

***Trends in Resident and Non-resident Hunter Effort and  
Harvest for Coyote 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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## 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 1994-1995 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 coyote (*Canis latrans*) spanning from the 1980-1981 hunting season to the 2009-10 hunting season for resident hunters, and data spanning from the 1994-1995 hunting season to the 2009-10 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*. 2<sup>nd</sup> Edition. New York: John Wiley and Sons, Inc.

## RESULTS

TABLE 1. Mississippi coyote 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 LICENCEES (A)
1981	5,636	760	0.10	1.14	76.3	31,821	8.66	4,947	1.9
1982	8,585	1,460	0.13	1.03	80.3	49,913	8.07	8,444	3.5
1983	19,978	2,613	0.21	1.44	82.2	54,526	6.13	13,360	5.1
1984	17,481	2,558	0.13	1.34	73.9	77,429	8.71	13,036	5.0
1985	28,062	3,759	0.16	1.77	80.6	104,740	9.15	15,785	6.2
1986	36,800	3,913	0.21	1.89	82.1	103,010	7.51	19,476	7.7
1987	41,847	4,144	0.10	1.63	82.7	282,461	14.99	25,749	10.1
1988	42,079	4,828	0.18	1.60	80.1	173,842	8.30	26,263	10.2
1989	-	-	-	-	-	-	-	-	-
1990	40,030	5,395	0.11	1.96	82.7	284,762	18.45	37,819	16.5
1991	42,565	5,130	0.10	2.31	84.7	291,106	20.4	23,035	10.1
1992	42,045	4,226	0.14	2.17	85.3	244,898	16.3	17,939	7.9
1993	38,649	4,389	0.12	2.18	87.5	238,360	16.64	16,981	7.4
1994	39,365	4,660	0.21	2.57	86.6	114,892	9.95	15,255	6.9
1995	34,496	4,253	0.19	2.43	84.7	146,672	13.01	14,277	6.6
1996	33,094	3,960	0.12	2.22	87.0	196,865	17.47	14,934	7.1
1997	21,828	2,615	0.12	1.92	81.1	72,779	17.47	11,228	5.4
1998	32,125	4,631	0.38	2.46	88.0	54,628	5.56	12,296	5.9
1999	36,076	6,197	0.13	2.75	84.1	234,802	23.32	13,289	6.4
2000	-	-	-	-	-	-	-	-	-
2001	27,173	3,670.08	0.30	2.37	91.4	65,129	7.10	11,189	5.5
2002	18,184	2,494.79	0.30	1.97	83.9	42,625	6.14	8,995	4.5
2003	21,835	3,476.34	0.28	2.05	89.0	54,793	6.70	10,349	5.5
2004	20,682	3,679	0.32	2.41	87.9	43,547	7.77	8,216	4.4
2005	18,312	4,361	0.11	1.96	78.3	101,255	15.36	9,058	4.9
2006	16,423	2,428	0.18	1.89	83.9	68,945	1039.00	8,314	4.7
2007	14,586	3,134	0.05	2.43	87.5	35,299	8.63	5,962	3.3
2008	14,103	2,137	0.27	1.82	84.5	36,104	6.33	7,703	4.3
2009	17,753	3,401	0.21	2.09	84.5	56,618	9.14	8,440	4.7
2010	16,866	3,325	0.35	2.22	89.1	29,464	5.64	7,496	4.5
2011	24,332	3,626	0.30	1.99	88.8	44,403	5.34	12,235	7.4

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



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

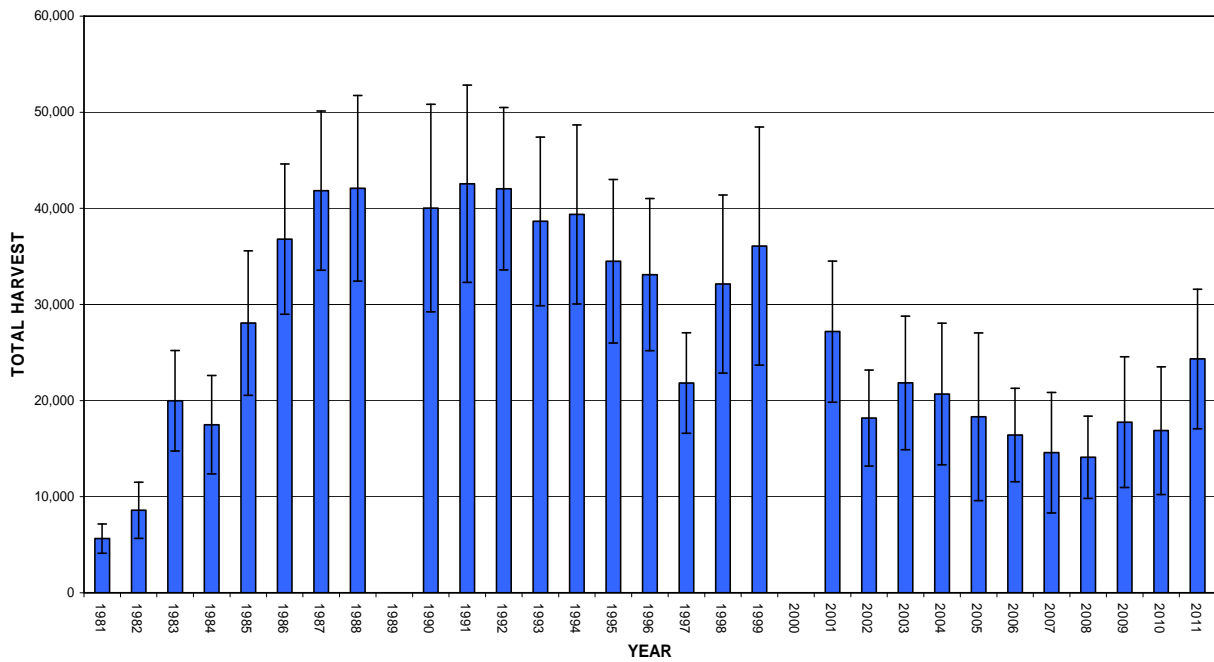


Figure 2. Trends in average daily kill of coyote for licensed resident hunters (1980 to the Present)

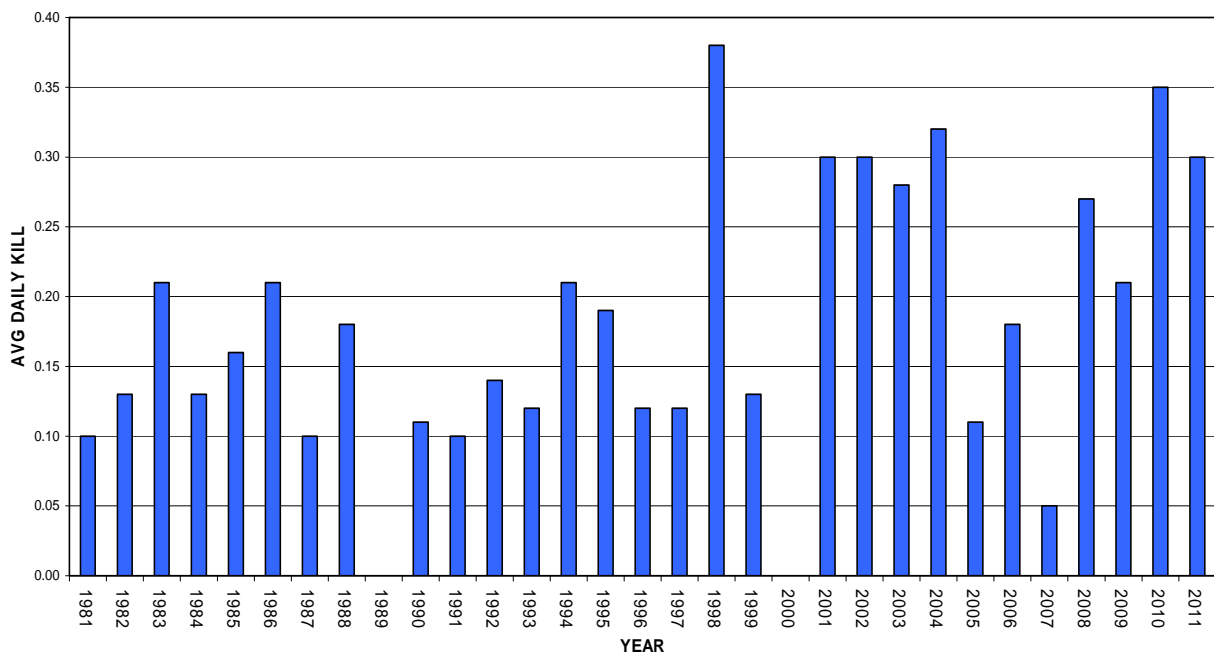


Figure 3. Trends in average seasonal harvest of coyote for licensed resident hunters (1980 to the Present)

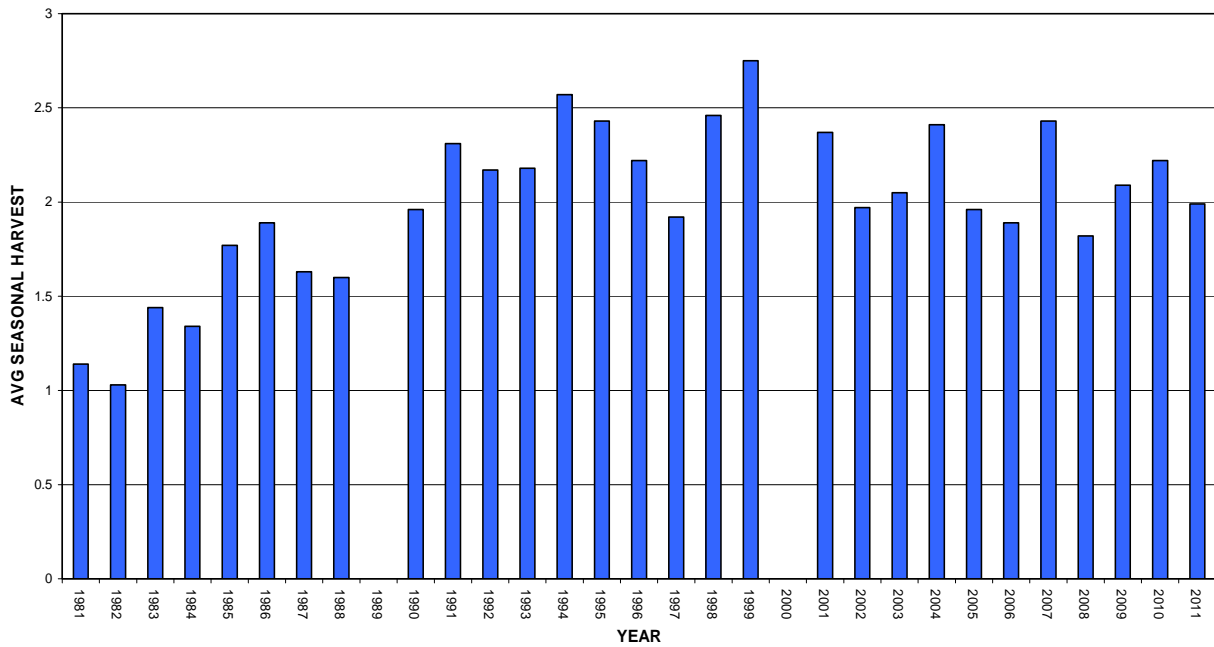


Figure 4. Trends in percent successful coyote hunters for licensed resident hunters (1980 to the Present)

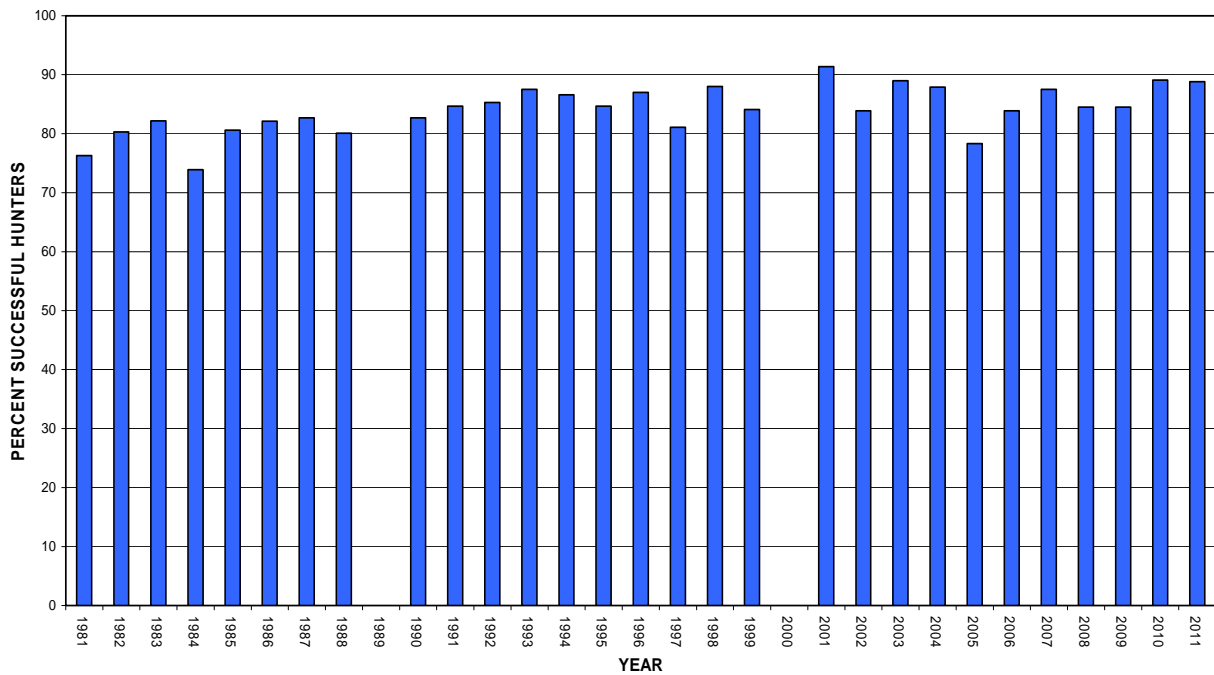


Figure 5. Trends in total man days in coyote hunting for licensed resident hunters (1980 to the Present)

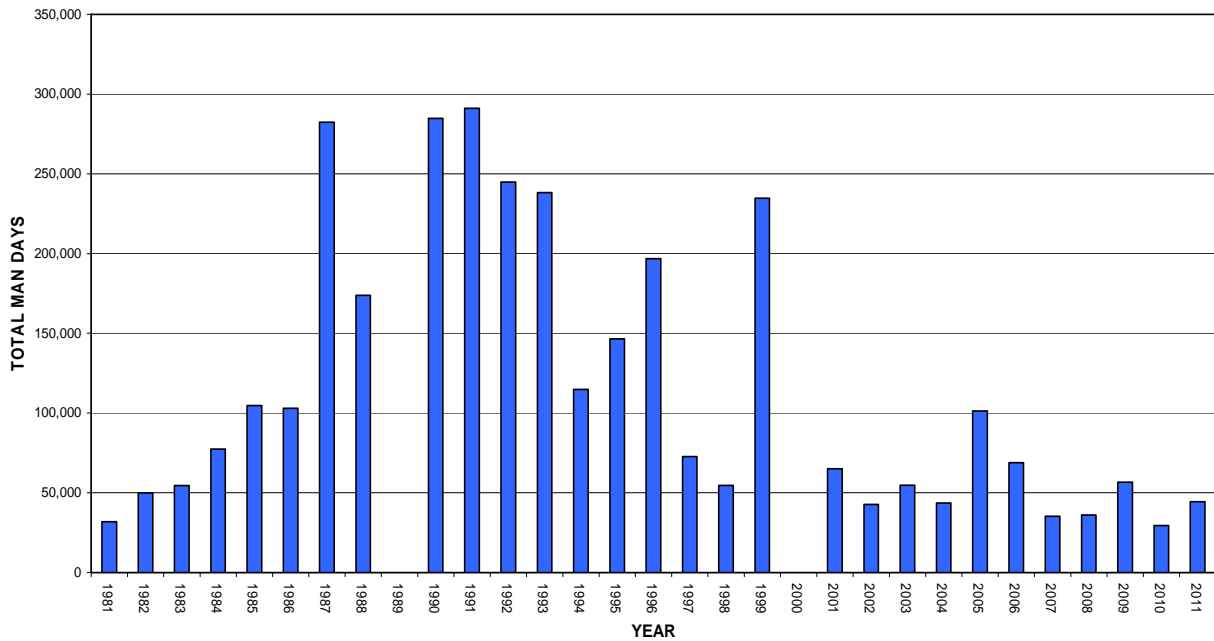


Figure 6. Trends in average seasonal days coyote hunting for licensed resident hunters (1980 to the Present)

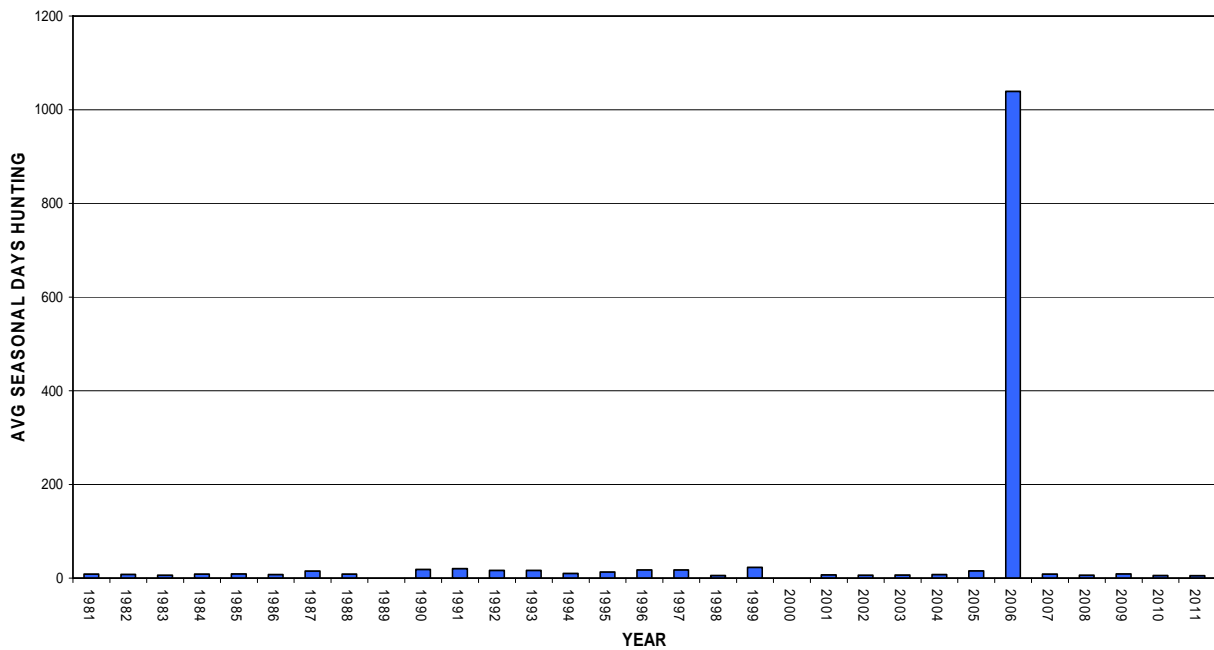


Figure 7. Trends in total coyote hunters for licensed resident hunters (1980 to the Present)

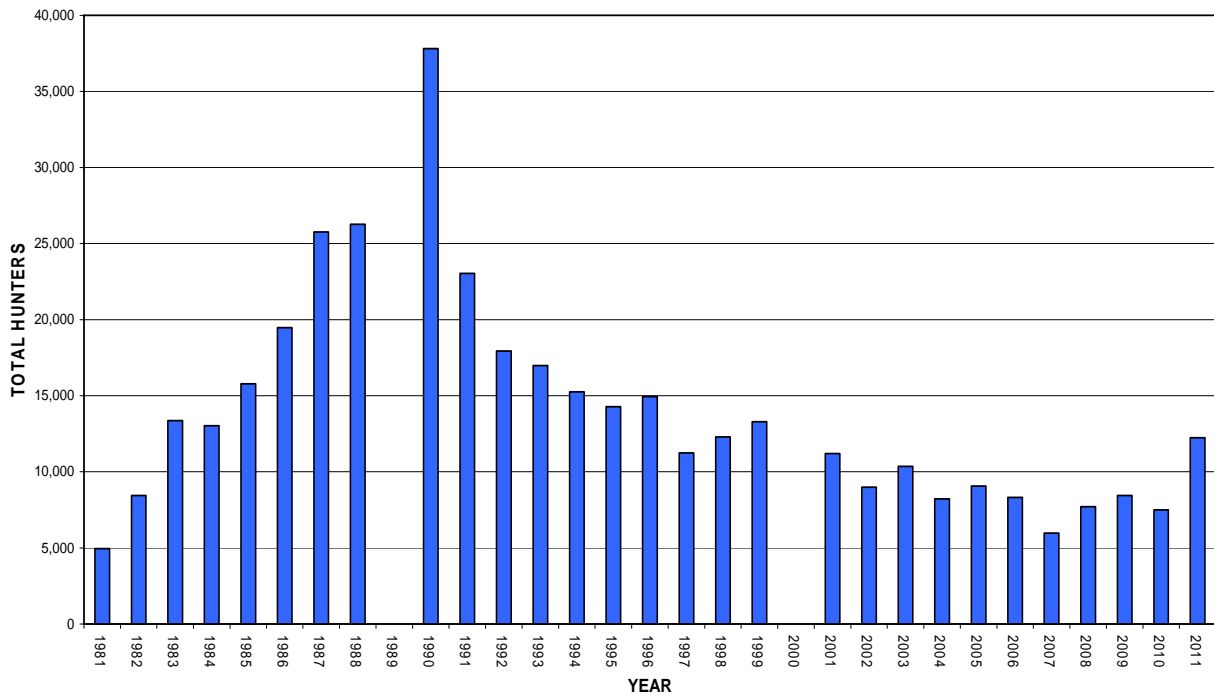


Figure 8. Trends in proportion of licensed resident hunters who hunted for coyote (1980 to the Present)

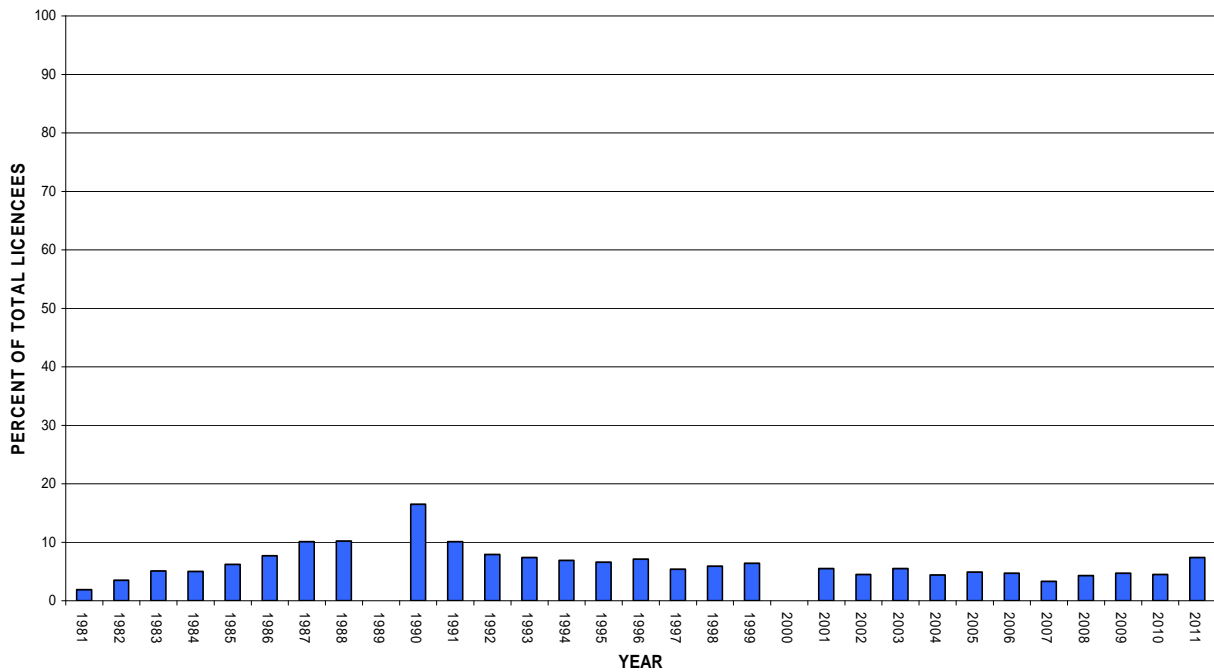


TABLE 2. Mississippi coyote hunting effort and harvest trends for licensed non-resident hunters (1994 to the Present)

	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	816	-	0.413	1.623	0.687	1,562	4.2	534	0.018
1996	1,383	-	0.978	2.683	80.25	1,963	3.24	506	1.225
1997	-	-	-	-	-	-	-	-	-
1998	992	-	0.538	1.25	100	4,085	3.77	602	1.25
1999	873	-	0.48	0.973	85.5	3,300	2.858	678	1.25
2000	-	-	-	-	-	-	-	-	-
2001	1,139	167.64	0.16	1.38	91.9	5,985	8.69	819	2.4
2002	1,017	229.88	0.1	1.81	89.2	5,374	16.23	553	1.6
2003	1,076.67	315.31	0.12	1.63	85.2	3,235	8.73	661	2
2004	1,133	251	0.15	1.68	85	3,409	8	677	2.1
2005	817	203	0.14	1.43	76.2	3,654	10.31	464	1.4
2006	744	208	0.29	1.39	84.9	1,420	4.94	523	1.7
2007	420	156	0.12	1.2	80	3,573	10.2	350	1
2008	801	220	0.08	1.63	84.21	2,959	8	634	1.7
2009	964	290	0.09	1.3	70	4,335	9.67	741	2
2010	2,237	1,274	0.55	3.38	100	3,097	10.57	663	1.8
2011	1,079	279	0.07	1.19	76.2	7,656	13.07	871	2.4

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

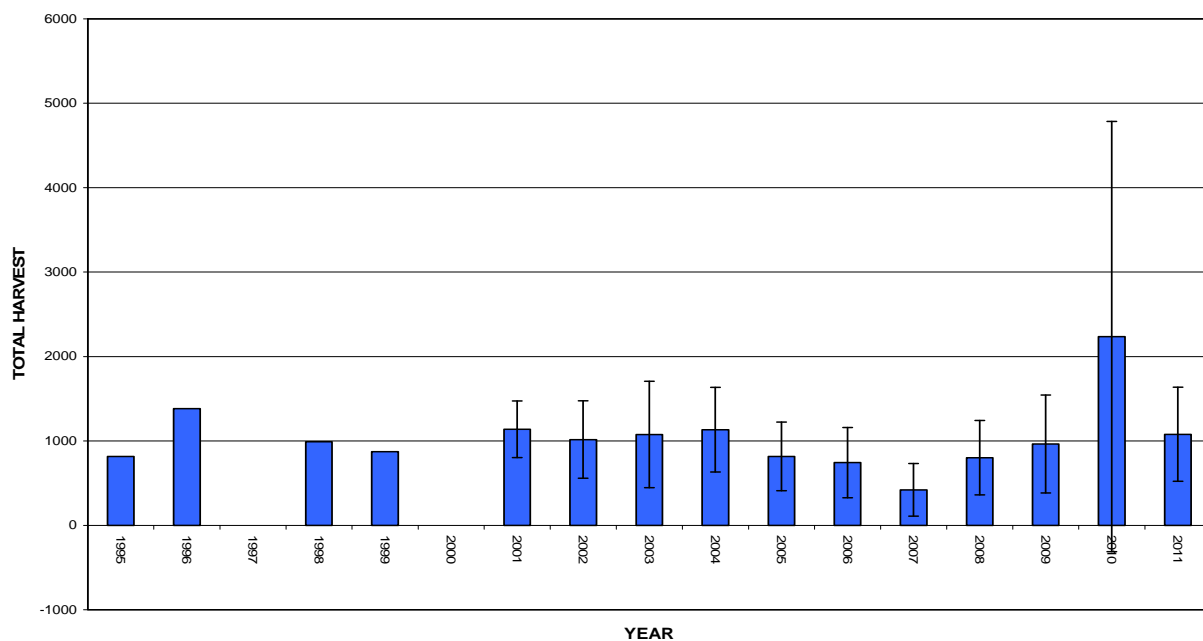


Figure 10. Trends in average daily kill of coyote for licensed non-resident hunters (1994 to the Present)

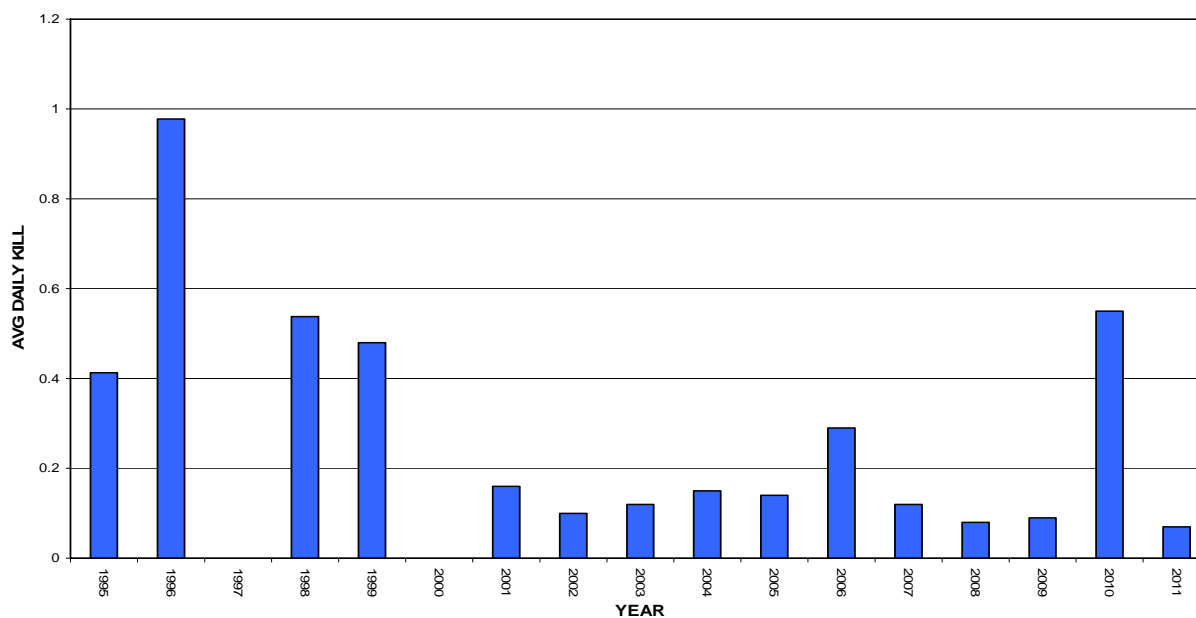


Figure 11. Trends in average seasonal harvest of coyote for licensed non-resident hunters (1994 to the Present)

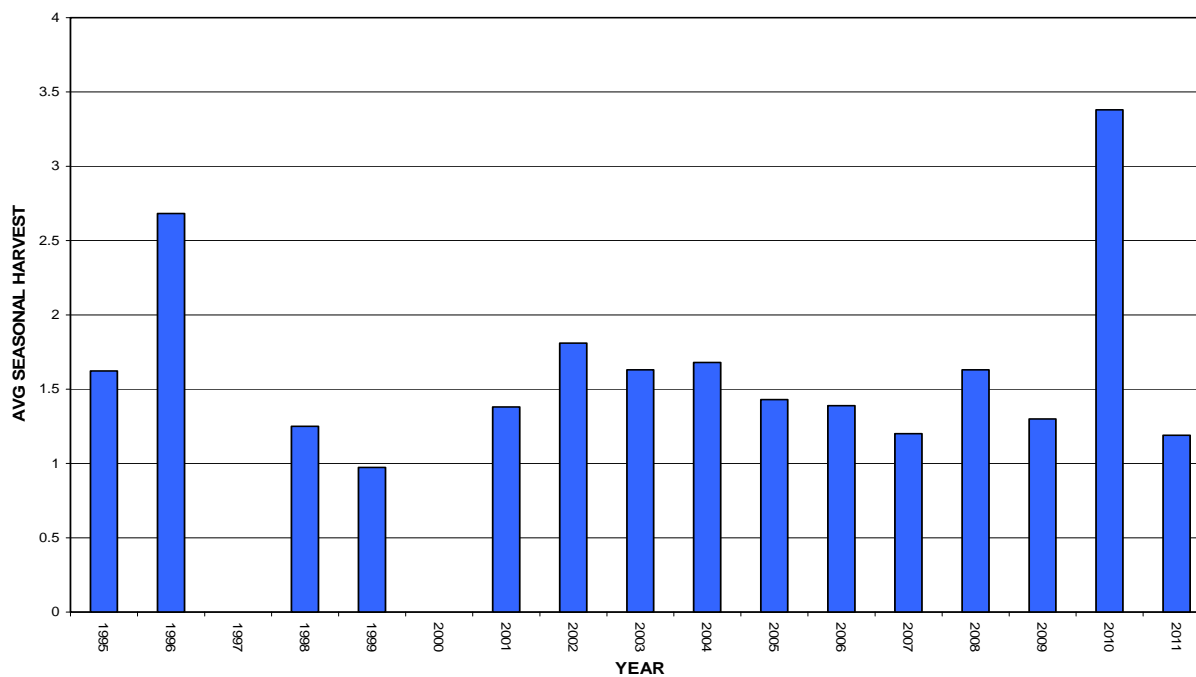


Figure 12. Trends in percent successful coyote hunters for licensed non-resident hunters (1994 to the Present)

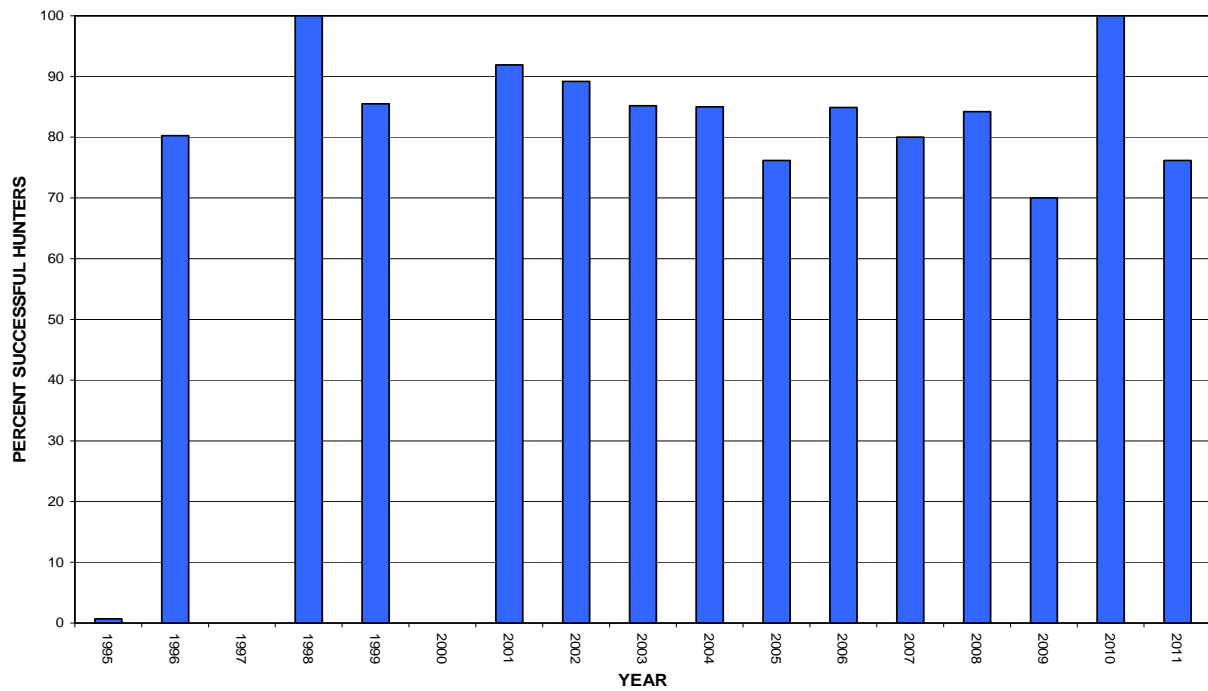


Figure 13. Trends in total man days in coyote hunting for licensed non-resident hunters (1994 to the Present)

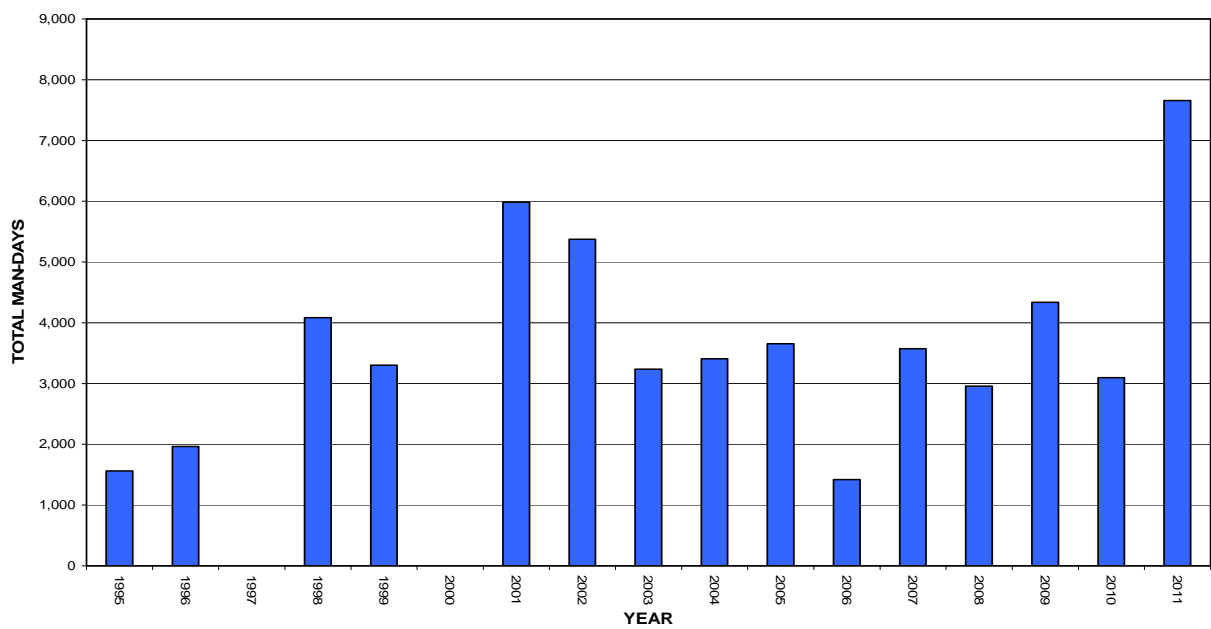


Figure 14. Trends in average seasonal days coyote hunting for licensed non-resident hunters (1994 to the Present)

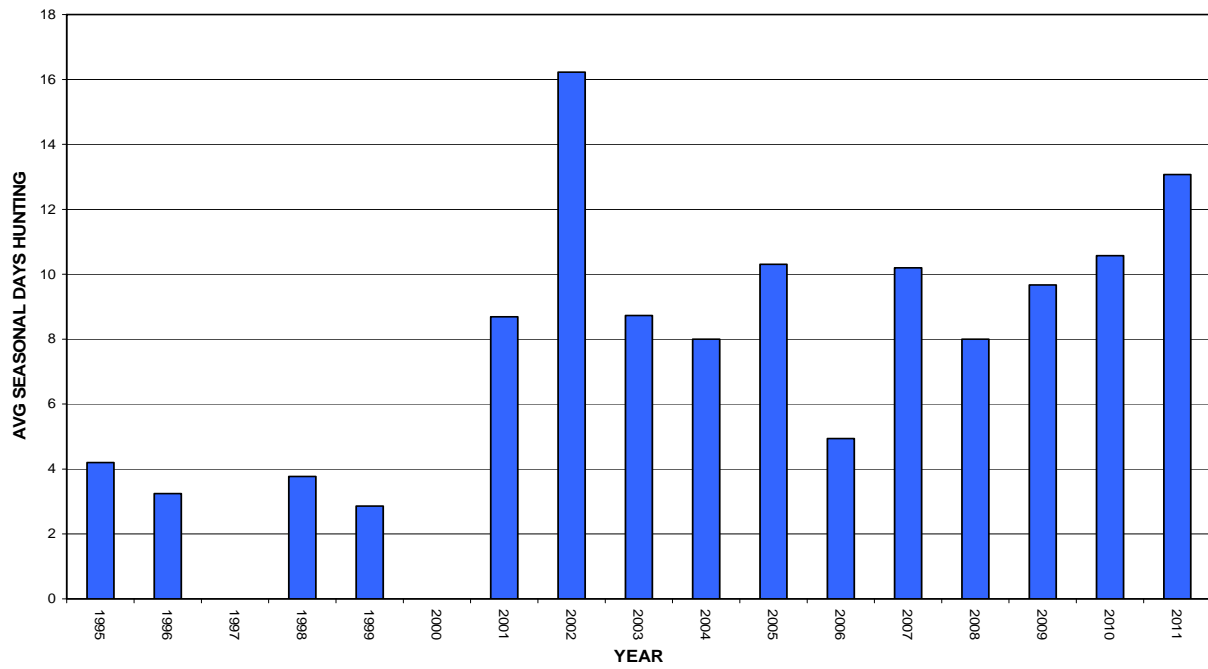


Figure 15. Trends in total coyote hunters for licensed non-resident hunters (1994 to the Present)

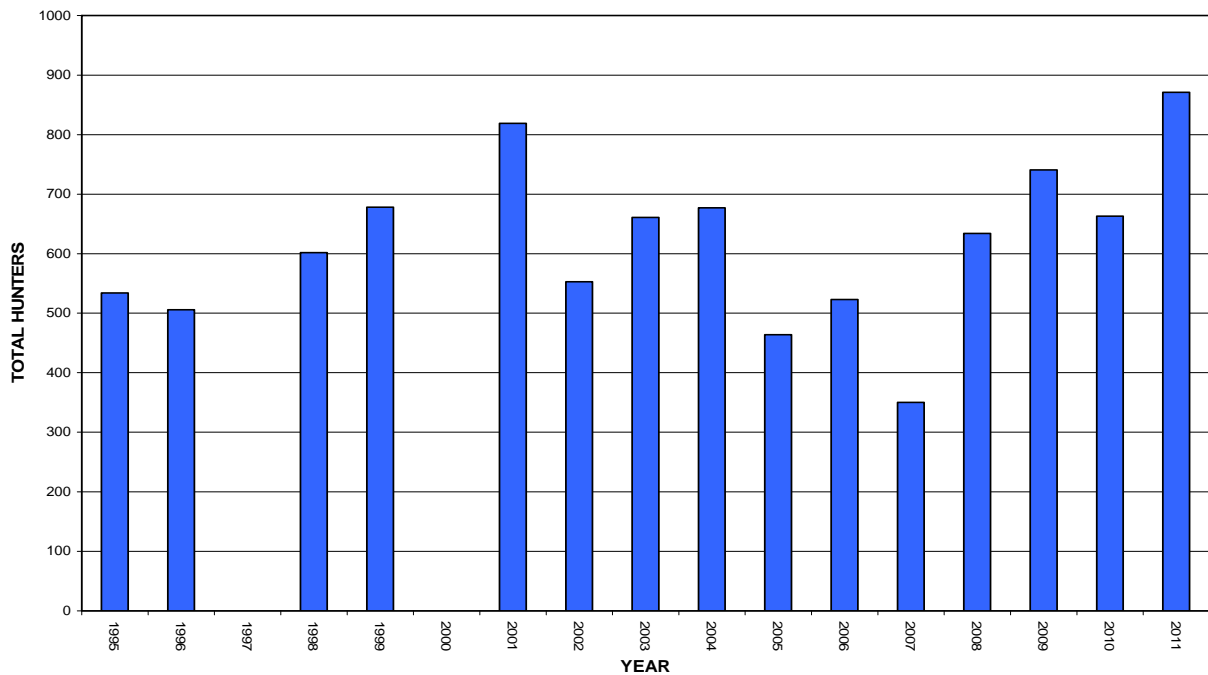




Figure 16. Trends in proportion of licensed non-resident hunters who hunted for coyote (1994 to the Present)

