

# Trends in Resident and Non-resident Hunter Effort and Harvest for Raccoon 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 the 1980-1981 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 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 raccoon (*Procyon lotor*), spanning from the 1980-81 hunting season to the 2009-10 hunting season for resident hunters, and data spanning from the 1994-95 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 raccoon hunting effort and harvest trends for licensed resident hunters (1980 to the Present)

	(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	
1981	233,072	17,034	0.69	8.16	90.5	303,656	11.59	28,907	11.3	
1982	208,199	31,736	0.57	8.42	86.3	323,309	14.48	24,923	10.2	
1983	224,055	33,440	0.89	8.37	92.1	243,346	9.53	27,220	10.4	
1984	181,724	25,037	0.64	7.25	91.1	229,677	10.41	25,184	9.7	
1985	241,990	37,912	0.84	9.34	90.4	264,774	10.96	26,005	10.1	
1986	188,996	22,923	0.78	9.10	90.1	224,075	11.71	20,945	8.3	
1987	222,458	28,130	0.80	8.73	90.8	261,462	11.14	25,487	10.0	
1988	194,833	28,362	0.78	6.71	87.1	229,492	8.35	29,165	11.4	
1989	-	-	-	-	-	-	-	-	-	
1990	149,847	31,165	0.55	7.85	88.1	267,606	14.89	38,304	16.7	
1991	135,547	25,018	0.77	7.82	90.8	157,615	9.75	22,368	9.8	
1992	126,536	18,015	0.69	7.86	92.9	174,684	11.8	15,697	6.9	
1993	134,079	16,708	0.67	7.62	91.5	181,702	10.94	17,600	7.6	
1994	118,594	12,044	0.56	7.87	90.9	188,861	13.42	15,048	6.8	
1995	134,842	20,870	0.59	9.02	95.5	211,192	15.27	14,957	6.9	
1996	97,388	21,069	0.53	9.43	91.2	171,160	17.46	10,417	5.0	
1997	110,080	20,490	0.53	9.05	91.0	198,296	17.46	12,170	5.9	
1998	135,915	21,250	0.53	8.86	89.8	235,250	16.47	15,413	7.4	
1999	127,424	17,722	0.60	11.06	94.0	185,940	17.38	11,726	5.7	
2000	-	-	-	-	-	-	-	-	-	
2001	102,044	17,730.20	0.52	9.63	93.1	156,519	18.69	8,376	4.1	
2002	108,526	22,928.84	0.85	10.77	84.9	105,044	12.63	8,318	4.2	
2003	80,518	17,124.78	0.60	7.99	87.8	112,589	13.38	8,416	4.5	
2004	78,193	17,920	0.59	8.19	86.5	101,708	13.81	7,367	3.9	
2005	64,583	17,256	0.62	6.76	88.1	90,377	10.93	8,270	4.5	
2006	103,878	21,095	0.6	12.77	90.9	166,902	21.12	7,904	4.5	
2007	49,613	13,743	0.67	6.69	91.1	48,016	10.02	4,791	2.7	
2008	66,719	13,584	0.58	10.24	98.2	105,992	17.76	5,967	3.3	
2009	35,361	7,691	0.3	4.63	87.8	108,704	15.24	7,130	4	
2010	52,238	11,577	0.66	7.07	81.4	74,493	10.78	6,910	4.2	
2011	67,496	13,078	0.62	5.8	94.3	89,628	9.31	9,623	5.8	

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



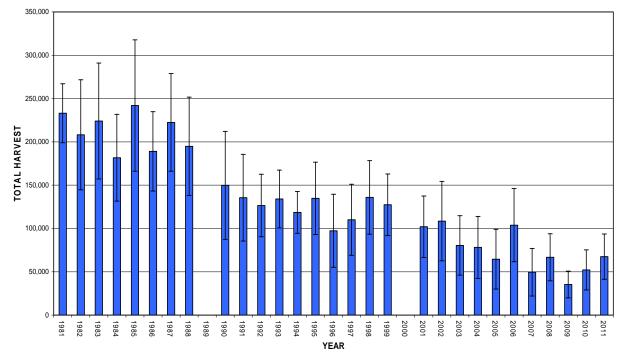


Figure 2. Trends in average daily kill of raccoon for licensed resident hunters (1980 to the Present)

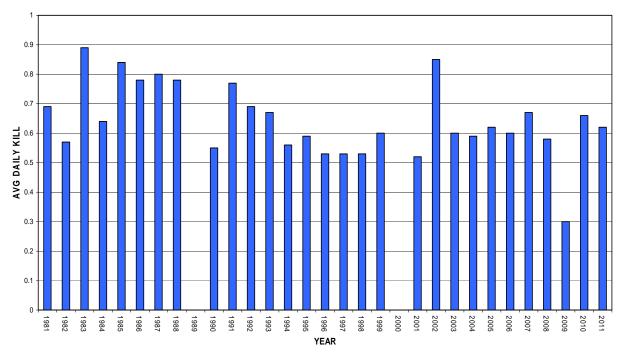


Figure 3. Trends in average seasonal harvest of raccoon for licensed resident hunters (1980 to the Present)

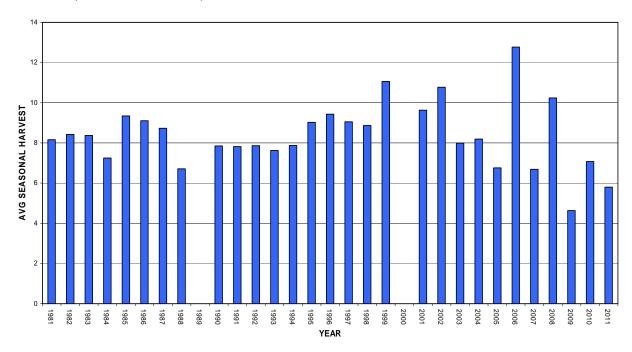


Figure 4. Trends in percent successful raccoon hunters for licensed resident hunters (1980 to the Present)

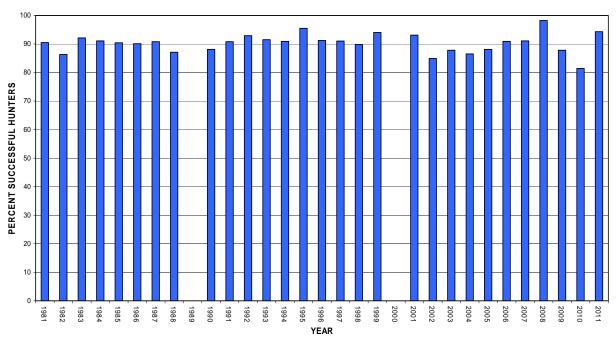


Figure 5. Trends in total man days in raccoon hunting for licensed resident hunters (1980 to the Present)

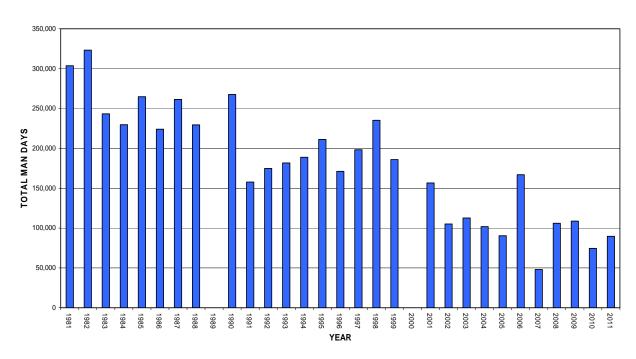
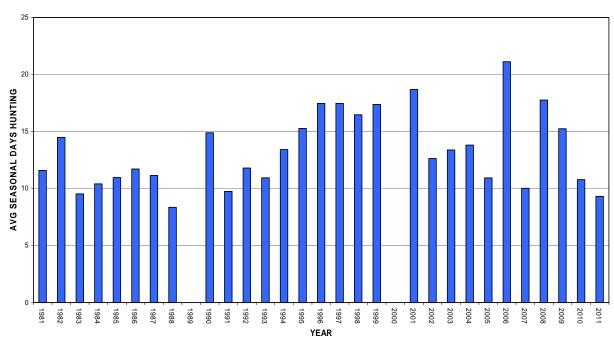
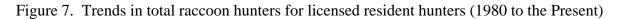


Figure 6. Trends in average seasonal days raccoon hunting for licensed resident hunters (1980 to the Present)





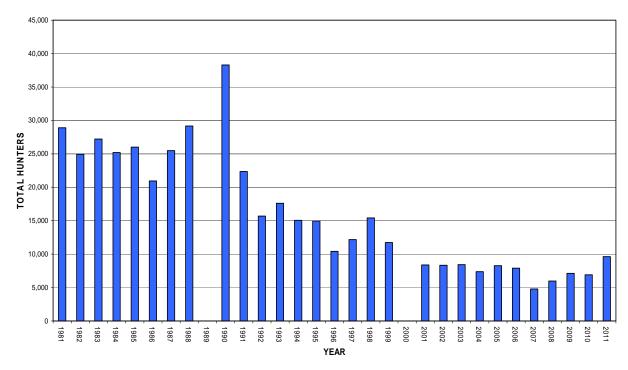


Figure 8. Trends in proportion of licensed resident hunters who hunted for raccoon (1980 to the Present)

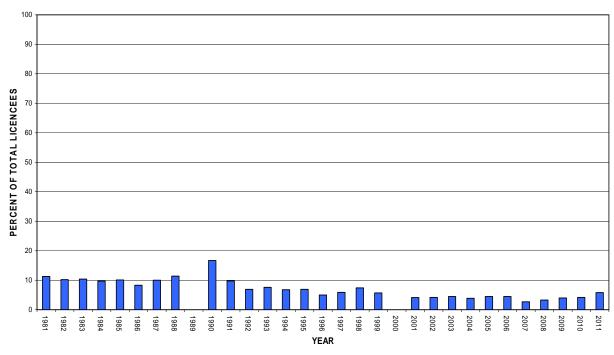


TABLE 2. Mississippi raccoon hunting effort and harvest trends for licensed non-resident hunters (1994 to the Present)

	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	3,967	-	0.694	7.255	0.955	5,622	11.788	572	0.023
1996	3,747	-	1.463	8.927	94	2,422	5.52	455	8.367
1997	-	-	-	-	-	-	-	-	-
1998	2,397	-	1.233	5.285	83.125	2,137	4.373	410	1.625
1999	940	-	0.883	3.093	90.625	1.892	2.375	310	0.8
2000	-	-	-	-	-	-	-	-	-
2001	1,880	476.98	0.66	4.94	93.8	2,666	7.53	354	1
2002	1,436	780.61	0.73	4.19	66.7	1,810	5.76	314	0.9
2003	4,282.20	1,648.30	0.44	6.92	88	9,690	15.84	612	1.9
2004	3,297	1,173	0.42	7.72	88	7,861	18.6	423	1.3
2005	5,318	1,720	0.71	7.44	96.3	6,245	10.48	596	1.8
2006	3,753	1,412	0.72	8.45	75	4	11.8	317	1
2007	701	374	1.55	4.25	75	385	2.75	140	0.4
2008	2,570	1,718	0.95	8.63	87.5	2,437	9.13	267	0.7
2009	1297	743	0.78	5	57.1	1,668	6.43	259	0.7
2010	1,615	761	1	4.25	100	1,408	4.25	331	0.9
2011	3,361	1,917	1.05	5.4	80	3,195	5.13	622	1.7

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

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

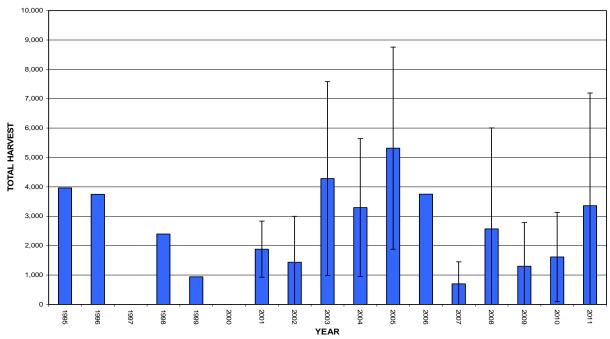


Figure 10. Trends in average daily kill of raccoon for licensed non-resident hunters (1994 to the Present)

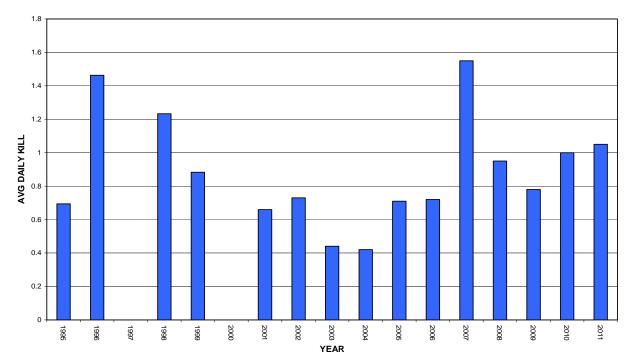


Figure 11. Trends in average seasonal harvest of raccoon for licensed non-resident hunters (1994 to the Present)

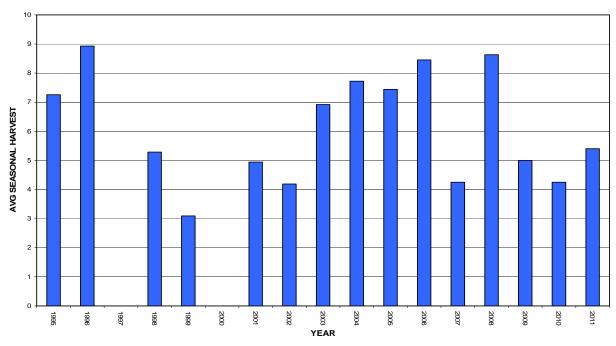


Figure 12. Trends in percent successful raccoon hunters for licensed non-resident hunters (1994 to the Present)

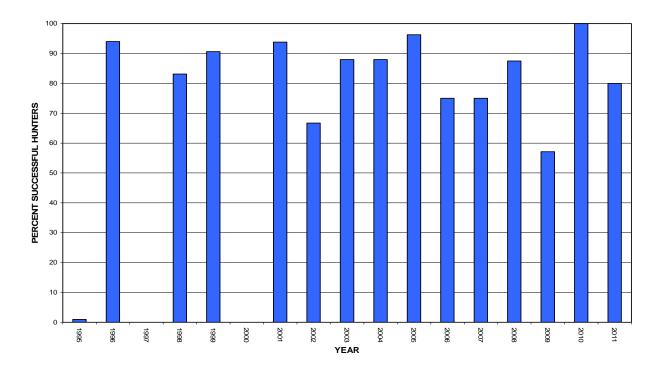


Figure 13. Trends in total man days raccoon hunting for licensed non-resident hunters (1994 to the Present)

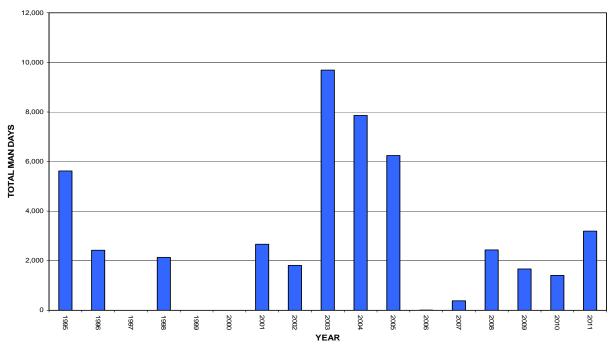


Figure 14. Trends in average seasonal days raccoon hunting for licensed non-resident hunters (1994 to the Present)

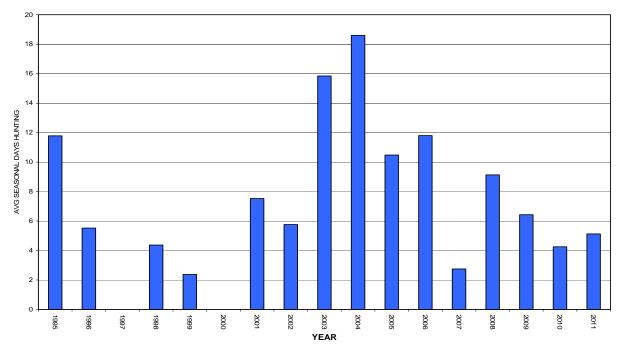


Figure 15. Trends in total raccoon hunters for licensed non-resident hunters (1994 to the Present)

