

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



**Human Dimensions & Conservation Law Enforcement Laboratory
Forest and Wildlife Research Center
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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 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 red fox (*Vulpes vulpes*) spanning from the 1980 hunting season to the 2011-10 hunting season for resident hunters, and data spanning from the 1994 hunting season to the 2011-10 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*. 2nd Edition. New York: John Wiley and Sons, Inc.

RESULTS

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

	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
1981	5,509	701	0.06	0.87	58.5	77,027	15.09	6,452	2.5
1982	7,086	2,912	0.07	1.33	61.5	58,756	14.3	5,448	2.2
1983	6,743	2,055	0.11	1.32	73.2	52,167	11.27	5,119	2.0
1984	5,037	1,401	0.07	1.21	67.9	57,940	16.96	4,148	1.6
1985	2,725	801	0.03	0.67	47.2	76,106	20.91	4,088	1.6
1986	3,591	728	0.11	1.08	69.4	24,789	10.09	3,373	1.3
1987	4,052	1,017	0.03	0.69	48.9	116,914	26.94	5,882	2.3
1988	3,918	1,111	0.05	0.71	52.6	79,840	16.15	5,514	2.1
1989	-	-	-	-	-	-	-	-	-
1990	4,804	1,045	0.08	1.10	83.9	53,971	13.93	24,728	10.8
1991	3,422	1,338	0.20	1.36	72.7	14,157	6.53	7,901	3.5
1992	4,245	1,081	0.27	1.38	81.1	14,516	5.48	2,963	1.3
1993	2,300	572	0.08	0.79	60.6	27,615	10.06	2,919	1.3
1994	1,372	278	0.08	0.92	75.0	13,153	10.9	1,496	0.7
1995	3,175	1,397	0.12	1.68	77.8	24,914	16.45	2,040	0.9
1996	1,291	432	0.03	0.78	61.1	28,615	20.67	1,659	0.8
1997	1,178	407	0.03	0.65	47.8	39,775	20.67	1,806	0.9
1998	2,338	816	0.07	1.53	76.5	16,212	13.36	1,472	0.7
1999	1,217	476	0.04	0.97	62.1	25,574	24.5	1,346	0.7
2000	-	-	-	-	-	-	-	-	-
2001	895	423.88	0.22	1.56	66.7	2,622	5.13	575	0.3
2002	580	236.64	0.04	0.60	60.0	9,295	12.0	967	0.5
2003	1,024	545.00	0.08	1.13	62.5	11,038	13.86	910	0.5
2004	992	510	1.25	1.75	100	567	1.33	567	0.3
2005	1,576	880	0.01	1.33	66.7	27,062	45.67	1,182	0.6
2006	3,490	1891	0.09	3	72.7	16,648	18	1,129	0.6
2007	0	0	0.18	0	0	0	0	0	0
2008	1,085	433	0.12	1	77.8	4,671	6.14	976	0.5
2011	873	504	0.1	1.2	80	6,991	12	728	0.4
2010	937	523	0.15	1.33	83.3	3,165	5.4	703	0.4
2011	1,512	598	0.13	1	72.7	9,631	7	1,512	0.9

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

Figure 1. Trends in total harvest of red fox for licensed resident hunters (1980-2011)

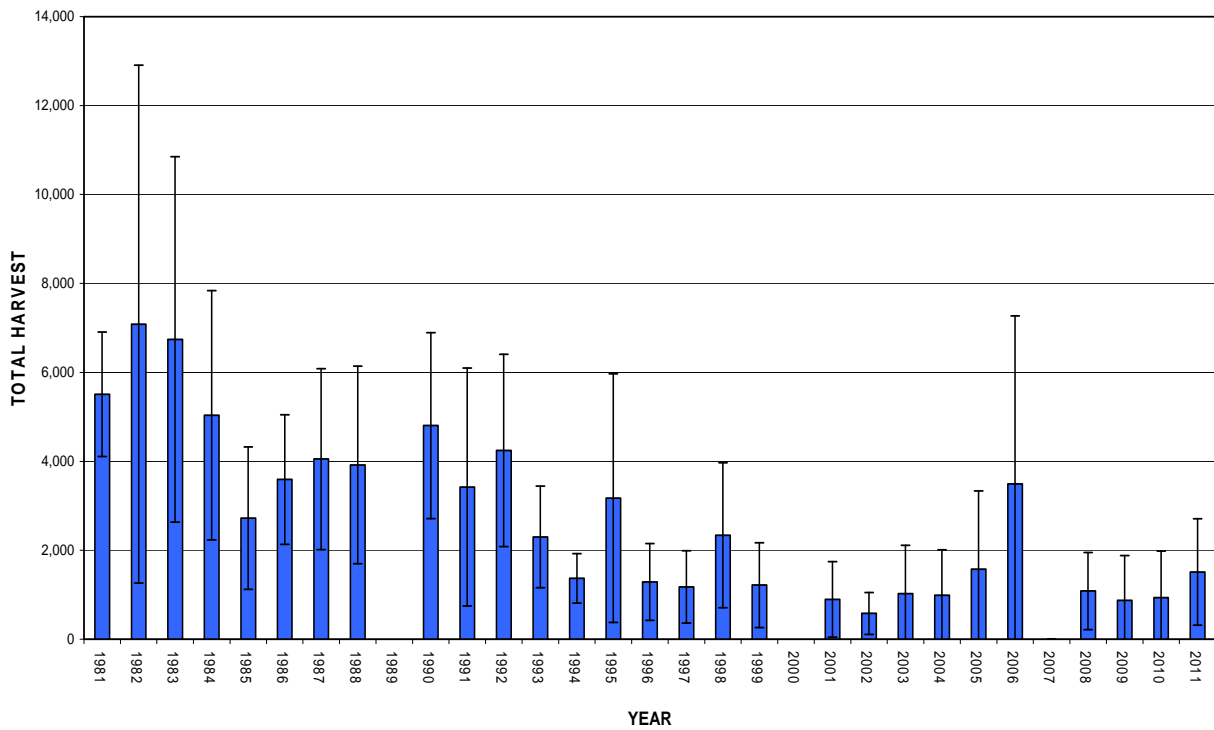


Figure 2. Trends in average daily kill of red fox for licensed resident hunters (1980-2011)

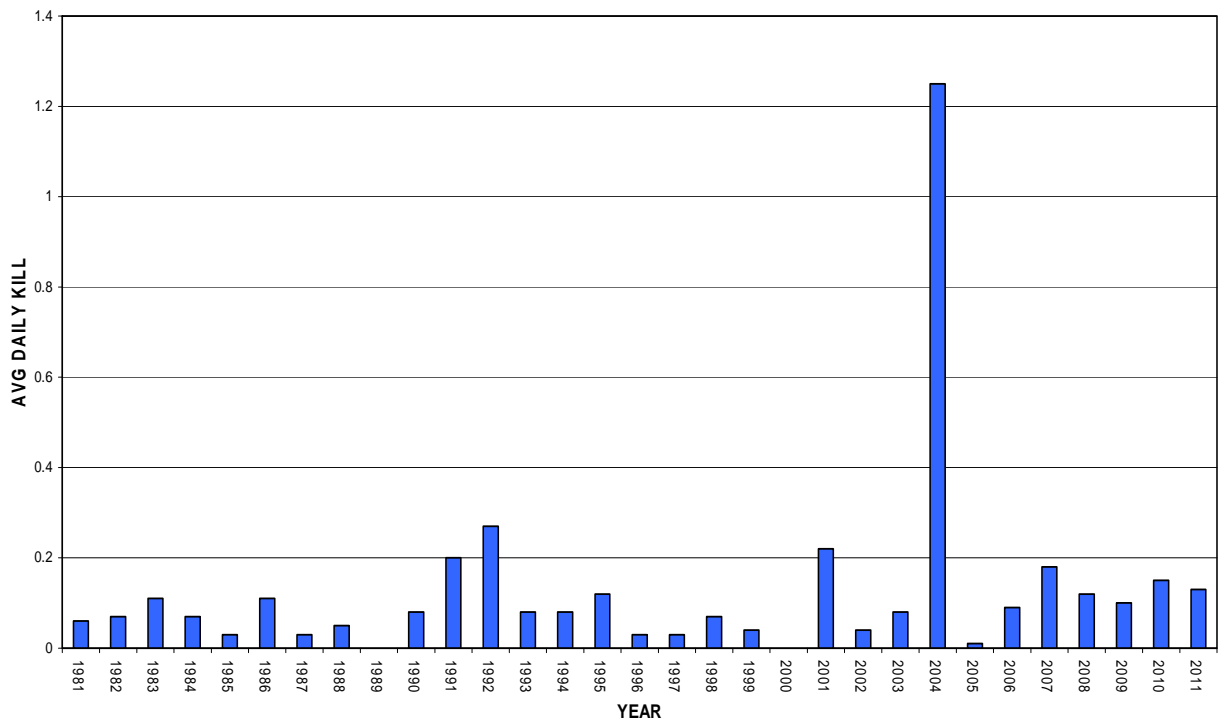


Figure 3. Trends in average seasonal harvest of red fox for licensed resident hunters (1980-2011)

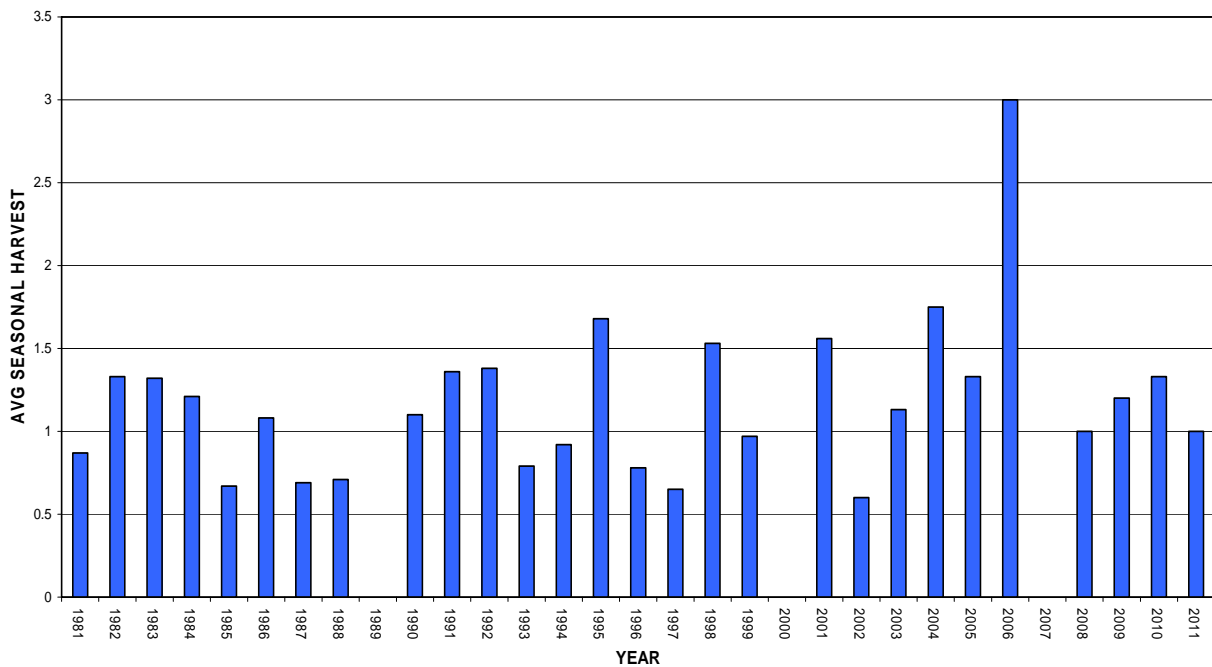


Figure 4. Trends in percent successful red fox hunters for licensed resident hunters (1980-2011)

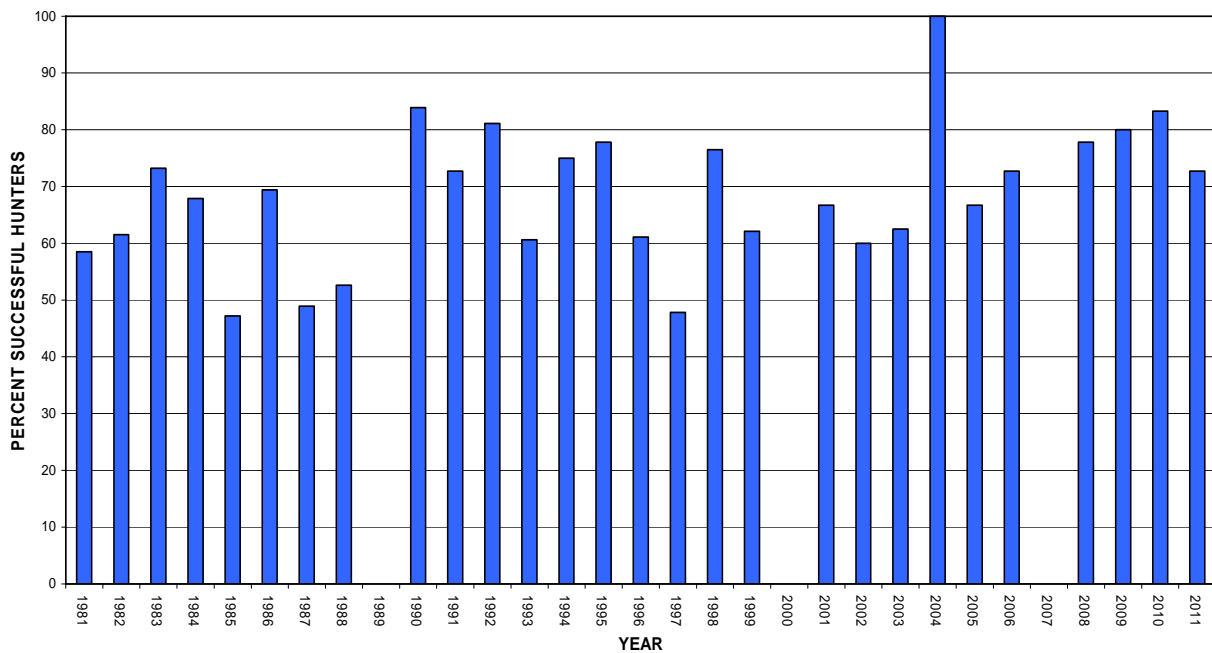


Figure 5. Trends in total man days red fox hunting for licensed resident hunters (1980-2011)

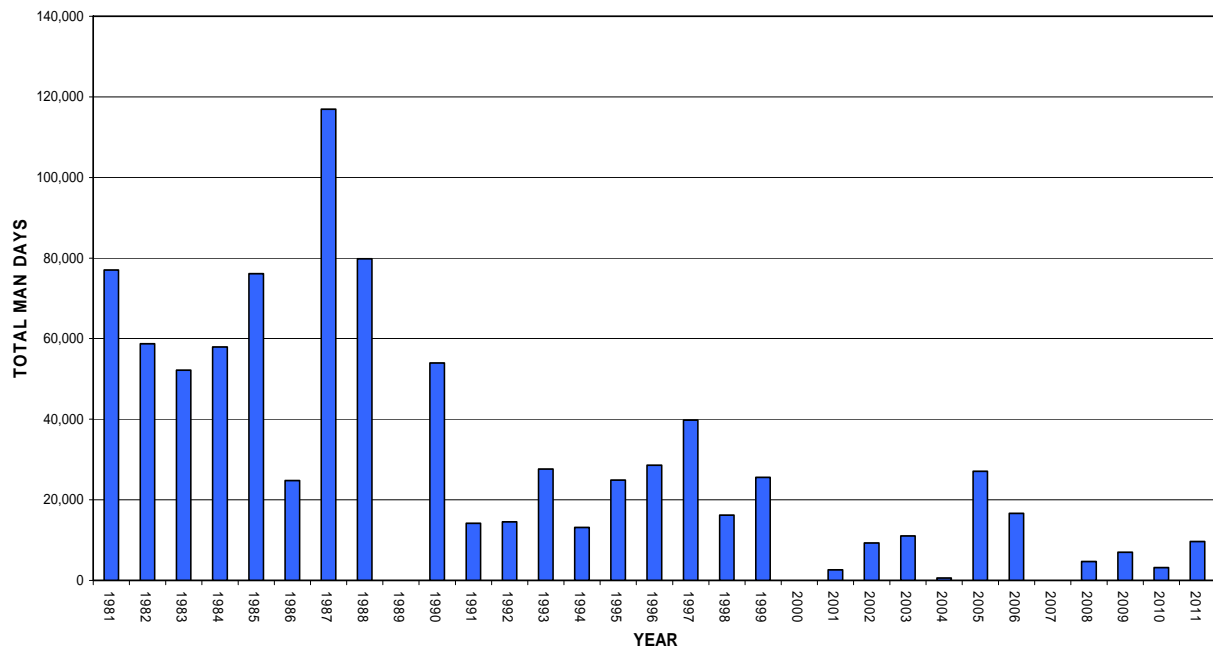


Figure 6. Trends in average seasonal days red fox hunting for licensed resident hunters (1980-2011)

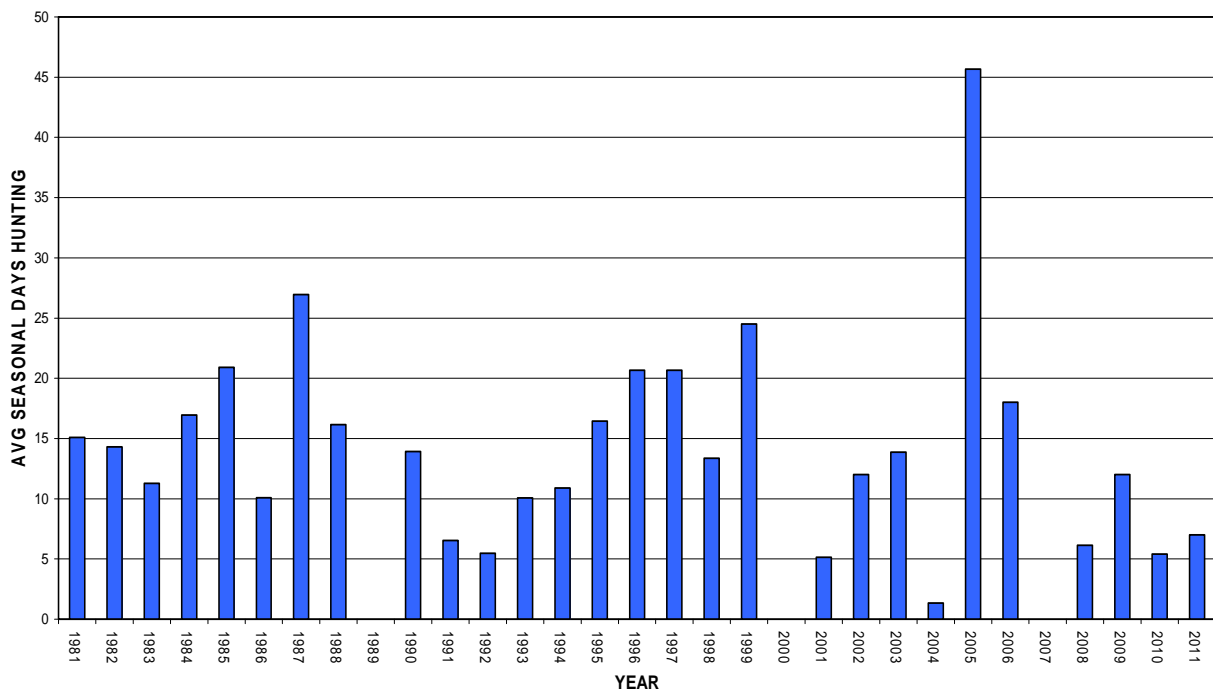


Figure 7. Trends in total red fox hunters for licensed resident hunters (1980-2011)

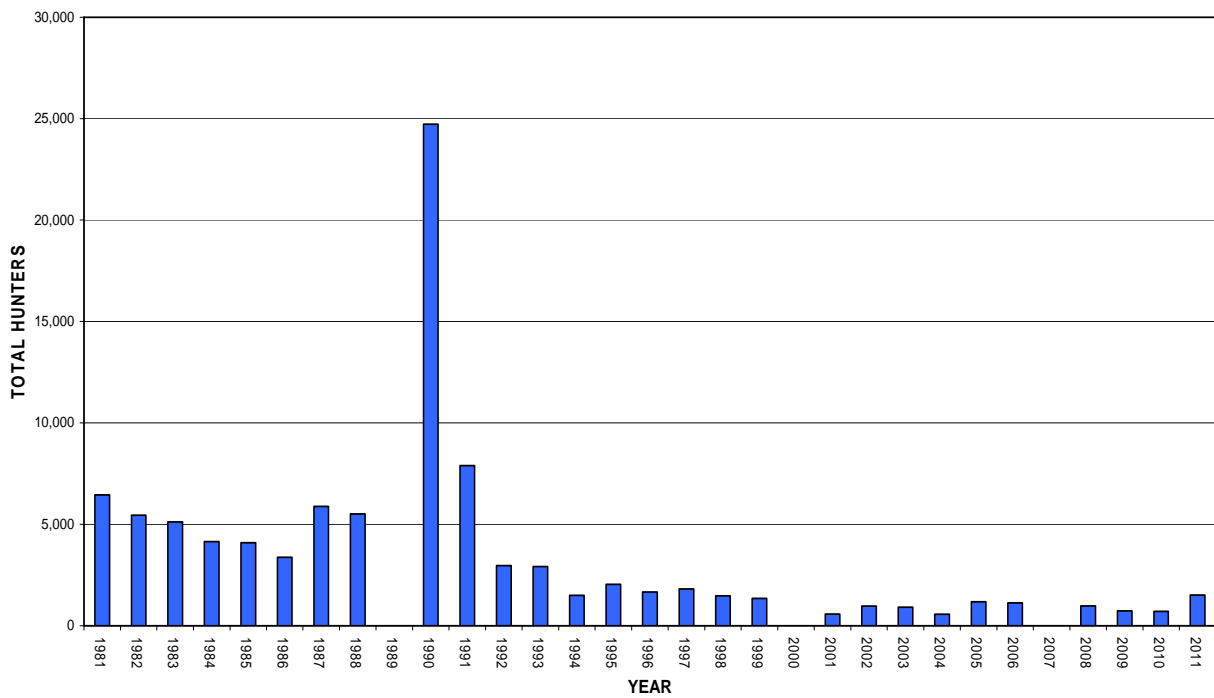


Figure 8. Trends in proportion of licensed non-resident hunters who hunted for red fox (1980-2011)

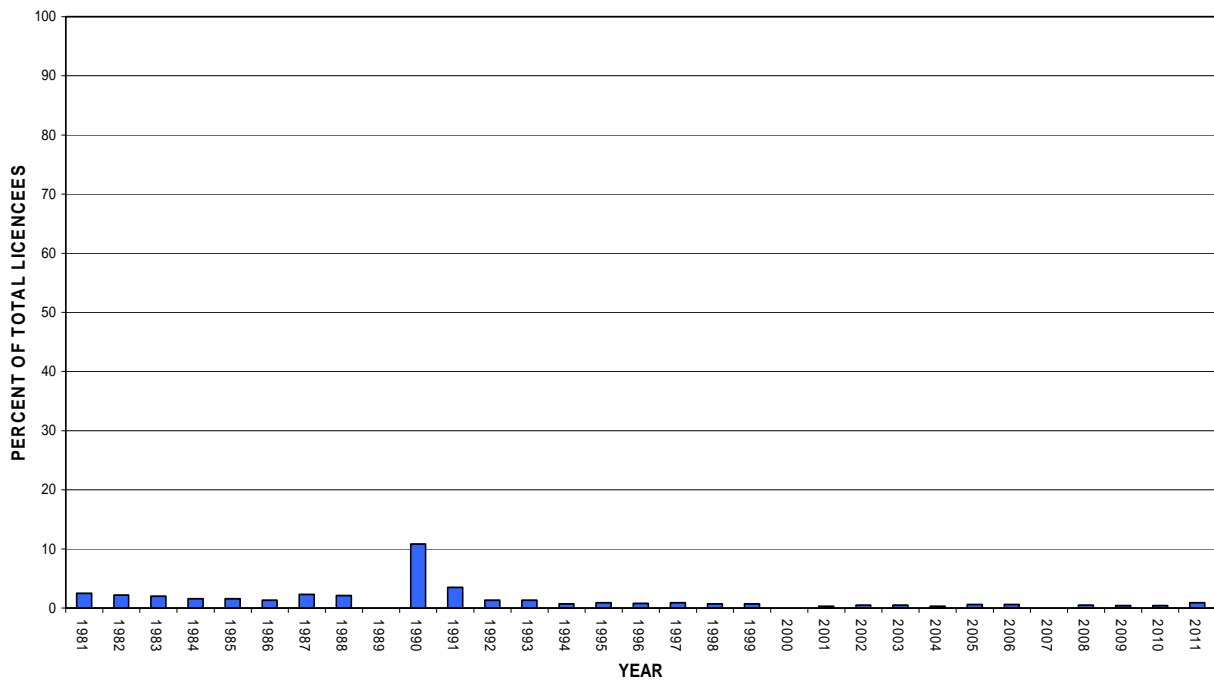


TABLE 2. Mississippi red fox hunting effort and harvest trends for licensed non-resident hunters (1994-2011)

	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 (A)
1995	131	-	0.17	3.2	0.4	762	18.6	41	0.003
1996	29	-	0.74	1	100	39	1.33	29	0.2
1997	-	-	-	-	-	-	-	-	-
1998	58	-	0.365	1.25	100	224	4.25	42	0.2
1999	16	-	0.22	1	50	72	4.5	16	0.1
2000	-	-	-	-	-	-	-	-	-
2001	44	27.09	0.07	1	75	608	13.75	44	0.1
2002	15	14.96	0.04	1	1	419	28	15	0.1
2003	73.41	54.7	0.33	1.5	1	220	4.5	49	0.2
2004	34	24	0.2	1	100	85	5	34	0.1
2005	23	23	0	0.5	50	265	12	45	0.1
2006	16	16	1	1	100	16	1	16	0.1
2007	0	0	0	0	0	140	4	35	0.1
2008	0	0	0.03	1	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0
2010	83	59	0	0.67	66.7	581	14	124	0.3
2011	0	0	0	0	0	415	10	41	0.1

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

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

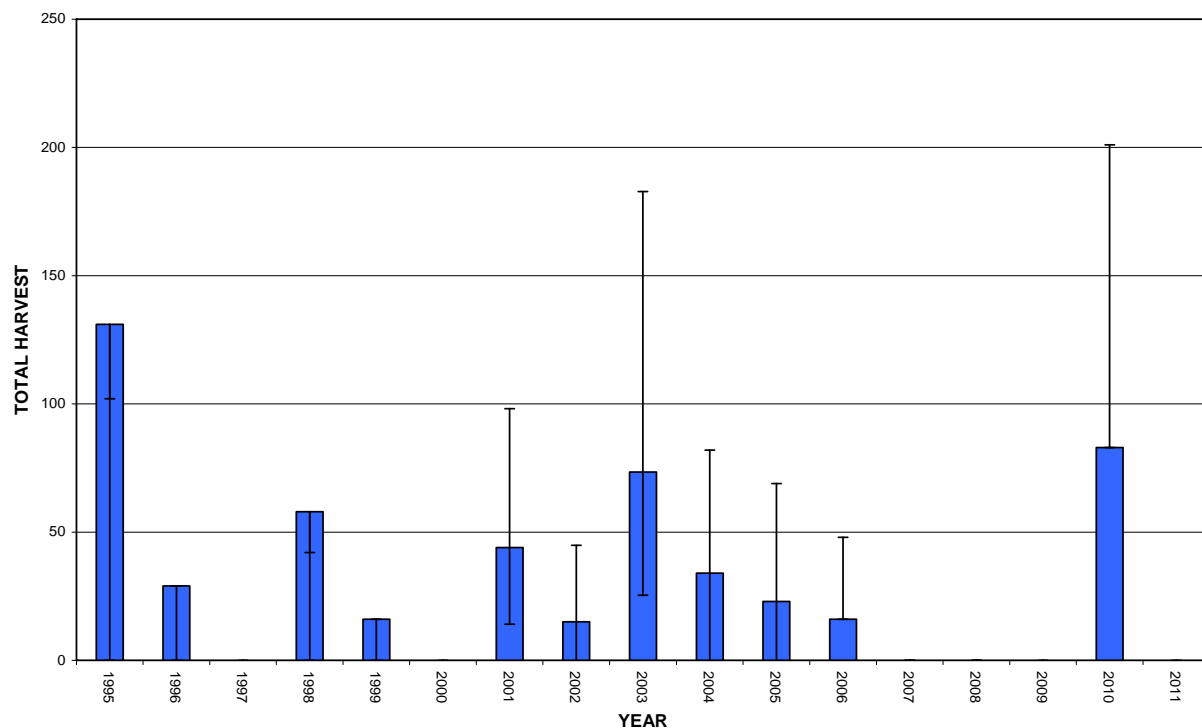


Figure 10. Trends in average daily kill of red fox for licensed non-resident hunters (1994-2011)

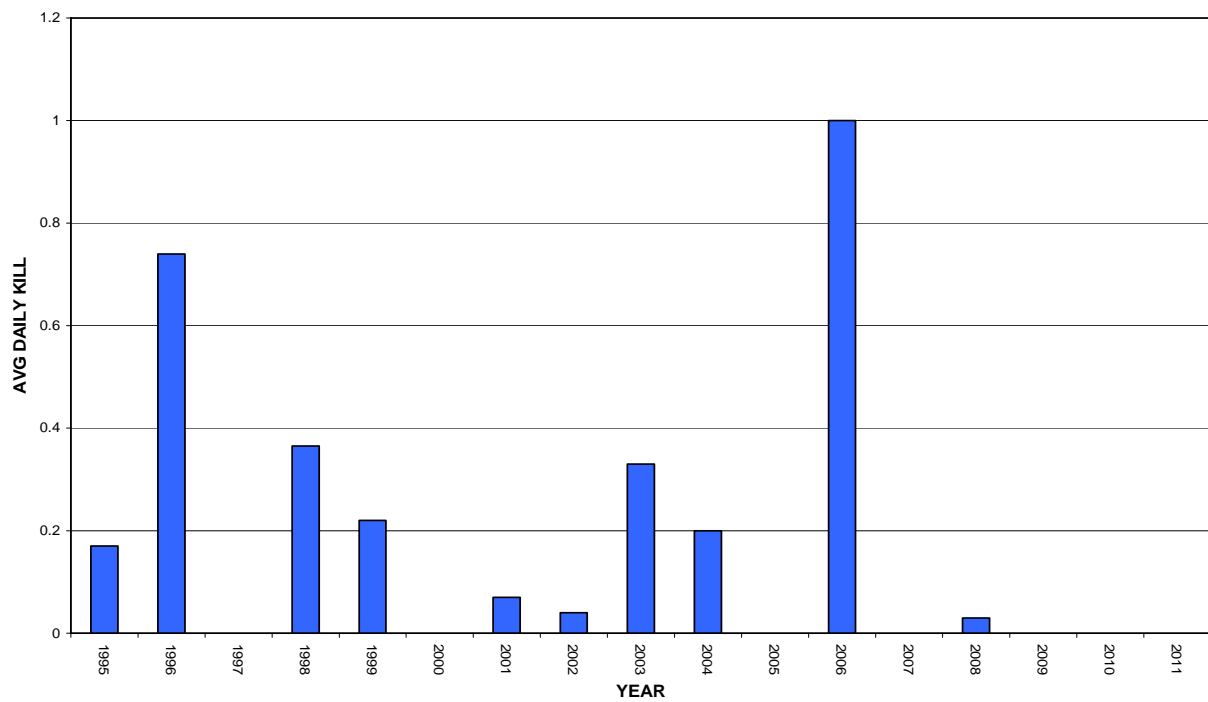


Figure 11. Trends in average seasonal harvest of red fox for licensed non-resident hunters (1994-2011)

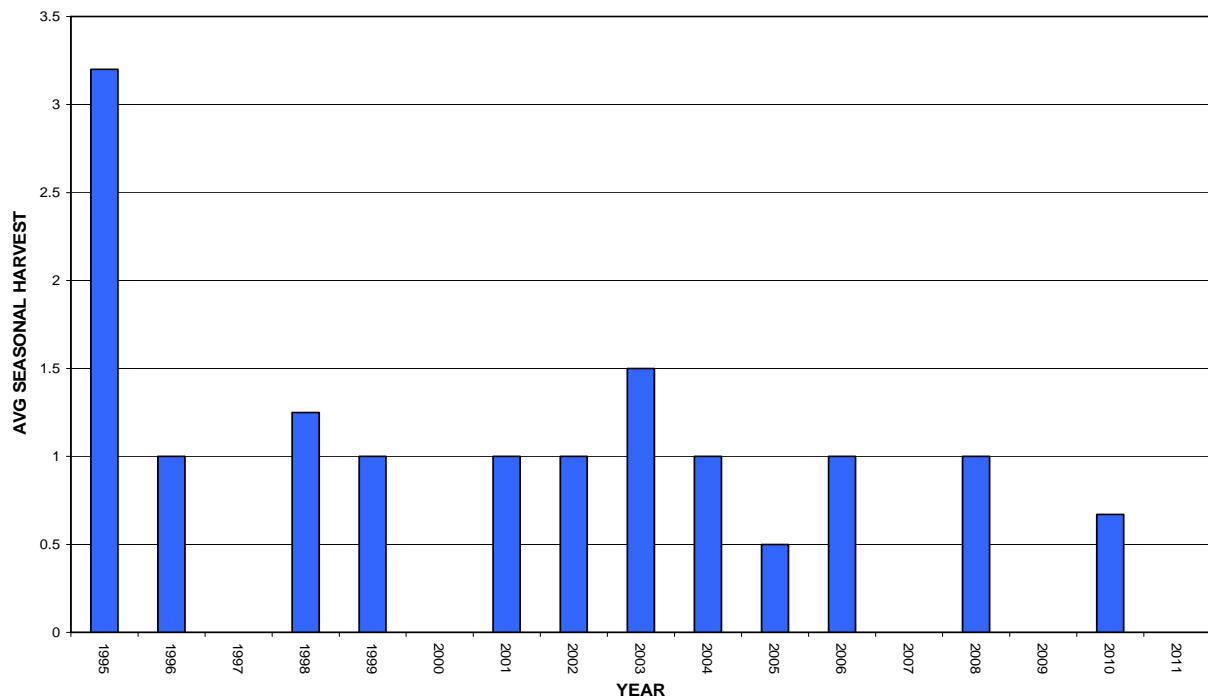


Figure 12. Trends in percent successful red fox hunters for licensed non-resident hunters (1994-2011)

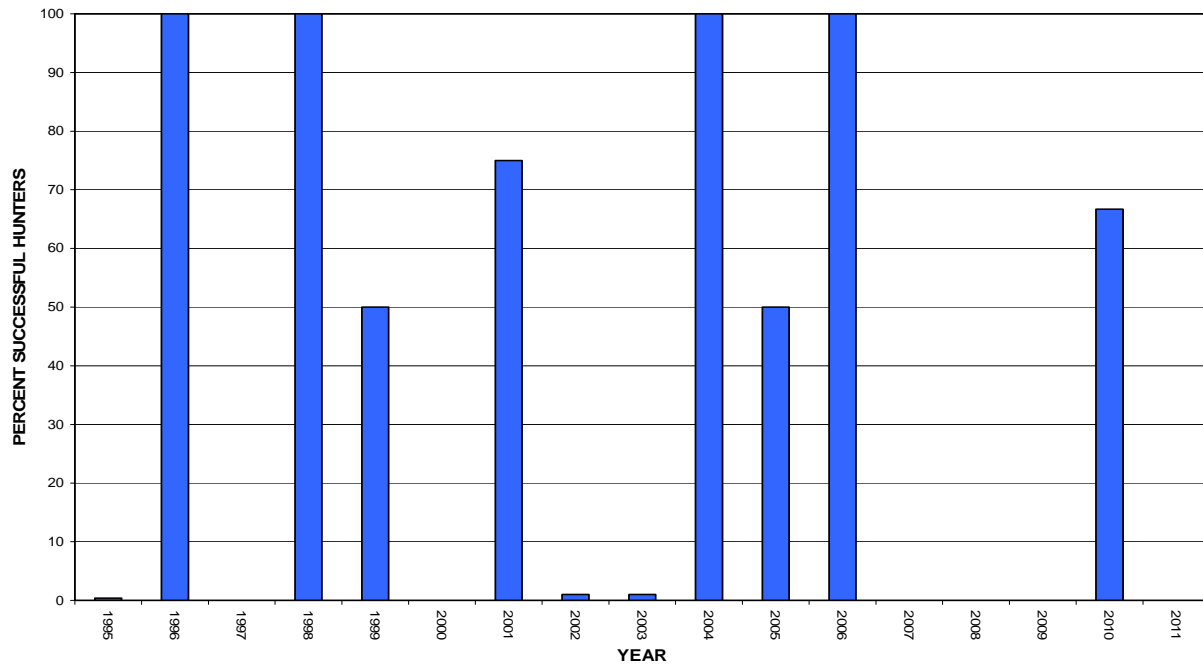


Figure 13. Trends in total man days red fox hunting for licensed non-resident hunters (1994-2011)

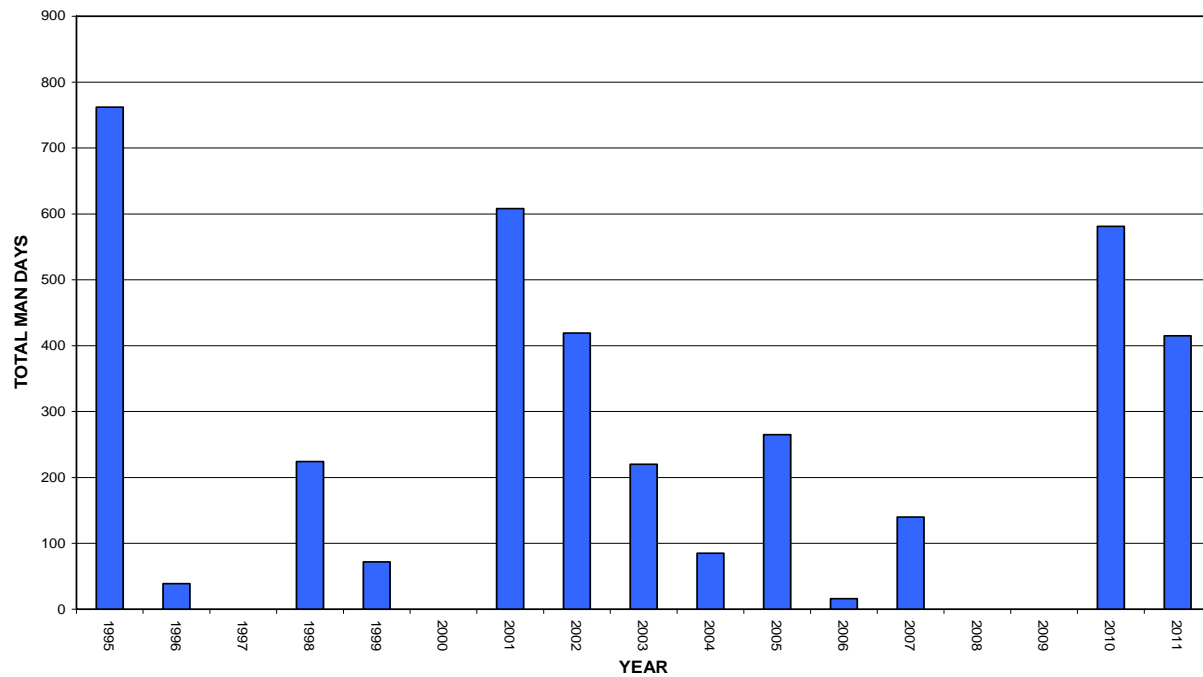


Figure 14. Trends in average seasonal days red fox hunting for licensed non-resident hunters (1994-2011)

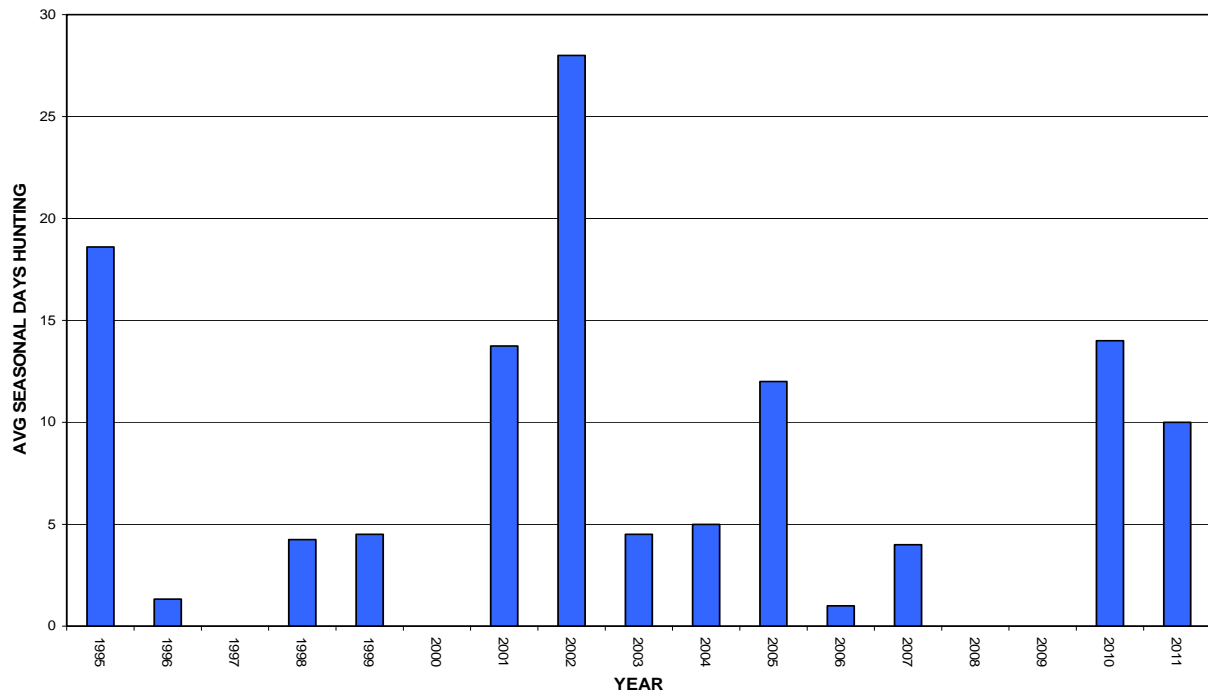


Figure 15. Trends in total red fox hunters for licensed non-resident hunters (1994-2011)

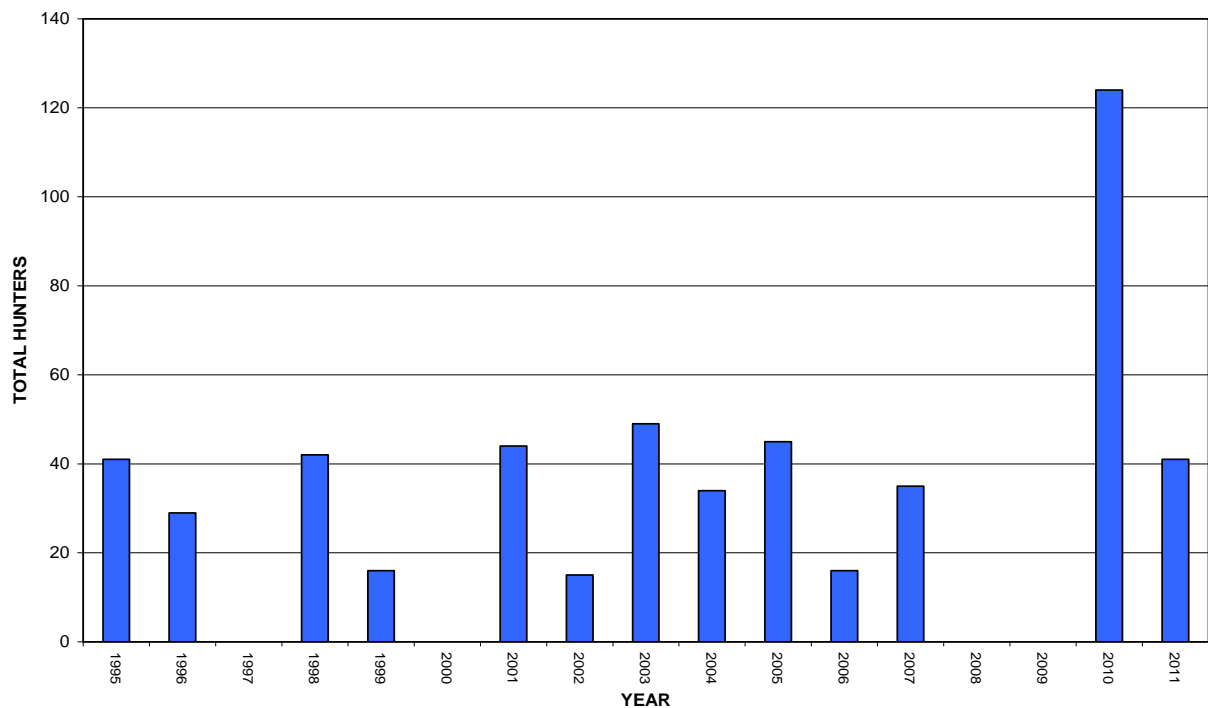


Figure 16. Trends in proportion of licensed non-resident hunters who hunted for red fox (1994-2011)

