Program Coordinator

Fall 1998

The 1997 black bear seasons in Arkansas were October 1-November 30 for archery/crossbow; October 18-22 for muzzleloaders; and November 1-5 and November 8-24 for modern guns. Only the northwest quadrant of the state is designated as the bear hunting zone. The seasonal bag limit was one by any legal method. Neither the use of dogs nor the use of bait, as an attractant, was allowed to aid in the harvest of bears. One hundred eighty-seven (187) bears were legally harvested and reported in 1997—109 males (58%) and 78 females (41%). Johnson County led the county totals with 26 bears, followed by Pope (23); Franklin (21); Newton (17); Logan (11); Yell (10); and Perry, Scott, Baxter, and Searcy counties (7 each). The Ozark Region produced 74% of the total harvest (138) and the Ouachita Region produced 26% (49).

INTRODUCTION. The Arkansas black bear population was nearly

extirpated by the early 1900s due to over-exploitation from unregulated hunting and habitat alteration from lumbering and agriculture activities. In 1915 the Arkansas Game and Fish Commission was created and in 1927 bear hunting was closed. Between 1958 and 1968 approximately 254 bear were relocated to Arkansas' interior highlands from Minnesota and Manitoba, Canada. In 1980, after a 52-year moratorium, bear hunting was resumed in Arkansas. The objectives of the hunt were to provide recreational opportunity to hunters and to collect biological data that would help manage this valuable resource.

The 1997 black bear seasons were (Archery/Crossbow) October 1 - November 30; (Muzzleloader) October 18-22; (Modern Gun) November 1-5 and November 8-24. The bear zone (see Table 1 and the attached bear zone map) included deer zones 1,2,5,6,9,10,11, and that part of zone 3 north of the White River and west of

highways 56 and 223. As in all previous seasons, dogs and baiting were prohibited and checking of harvested bears was required within the county where taken. Special bear hunting permits were not required.

METHODS. Harvested bears were checked and biological data collected at AGFC big game check stations. To determine the age of each bear, a first upper premolar was removed and placed in a supplied coin envelope. The extracted teeth were sent to Milltown, Montana, to Matson's Laboratory for tooth sectioning and aging by cementum analysis techniques.

RESULTS AND DISCUSSION.

During the 1997 bear season there were 61 days available for archery/crossbow hunting, 5 days available for muzzleloader hunting, 5 days available for bear-only modern gun hunting, and 17 days available for combined deer and bear hunting with modern guns.



A total of 187 bears were harvested during the 1997 season, 109 males (58%) and 78 females (41%). This total is down almost 10% from the 1996 record total of 207 (Table 2).

Modern guns accounted for 49% of the harvest, followed by archery equipment (23%), muzzleloaders (20%), and crossbows (8%). Sixty-five bears (35%) were taken during the modern gun bear season coinciding with the first 17 days of modern gun deer season (Nov. 8-24). Another 53 (28%) were taken during the October 1-November 30 archery/crossbow season; 41 (22%) were taken during the October 18-22 muzzleloader season; and 28 (15%) were taken during the November 1-5 bear-only modern gun season.

The Ozark Mountain Region produced 74% of the harvest (138 bears), as compared to the Ouachita Mountain Region's 26% (49). There were 73 bears (39% of the total) harvested on AGFC wildlife management areas (WMAs). Reported harvest on WMAs were 36 on White Rock (19% of the statewide total harvest), 22 on Piney Creeks (12%), six on Sylamore, five on Mt. Magazine, three on Winona, and one on Gulf Mountain.

Bears were harvested in twenty-two Arkansas counties, three less than in 1996. No reported harvest occurred in the bear-zone counties of Pulaski, Carroll and Washington. Johnson County produced the greatest number (26), followed by Pope (23); Franklin (21); Newton (17); Van Buren (12); Crawford (11); Logan (11); Yell (10); Perry, Scott, Baxter and Searcy (7 each); Polk (5); Madison and Stone (4 each); Garland (3); and Montgomery, Saline, Sebastian, Boone, Conway, and Izard (2 each).

The total number of bears harvested, relative to the amount of habitat available and the estimated bear population in the Ozark and Ouachita Mountains is low. There are approximately 2.9 million acres of national forest land in Arkansas. In 1996, one bear

was harvested per 14,010 acres of national forest, or one bear per 21.9 mi. In 1997, one bear was harvested per 15,508 acres of national forest, or one bear per 24.2 mi. The reduced harvest from 1996 to 1997 probably was due to an excellent mast crop in both the Ozark and Ouachita National Forests. When mast is available forest-wide, bears are less vulnerable to hunters because bears do not have to concentrate their feeding efforts in one area, thus visible signs of their presence are less apparent.

From 1980 through 1997, 1,126 bears have been harvested, 560 males (50%) and 566 females (50%). This is an ideal sex distribution. The proportion of females must remain below 56% (our 18-year average is 50%) to maintain a stable sex distribution.

As statewide bear populations increase, so should harvest goals. An annual harvest goal of 200 bears was set in 1993; this goal was reached in 1996. Because bear populations continue to increase in Arkansas, AGFC now is updating its goals for bear populations and bear harvest levels.

Table 1. Number and sex of bears harvested in Arkansas, 1980-97

<u>Year</u>	<u>Total number harvested</u>	<u>Males (%)</u>	<u>Females (%)</u>
1980	5	3 (60)	2 (40)
1981	20	4 (20)	16 (80)
1982	19	8 (42)	11 (58)
1983	31	17 (55)	14 (45)
1984	31	18 (58)	13 (42)
1985	23	9 (39)	14 (61)
1986	13	7 (54)	6 (46)
1987	7	3 (43)	4 (57)
1988	14	8 (57)	6 (43)
1989	30	12 (40)	18 (60)
1990	19	11 (58)	8 (42)
1991	102	35 (34)	67 (66)
1992	44	25 (57)	19 (43)
1993	115	53 (46)	62 (54)
1994	126	64 (51)	62 (49)
1995	133	63 (47)	70 (53)
1996	207	111 (54)	96 (46)
1997	<u>187</u>	<u>109 (58)</u>	<u>78 (42)</u>
Totals	1126	560 (50)	566 (50)

Table 2. Bear hunting season dates and regulations from 1980-97.

<u>Year</u>	<u>Season dates</u>	<u>Permit fees</u>	<u>Areas open to hunting</u>
1980	Dec. 2-5	\$25.00	Selected WMAs
1981	Oct. 26-Nov. 1	\$10.00	Wildlife Mgt. Zones 1,2,2A,5,11
1982	Oct. 16-22	\$10.00	Wildlife Mgt. Zones 1,2,5,11
1983	Nov. 5-8	Free	Designated Bear Zone
1984	Nov. 3-6	Free	Designated Bear Zone
1985	Nov. 2-5	None Required	Designated Bear Zone
1986	Dec. 4-7	None Required	Designated Bear Zone
1987	Dec. 3-6	None Required	Designated Bear Zone
1988	Oct. 29-Nov. 1	None Required	Designated Bear Zone
1989	Oct. 28-31	None Required	Designated Bear Zone
1990	Nov. 6-10	None Required	Designated Bear Zone
1991	Oct. 1-31 (Archery) Oct. 19-23 (Muzzleloader) Oct. 12-17 & Nov. 9-10 (Modern Gun)	None Required	Designated Bear Zone
1992	Nov. 1-15 (Archery) Nov. 7-10 & 14-15 (Modern Gun)	None Required	Designated Bear Zone
1993	Nov 6- Dec 31 (Archery/Crossbow) Nov 6-9 & 13-21 (Modern Gun) Dec. 25-Jan. 2, 1994 (Muzzleloader)	None Required	Designated Bear Zone
1994	Oct. 19-31 (Archery/Crossbow) Nov. 5-8 & 12-20 (Modern Gun) Dec. 24-Jan.1, 1995 (Muzzleloader)	None Required	Designated Bear Zone
1995	Oct. 28-Dec. 31 (Archery/Crossbow) Nov. 4-7 & 11-19 (Modern Gun) Dec. 23-31 (Muzzleloader)	None Required	Designated Bear Zone
1996	Oct. 1-Nov. 30 (Archery/Crossbow) Oct. 19-23 (Muzzleloader) Nov. 2-6 & 9-25 (Modern Gun)	None Required	Designated Bear Zone
1997	Oct. 1-Nov. 30 (Archery/Crossbow) Oct. 18-22 (Muzzleloader) Nov. 1-5 & 8-24 (Modern Gun)	None Required	Designated Bear Zone

Table 3. 1997 BEAR HARVEST BY W.M.A.

W.M.A.	ARCHERY/XBOW		MUZZLELOADER		MODERN GUN		MODERN GUN		TOTAL MALE	TOTAL FEMALE	GRAND TOTAL
	Oct. 1-Nov. 30 '97		Oct. 18-Oct. 22 '97		Nov. 1-Nov. 5 '97		Nov. 8-Nov. 24 '97		For W.M.A.	For W.M.A.	For W.M.A.
	Male	Female	Male	Female	Male	Female	Male	Female			
Gulf Mountain							1		1	0	1
Mt. Magazine	1	1	2				1		4	1	5
Piney Creeks	1	1	4	2	3	1	6	4	13	8	22
Sylamore	2	2					1	1	3	3	6
White Rock	7	3	4	4	7	2	3	6	21	15	36
Winona	1		1				1		3	0	3
TOTAL	12	7	11	6	10	3	12	11	45	27	73

Table 4. 1997 BEAR HARVEST BY COUNTY

COUNTY	ARCHERY/XBOW		MUZZLELOADER		MODERN GUN		MODERN GUN		TOTAL MALE	TOTAL FEMALE	GRAND TOTAL
	Oct. 1-Nov. 30 '97		Oct. 18-Oct. 22 '97		Nov. 1-Nov. 5 '97		Nov. 8-Nov. 24 '97		For County	For County	For County
	Male	Female	Male	Female	Male	Female	Male	Female			
Baxter	4	0					2	1	6	1	7
Boone	1		1						2	0	2
Conway		1					1		1	1	2
Crawford	1	1	2	1	1		2	3	6	5	11
Franklin	5	1	2	2	4	2	1	4	12	9	21
Garland	1	1					1		2	1	3
Izard			2						2	0	2
Johnson	4	2	4	1	5	2	5	3	18	8	26
Logan	4	1	2	1	1		1	1	8	3	11
Madison	1				1		2		4	0	4
Montgomery					1		1		2	0	2
Newton	3	2	2	1		3	3	3	8	9	17
Perry	3	3						1	3	4	7
Polk	1	1	2				1		4	1	5
Pope	1		3	2		1	5	11	9	14	23
Saline			1				1		2	0	2
Scott			2	1		1	2	1	4	3	7
Searcy							3	4	3	4	7
Sebastian	1	1							1	1	2
Stone		4							0	4	4
Van Buren	1	3	1	3	1	1	1	1	4	8	12
Yell	4	1	2				1	1	8	2	10
TOTAL	35	22	26	12	15	10	33	34	109	78	187

