

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

**Human Dimensions & Conservation Law Enforcement Laboratory
Forest and Wildlife Research Center
Mississippi State University**

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Harvest for Squirrel in Mississippi:
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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 the 1980-1981 hunting season. Non-resident hunter surveys began on an annual basis in the 1994-95 hunting season (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 researchers to determine trends in total harvest, average seasonal harvest per hunter, average daily harvest per hunter, average person-days 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 squirrel (both the fox squirrel (*Sciurus niger*) and the gray squirrel (*Sciurus carolinensis*)) spanning from the 1980-81 hunting season to the 2010-11 hunting season for resident hunters, and data spanning from the 1994-95 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 squirrel hunting effort and harvest trends for licensed resident hunters
(1980 to the Present)

	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 LICENSEES (A)
1981	2,588,061	62,253	2.30	15.63	92.1	1,092,168	6.68	165,915	64.8
1982	2,545,308	107,746	2.37	16.46	93.8	1,048,472	6.87	155,260	63.8
1983	2,625,497	100,077	2.37	15.66	93.8	1,083,956	6.52	168,315	64.2
1984	2,467,325	104,463	2.25	15.62	94.0	1,074,860	6.91	158,658	61.3
1985	2,609,101	101,241	2.56	16.53	92.6	988,042	6.32	158,189	61.7
1986	2,268,034	61,884	2.47	15.12	93.2	897,312	6.06	150,480	59.3
1987	2,370,018	98,523	2.41	15.48	93.2	974,055	6.44	153,185	60.0
1988	2,276,703	91,101	2.39	14.01	92.9	939,880	5.82	163,091	63.5
1989	-	-	-	-	-	-	-	-	-
1990	1,728,780	77,829	2.28	12.74	91.7	742,574	5.55	143,760	62.8
1991	1,500,096	75,101	2.39	13.48	91.4	607,593	5.53	114,287	50.0
1992	1,365,943	55,432	2.12	12.56	90.8	627,628	5.86	108,276	47.6
1993	1,347,410	57,852	2.33	12.67	90.6	560,660	5.35	106,397	46.1
1994	1,214,953	43,639	2.30	13.24	91.8	507,881	5.63	91,782	41.6
1995	1,073,743	47,518	2.31	12.53	91.1	449,292	5.30	86,118	40.0
1996	984,343	59,661	2.44	12.69	89.2	395,053	5.18	78,171	37.4
1997	904,228	42,316	2.44	11.92	89.9	396,186	5.18	75,926	36.9
1998	1,163,375	65,604	2.30	13.62	88.6	492,377	5.84	85,723	41.3
1999	901,099	33,731	2.19	12.05	90.3	400,384	5.46	75,392	36.5
2000	-	-	-	-	-	-	-	-	-
2001	848,257	42,801.18	2.25	12.59	90.2	367,313	5.56	67,326	33.3
2002	1,086,902	97,425.54	2.44	14.66	92.4	427,312	6.03	74,092	37.0
2003	810,754	45,280.92	2.25	12.36	91.2	340,293	5.43	65,620	34.7
2004	880,243	64,446	2.46	15.01	92.3	320,245	5.85	58,646	31.3
2005	1,022,492	127,997	2.36	16.38	93.1	410,300	6.84	62,417	33.7
2006	613,002	46,661	1.33	9.26	91.2	169,280	6.35	28,741	16.4
2007	471,217	36,610	2.16	13.29	93.4	210,677	6.36	35,453	19.8
2008	504,898	43,823	2.19	12.86	90.3	219,877	5.88	39,272	21.7
2009	497,389	49,898	2.31	13.05	91.2	211,003	5.73	38,126	21.3
2010	539,837	48,474	2.34	13.28	93.1	217,606	5.67	40,643	24.6
2011	642,933	51,939	2.36	13.36	90.6	259,432	5.74	48,113	28.9

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

Figure 1. Trends in total harvest of squirrel for licensed resident hunters (1980 to the Present)

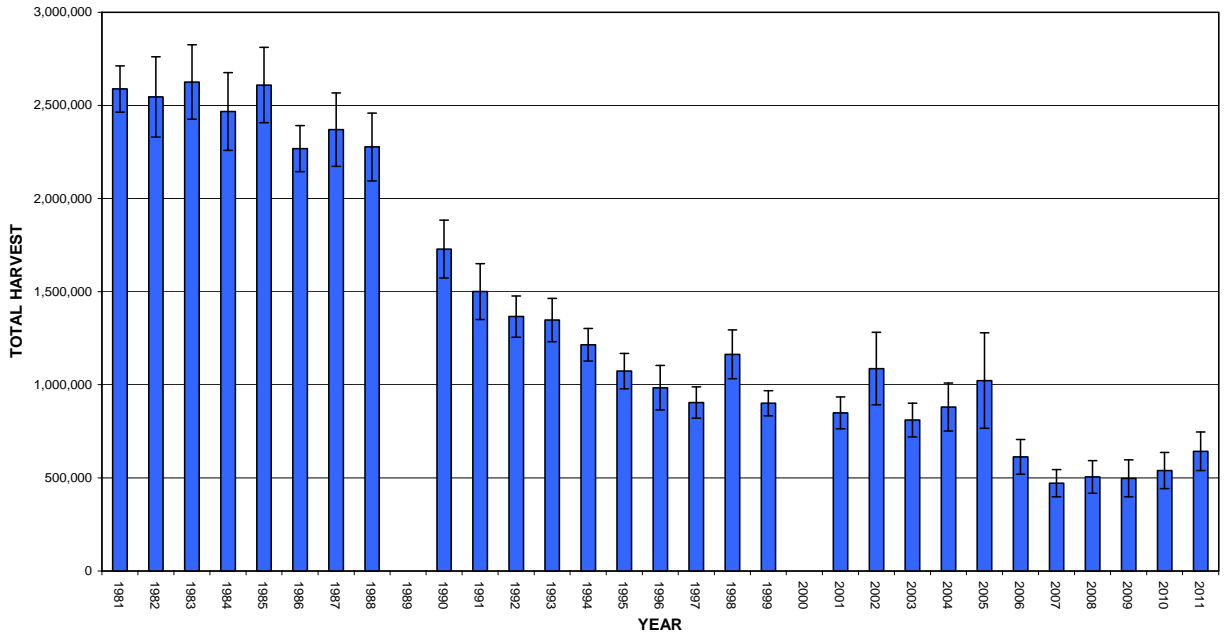


Figure 2. Trends in average daily kill of squirrel for licensed resident hunters (1980 to the Present)

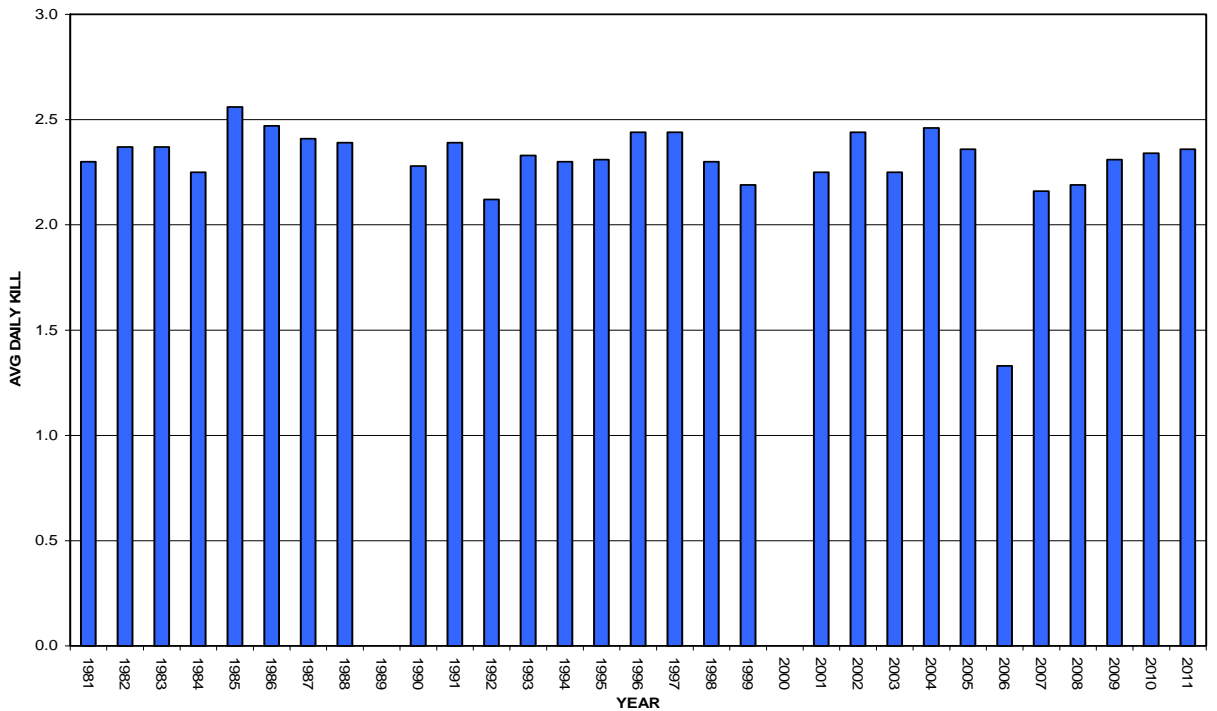


Figure 3. Trends in average seasonal harvest of squirrel for licensed resident hunters (1980 to the Present)

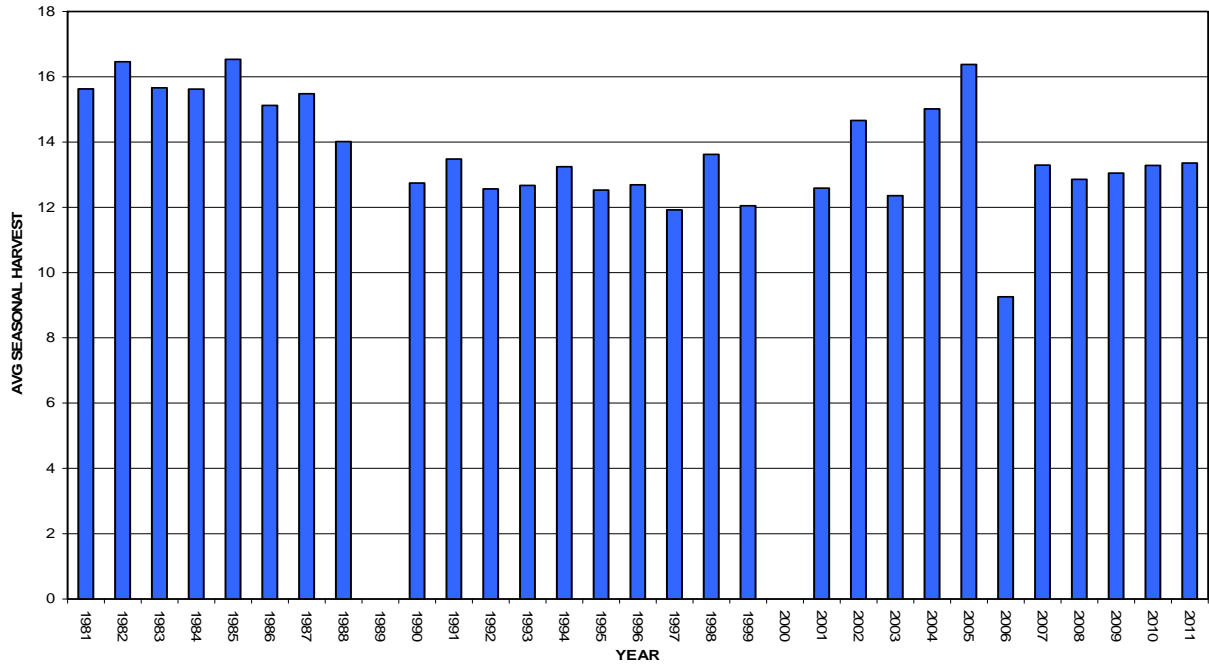


Figure 4. Trends in percent successful squirrel hunters for licensed resident hunters (1980 to the Present)

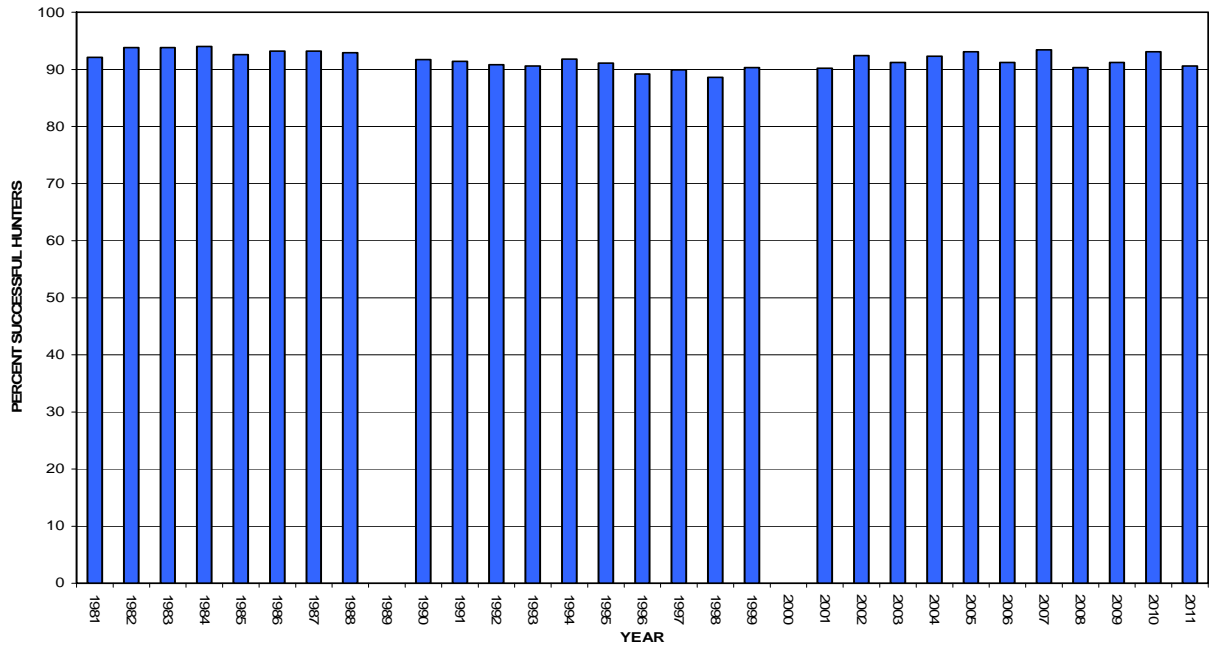


Figure 5. Trends in total man days squirrel hunting for licensed resident hunters (1980 to the Present)

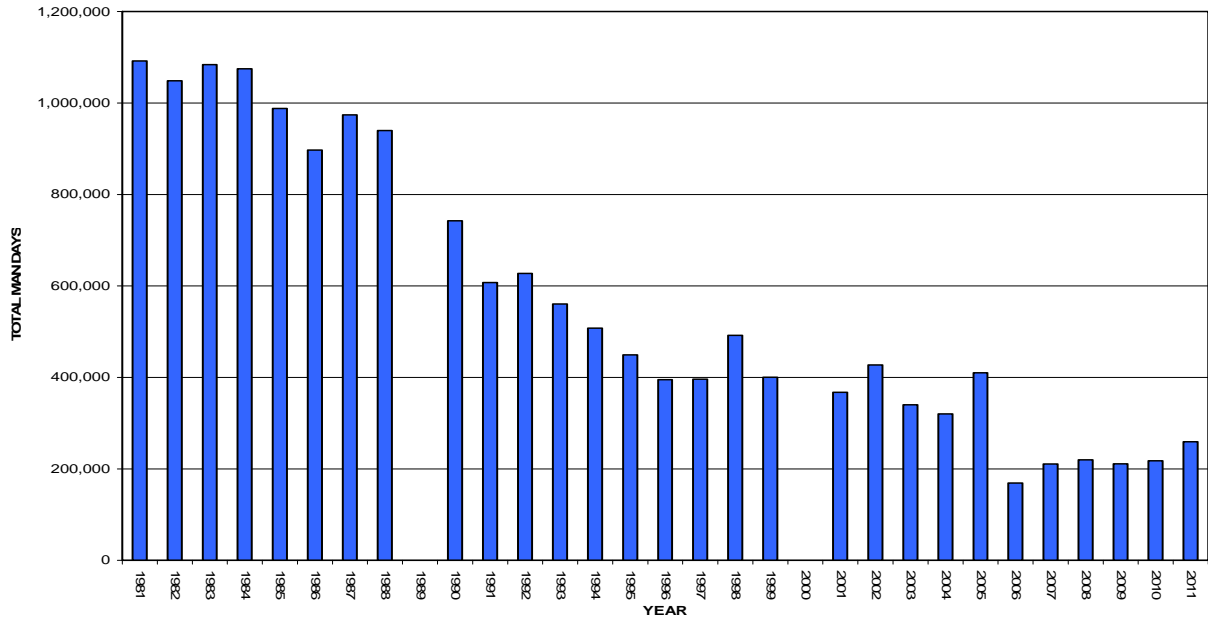


Figure 6. Trends in average seasonal days squirrel hunting for licensed resident hunters (1980 to the Present)

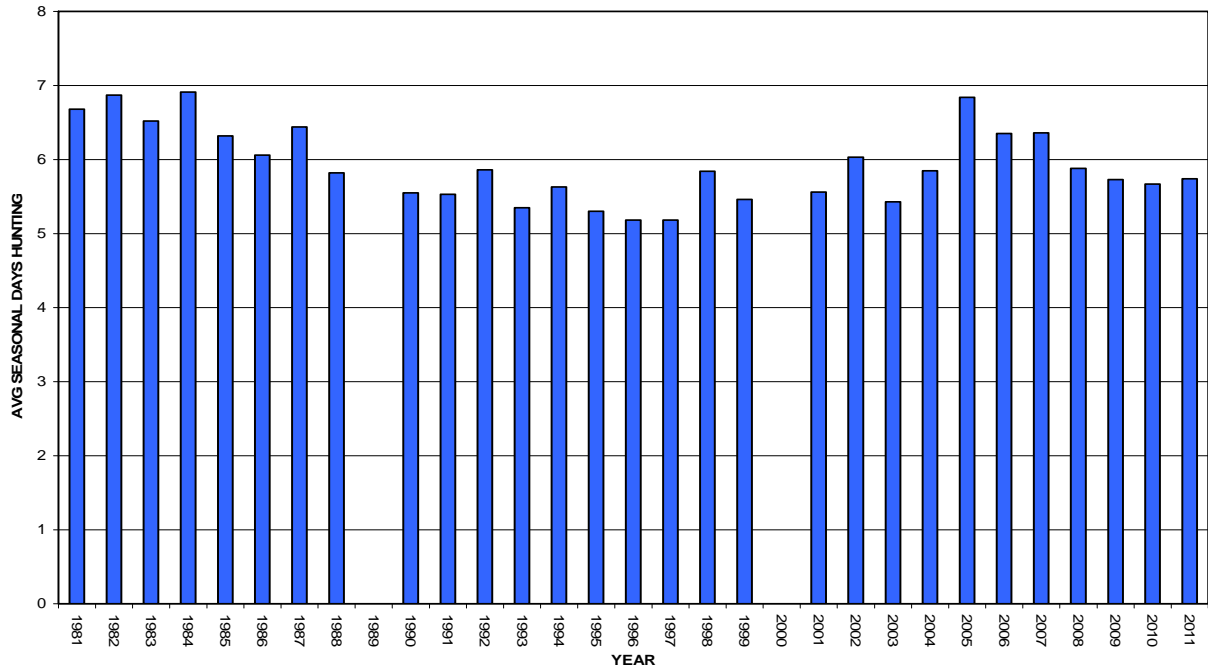


Figure 7. Trends in total squirrel hunters for licensed resident hunters (1980 to the Present)

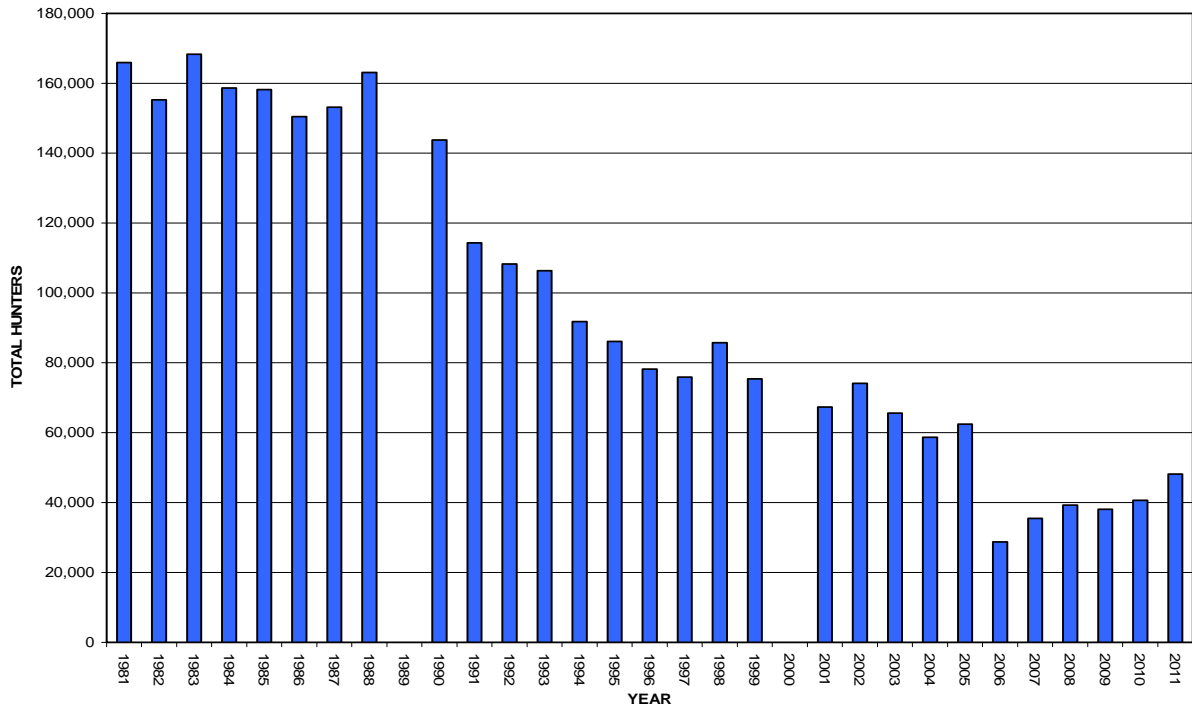


Figure 8. Trends in proportion of licensed resident hunters who hunted for squirrel (1980 to the Present)

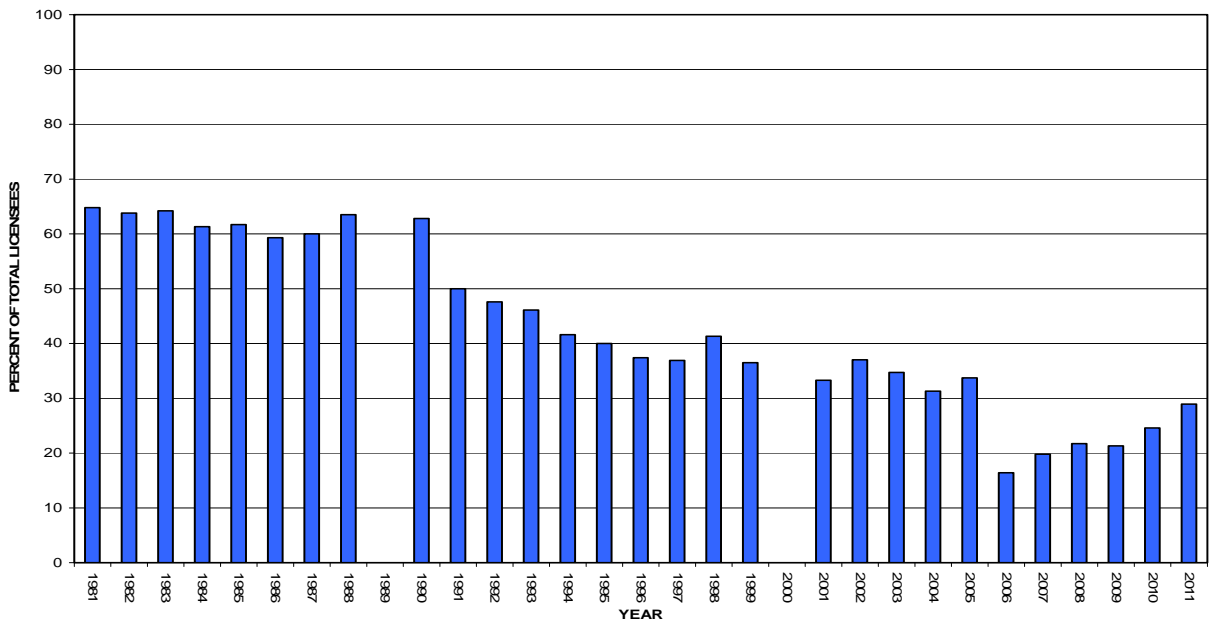


TABLE 2. Mississippi squirrel hunting effort and harvest trends for licensed non-resident hunters (1994 to the Present)

	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 (A)
1995	69,861	-	2.47	12.623	0.918	25,156	4.24	4,879	0.15
1996	49,156	-	2.583	10.768	88.75	17,078	4.028	3,891	11.925
1997	-	-	-	-	-	-	-	-	-
1998	68,216	-	2.948	17.723	89.25	24,500	6.055	4,632	11.425
1999	48,182	-	3.003	8.97	84.775	14,238	3.015	3,574	6.75
2000	-	-	-	-	-	-	-	-	-
2001	86,115	10,146	3.43	17.61	91	7,836	4.71	4,889	14.2
2002	70,664	7,264	2.64	14.49	91.4	25,343	5.49	4,876	13.7
2003	60,367	7,636	3.45	17.75	93.5	16,579	5.04	3,401	10.4
2004	57,514	5,536	3.11	15.97	92.5	17,201	4.99	3,601	11.4
2005	71,074	12,073	3.45	18.84	96.5	19,053	5.36	3,774	11.6
2006	43,330	4,589	2.97	13.89	92.4	13	4.57	3,120	9.9
2007	47,362	10,401	3.66	21.46	98.41	12,742	5.95	2,207	6.4
2008	43,494	11,005	3.94	19.45	98.51	10,721	5.08	2,236	6.2
2009	46,447	8,642	3	16.49	93.4	15,377	5.59	2,817	7.6
2010	36,949	6,034	3.18	12.05	91.9	10,832	3.77	3,065	8.5
2011	38,522	5,758	3.03	13.27	98.6	11,896	4.38	2,905	8.1

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

Figure 9. Trends in total harvest of squirrel for licensed non-resident hunters (1994 to the Present)

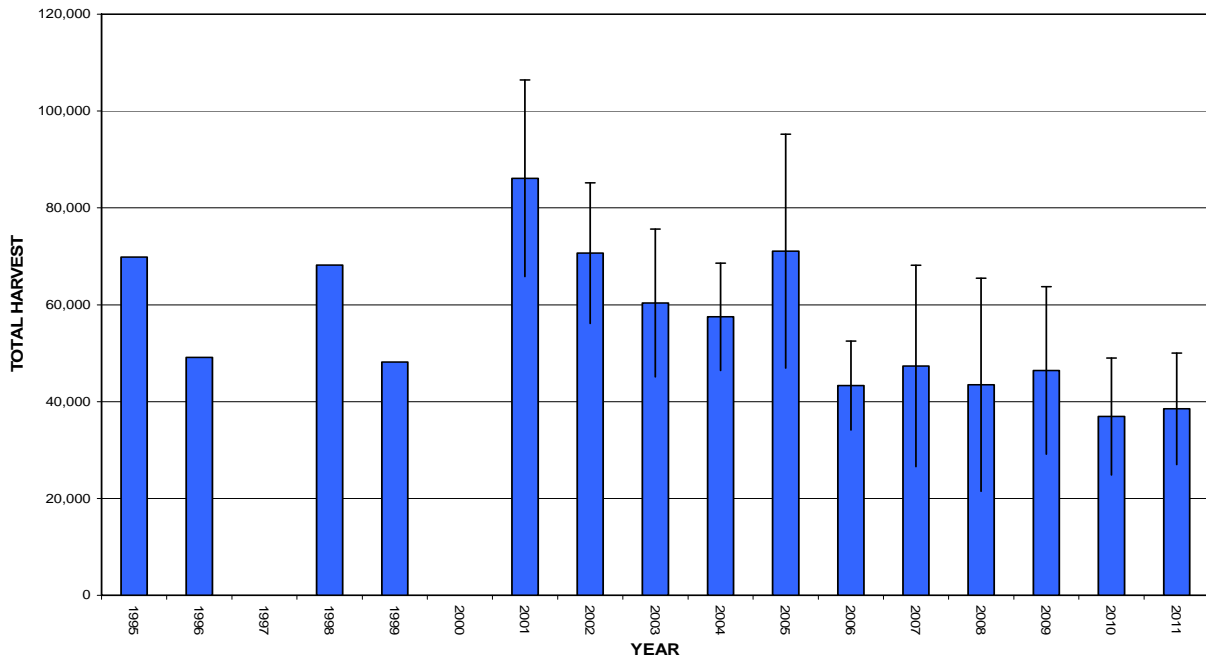


Figure 10. Trends in average daily kill of squirrel for licensed non-resident hunters (1980 to the Present)

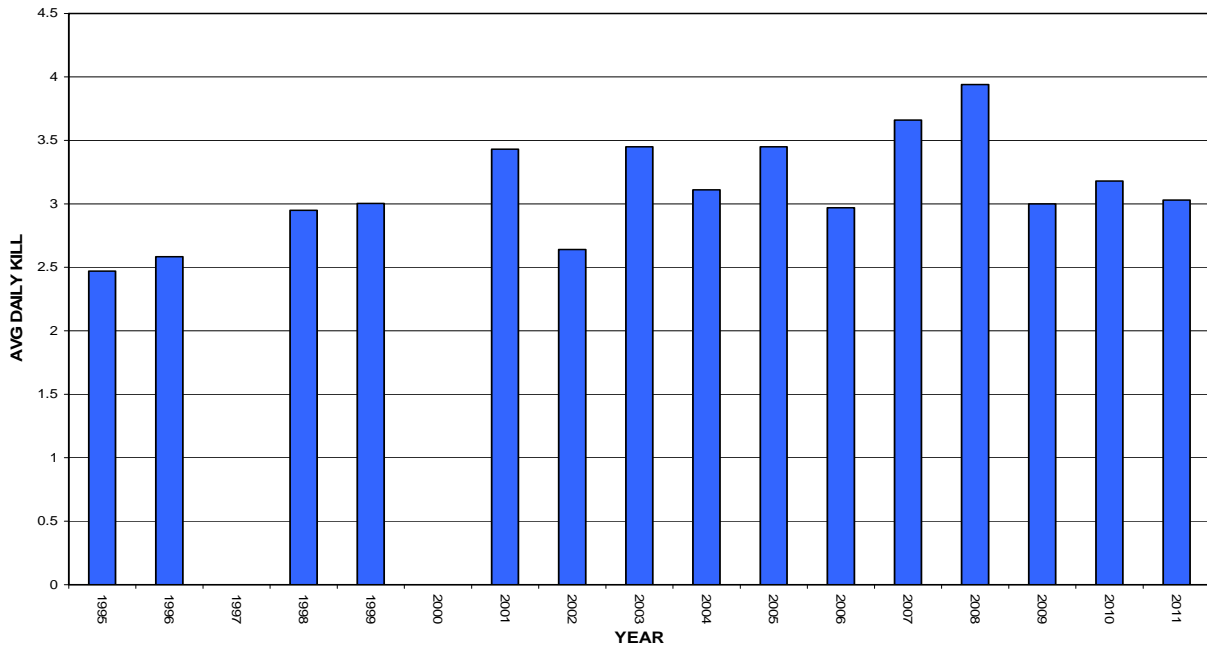


Figure 11. Trends in average seasonal harvest of squirrel for licensed non-resident hunters (1994 to the Present)

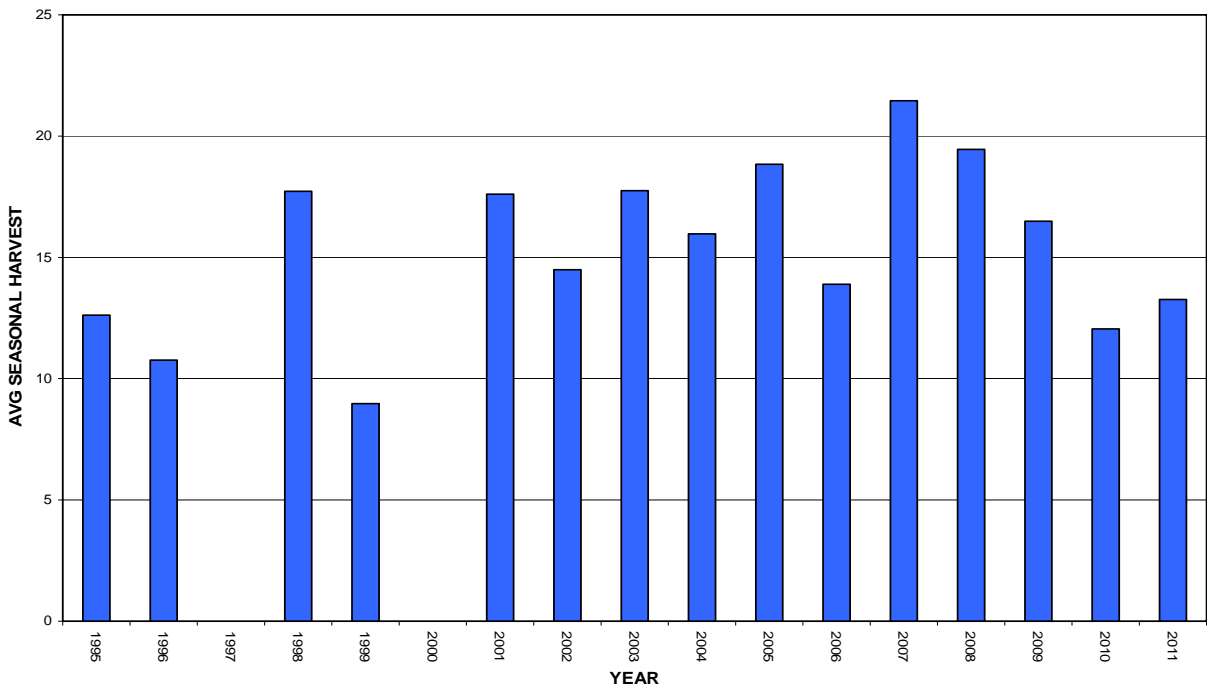


Figure 12. Trends in percent successful squirrel hunters for licensed non-resident hunters (1994 to the Present)

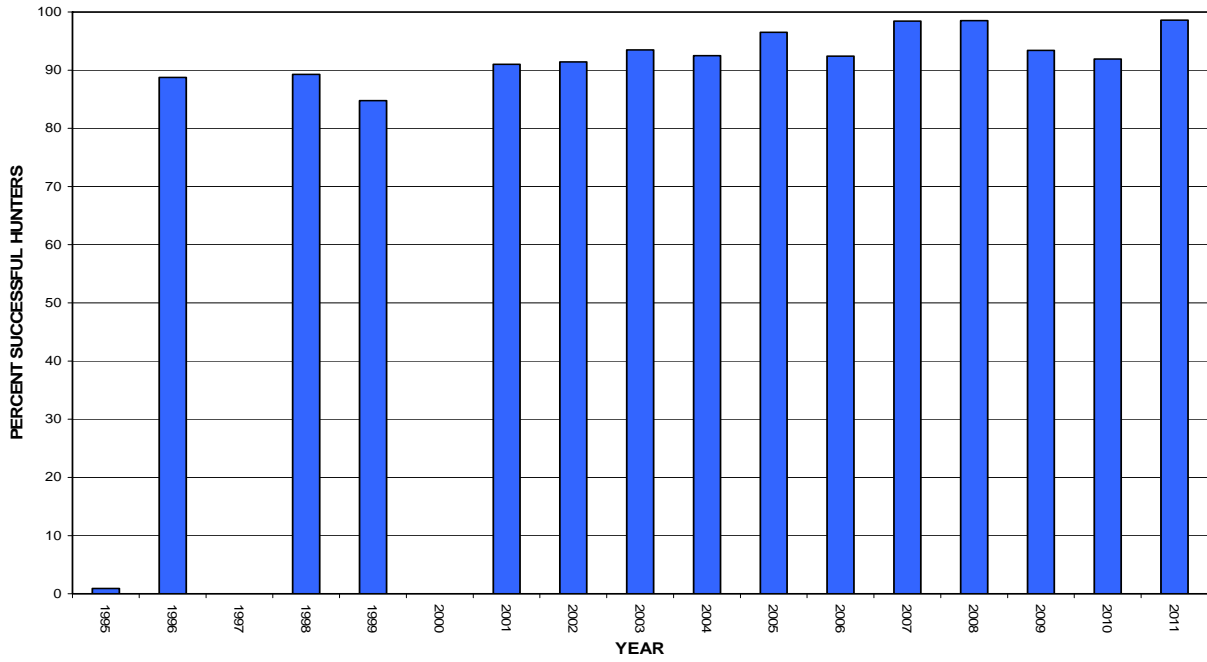


Figure 13. Trends in total man days in squirrel hunting for licensed non-resident hunters (1994 to the Present)

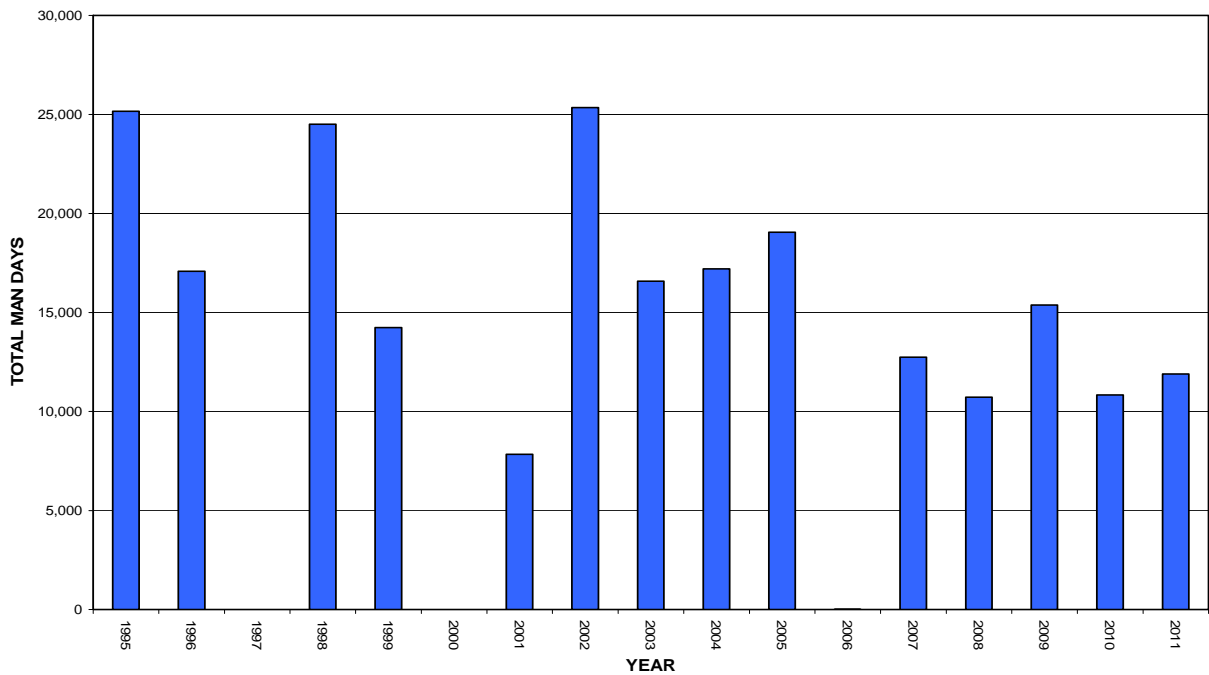


Figure 14. Trends in average seasonal days squirrel hunting for licensed resident hunters (1994 to the Present)

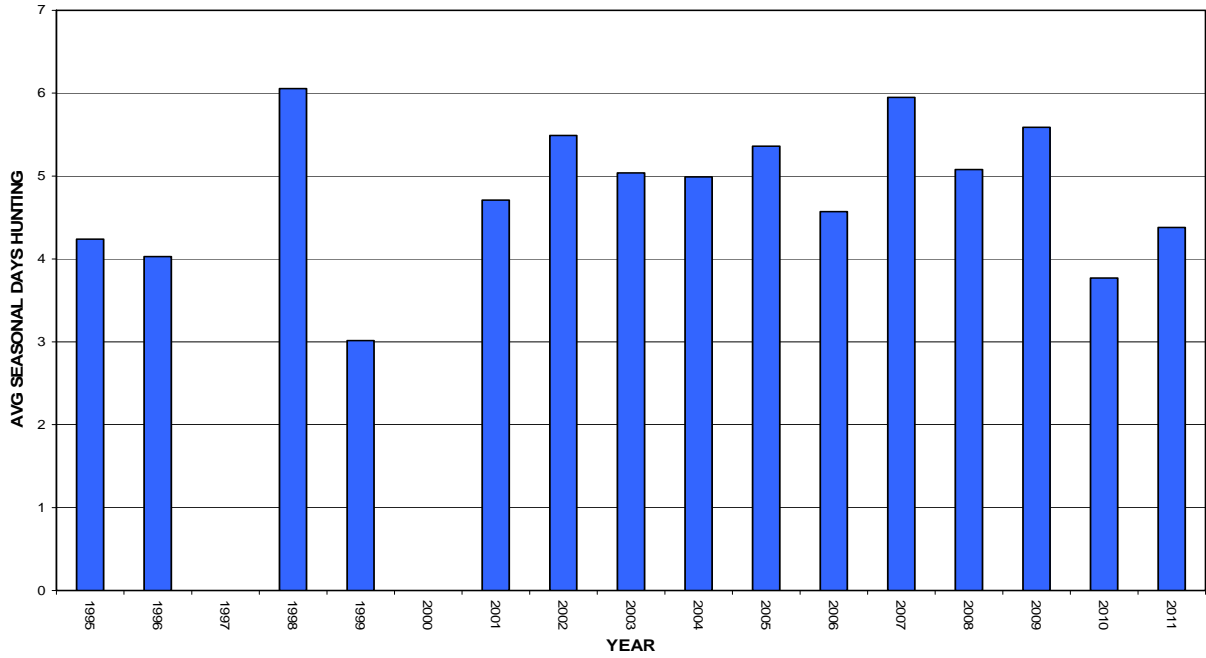


Figure 15. Trends in total squirrel hunters for licensed non-resident hunters (1994 to the Present)

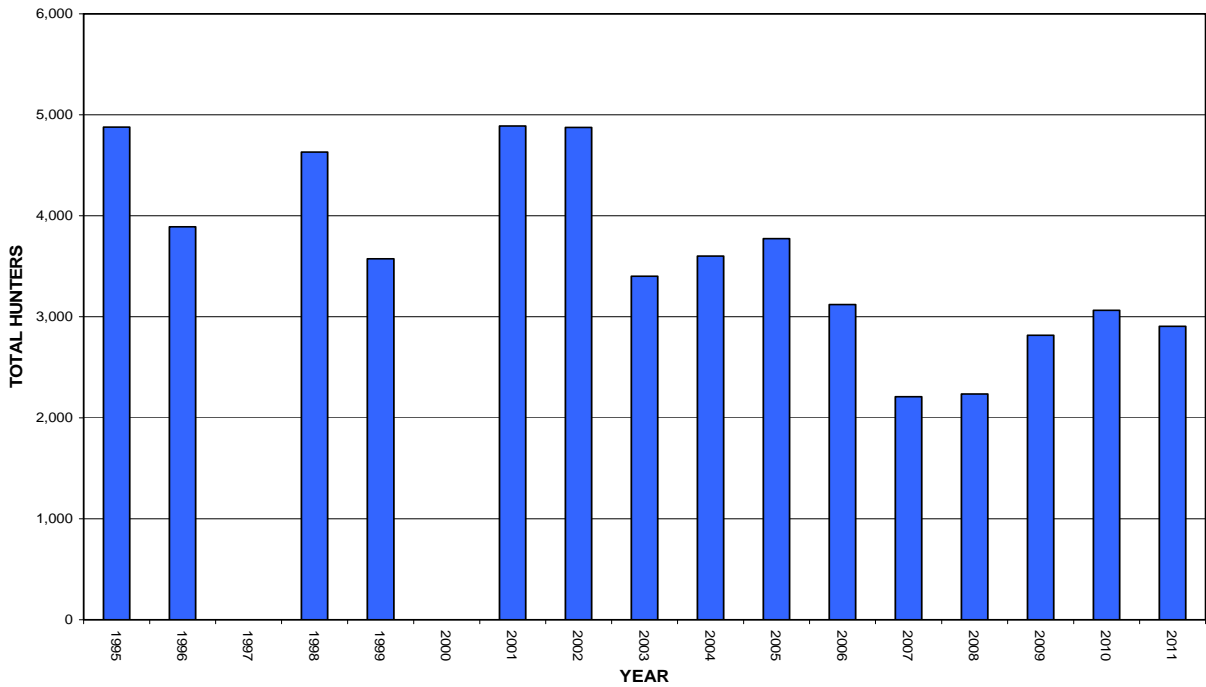


Figure 16. Trends in proportion of licensed non-resident hunters who hunted for squirrel (1994 to the Present)

