

Trends in Resident and Non-resident Hunter Effort and Harvest for Bobcat in Mississippi: 1980-81 to 2010-11 Seasons

Prepared for the

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INTRODUCTION & METHODS

Self-administered mail surveys of resident hunters have been conducted intermittently since the 1947-48 Mississippi hunting season to estimate hunter effort and game harvest in Mississippi, with annual surveys (unless noted) starting in 1980-1981 season. Non-resident hunter surveys began on an annual basis in 1994 (unless noted).

Annual surveys were completed by the Human Dimensions & Conservation Law Enforcement Laboratory in the Forest & Wildlife Research Center at Mississippi State University from 2001 thru 2011 using mail survey methodology prescribed by Dillman (2000). This entailed an introductory letter being sent to hunters followed one-week later by another letter, questionnaire, and business reply envelope (i.e., a complete packet). Ten days after that, hunters were sent a reminder/thank you postcard. Non-respondents were sent a complete packet as necessary three and seven weeks after the postcard.

These surveys provide information to biologists and researcher to determine trends in total harvest, average seasonal harvest per hunter, average daily harvest per hunter, average persondays spent afield, total person-days spent afield, percent successful hunters, and the proportion of hunters seeking 13 different game species, and feral hog. This report includes mail survey data for bobcat (*Lynx rufus*, or commonly *felis rufus*) spanning from the 1980-81 hunting season to the 2010-11 hunting season for resident hunters, and data spanning from the 1994 hunting season to the 2010-11 hunting season for non-resident hunters.

This document will be updated annually with most recent data and will evolve to include other measures and information as that information is extracted from archived files. This report does not attempt to determine and describe trends in hunter effort and harvest. It is meant to provide the reader with the data for these estimates in an organized manner.

LITERATURE CITED

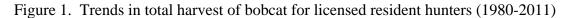
Dillman, D.A. 2000. *Mail and Internet Surveys: The Tailored Design Method*. 2nd Edition. New York: John Wiley and Sons, Inc.

RESULTS

TABLE 1. Mississippi bobcat hunting effort and harvest trends for licensed resident hunters (1980-2011)

(1980-2011) TOTAL SE OF AVERAGE AVERAGE PERCENT TOTAL AVERAGE TOTAL PERCENT									
	HARVEST	TOTAL HARVEST	DAILY KILL	SEASONAL HARVEST	SUCCESSFUL HUNTERS	MAN- DAYS	SEASONAL DAYS HUNTING	HUNTERS	OF TOTAL LICENCEES (A)
1981	3,312	568	0.24	1.15	77.6	11,119	4.61	2,882	1.1
1982	6,537	1,581	0.52	1.6	90	9,429	2.88	4,086	1.7
1983	5,869	1,045	0.13	1.00	78.7	32,525	7.40	5,869	2.2
1984	6,222	1,696	0.33	1.28	84.4	12,217	3.73	4,740	1.8
1985	8,063	1,561	0.37	1.48	89.6	12,907	3.23	5,451	2.1
1986	7,346	957	0.28	1.29	84.0	14,716	4.25	5,767	2.3
1987	9,411	1,837	0.12	1.18	78.7	54,191	9.34	7,973	3.1
1988	5,949	1,106	0.19	0.87	70.2	27,065	4.43	6,820	2.7
1989	-	-	-	-	-	-	-	-	-
1990	5,604	971	0.31	1.11	97.3	14,721	3.44	25,455	11.1
1991	6,156	1,061	0.46	1.10	89.6	10,857	2.21	10,794	4.7
1992	7,608	1,826	0.21	1.48	88.5	30,862	7.53	4,885	2.1
1993	6,279	907	0.30	1.05	85.2	17,293	3.61	5,395	2.3
1994	7,565	935	0.27	1.29	91.4	18,132	4.33	5,778	2.6
1995	7,252	1,196	0.15	1.33	90.3	35,933	9.44	5,439	2.5
1996	6,637	1,034	0.40	1.22	94.9	13,339	3.00	5,439	2.6
1997	6,360	833	0.40	1.04	83.1	37,660	3.00	6,046	2.9
1998	7,447	1,258	0.30	1.40	94.5	17,950	5.15	4,762	2.3
1999	9,817	1,942	0.22	1.46	89.7	34,505	6.41	6,775	3.3
2000	<u>-</u>	-	-	- 	-	-	-		-
2001	6,713	894.15	0.36	1.25	93.8	14,202	3.40	5,179	2.6
2002	3,482	651.7	0.13	0.97	83.3	17,592	6.96	3,482	1.7
2003	8,643	1,502.86	0.40	1.60	91.5	16,496	4.11	5,345	2.8
2004	6,516	1,255	0.24	1.35	96.8	13,161	5.11	4,392	2.3
2005	7,286	3,199	0.11	1.68	77.3	39,267	9.95	4,322	2.3
2006	6,261	1,031	0.20	1.21	87.5	19,043	5.4	4,927	2.8
2007	5,004	963	0.11	1.42	93.5	15,549	7.63	3,300	1.8
2008	7,594	1,460	0.2	1.35	91.7	27,814	6.54	5,207	2.9
2009	2,328	648	0.04	0.94	82.4	34,073	21.18	2,474	1.4
2010	7,379	1,347	0.22	1.49	90.2	18,678	5.64	4,802	2.9
2011	8,523	1,711	0.24	1.51	87.8	22,751	5.47	5,636	3.4

(A) Calculated as a percent of small game license holders only



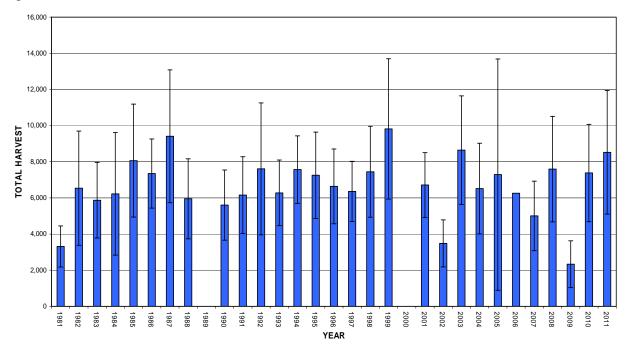


Figure 2. Trends in average daily kill of bobcat for licensed resident hunters (1980-2011)

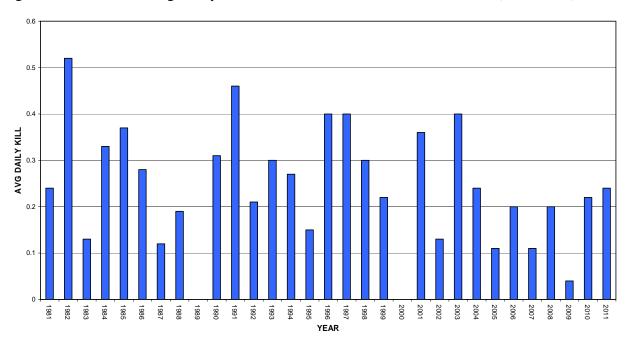


Figure 3. Trends in average seasonal harvest of bobcat for licensed resident hunters (1980-2011)

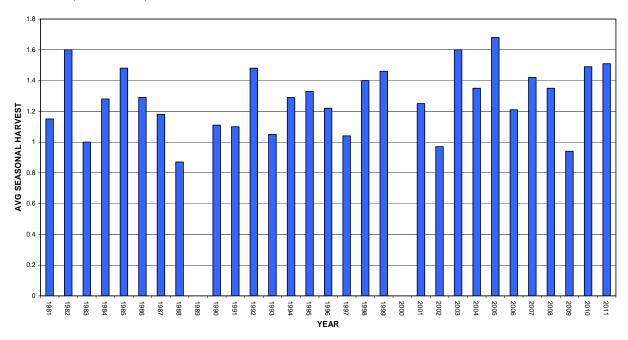
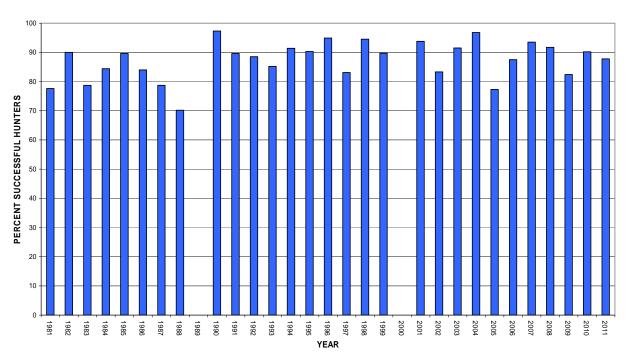
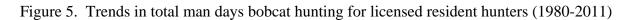


Figure 4. Trends in percent successful bobcat hunters for licensed resident hunters (1980-2011)





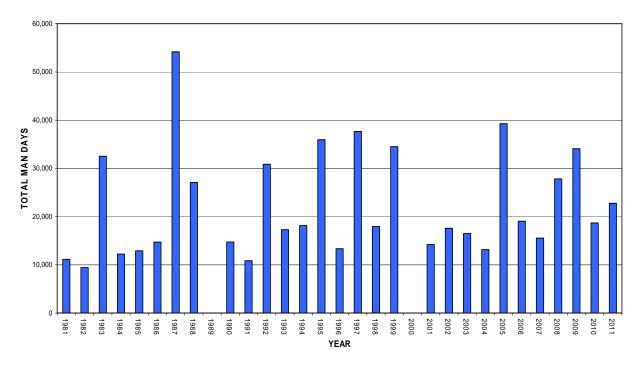
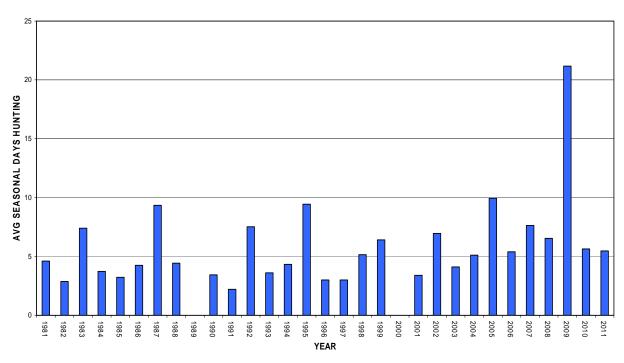
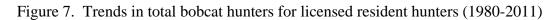


Figure 6. Trends in average seasonal days bobcat hunting for licensed resident hunters (1980-2011)





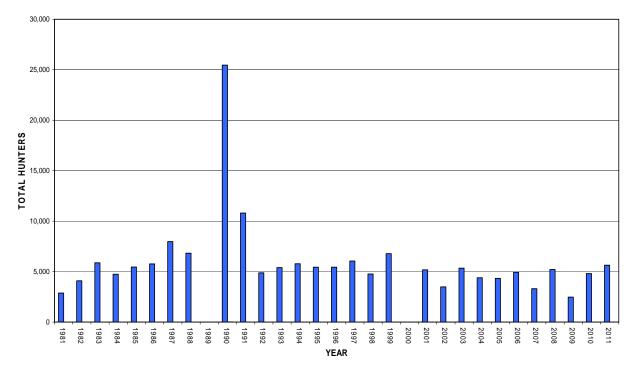


Figure 8. Trends in proportion of licensed resident hunters who hunted for bobcat (1980-2011)

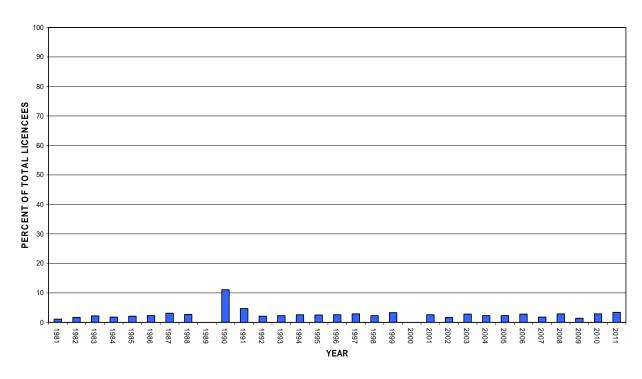


TABLE 2. Mississippi bobcat hunting effort and harvest trends for licensed non-resident hunters (1995-2011)

	TOTAL HARVEST	SE of TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	PERCENT SUCCESSFUL HUNTERS	TOTAL MAN- DAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	PERCENT OF TOTAL LICENCEES
1995	484	-	0.297	1.257	0.917	1,823	4.27	380	0.013
1996	418	-	0.473	1.333	46.333	1,990	3.797	380	1.133
1997	-	-	-	-	-	-	-	-	-
1998	639	-	0.295	1.033	91.675	2,984	4.228	477	0.975
1999	349	-	0.42	0.787	69.167	1,849	3.51	366	0.967
2000	-	-	-	-	-	-	-	-	-
2001	918	152.01	0.12	1.32	90.5	5,826	9.91	697	2
2002	419	103.3	0.15	1.22	82.6	1,396	6.2	344	1
2003	660.68	135.09	0.09	0.96	89.3	3,800	9.06	685	2.1
2004	642	137	0.12	1.31	96.6	3,080	10.65	491	1.6
2005	442	121	0.09	1.14	85.7	3,492	13.17	309	0.9
2006	396	91	0.18	1.04	86.9	1,383	5.44	634	1.2
2007	420	354	0.23	2.4	60	1,857	10.6	175	0.5
2008	234	120	0.13	1.26	71.43	1,371	8.2	234	0.6
2009	259	143	0.06	1	57.1	1,300	7	259	0.7
2010	580	175	0.05	1	85.7	4,009	13.71	580	1.6
2011	373	137	0.06	0.82	72.7	4,289	12.88	456	1.3

(A) Calculated as a percent of small game license holders only

Figure 9. Trends in total harvest of bobcat for licensed non-resident hunters (1994-2011)

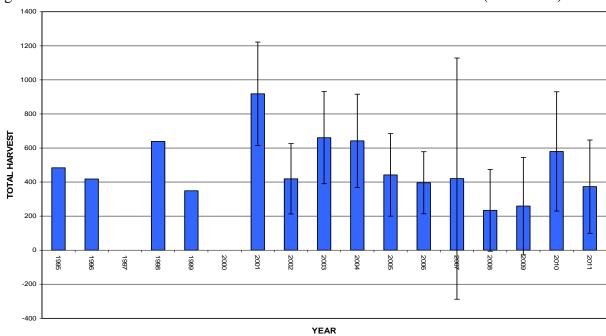


Figure 10. Trends in average daily kill of bobcat for licensed non-resident hunters (1994-2011)

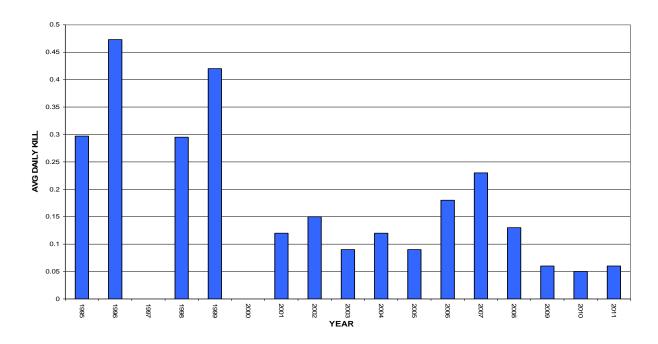


Figure 11. Trends in average seasonal harvest of bobcat for licensed non-resident hunters (1994-2011)

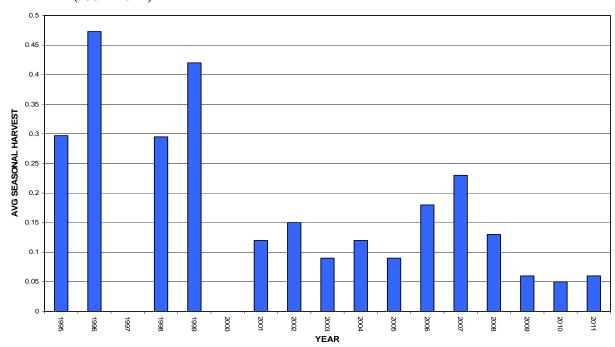


Figure 12. Trends in percent successful bobcat hunters for licensed non-resident hunters (1994-2011)

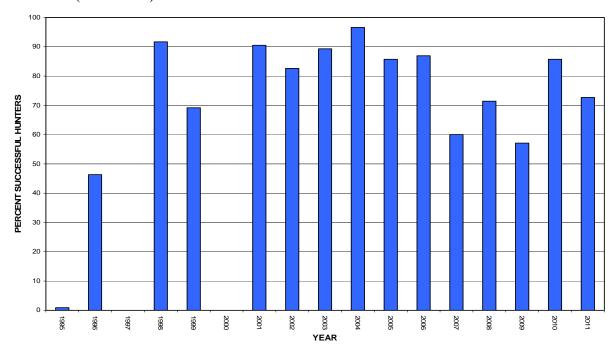


Figure 13. Trends in total man days bobcat hunting for licensed non-resident hunters (1994-2011)

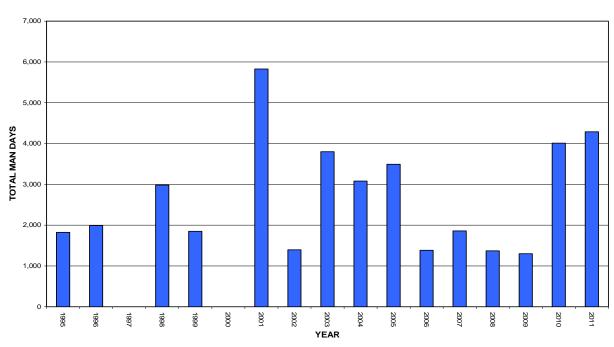


Figure 14. Trends in average seasonal days bobcat hunting for licensed non-resident hunters (1994-2011)

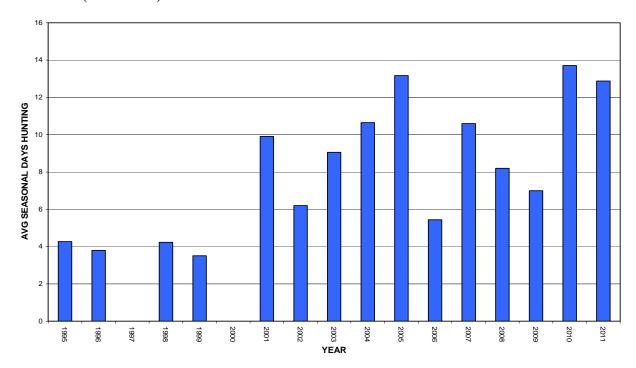


Figure 15. Trends in total bobcat hunters for licensed non-resident hunters (1994-2011)

