

# Louisiana Harvest Summary 2011-2012

LDWF WMA and private lands biologists,  
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## Introduction

The Louisiana deer program is administered by the Office of Wildlife and implemented through 6 field offices where wildlife biologists and technicians perform year round research and management activities on public and private lands. For hunting season purposes, the state is now divided into 7 deer Areas. For the 2012-13 season, Area 4 will be combined with Area 1 (Figure 1).

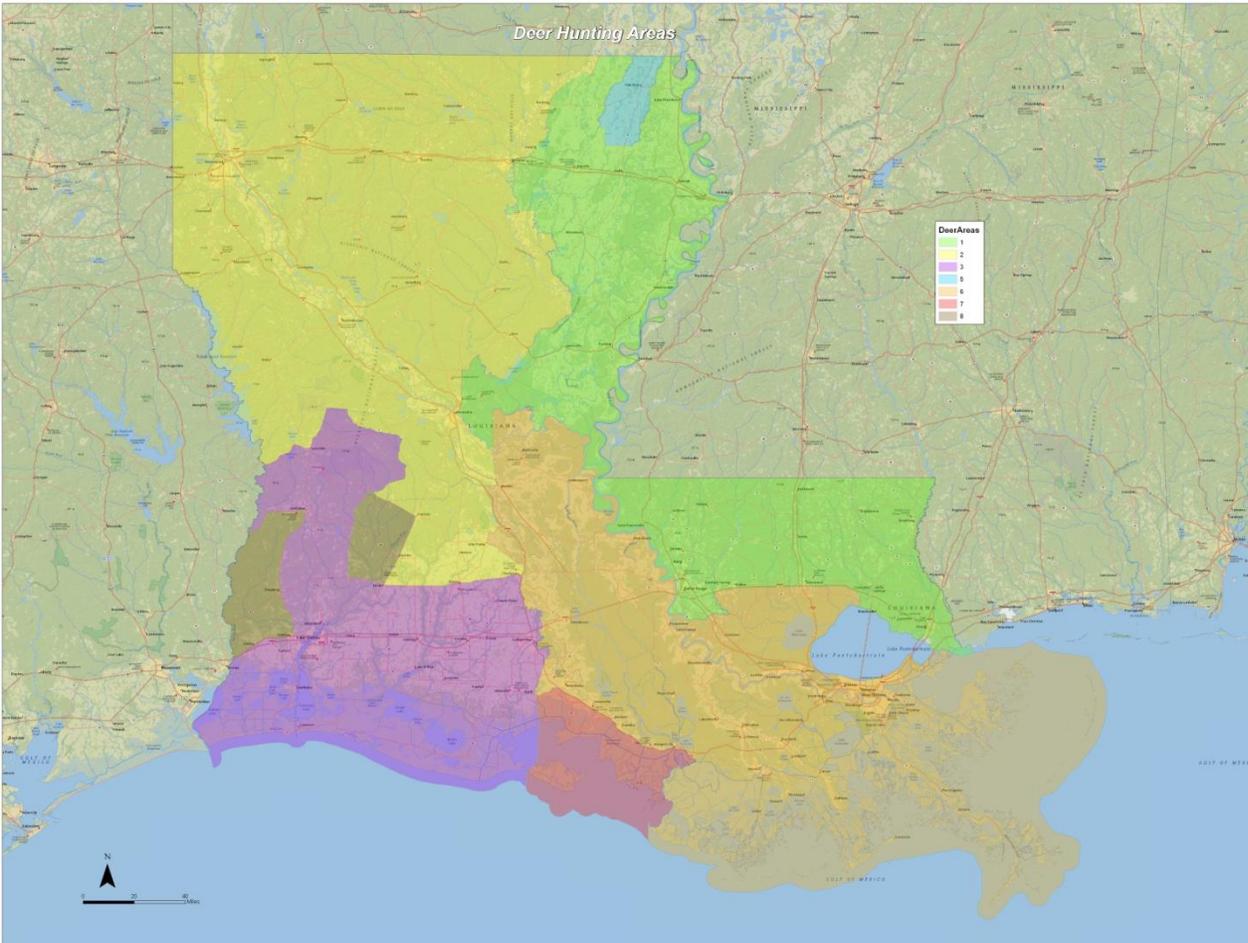
Seasons are set according to general breeding periods, habitats, weapons, and hunting methods. Louisiana has a statewide limit of 3 antlered and 3 antlerless deer per year. Antlerless deer may be taken during the entire season except in a portion of the Atchafalaya basin, and West Carroll parish, where there are limited and specific days for antlerless harvest. All deer must be tagged prior to being moved from the harvest site.

All deer must be reported through the phone or internet system, a wildlife management area (WMA) worker, or the Deer Management Assistance Program (DMAP). This harvest information along with other data is used to develop deer seasons and regulations.



Mr. John Barton Sr., surrounded by friends and family, celebrate and share in the harvest of a fine East Feliciana deer.

Figure 1. Louisiana Deer Hunting Areas, 2012-13.



## Harvest

Anecdotal reports from many hunters were lower than normal deer numbers and harvests across much of the state. A record mast crop was observed following another severe drought. The first 6 months of 2011 were the driest ever recorded in Louisiana (Jan –June 2011). Some hunters that only hunted permanent stands over food plots or bait did not have a lot of success.

Hunters experienced favorable weather conditions for much of the deer hunting season this year. January however, was a relatively warm month and may have affected Areas 1 and 6 hunters the most, reducing deer movement and harvest opportunities.

The spring flooding of 2011 once again impacted the batture areas along the MS River, impacting habitat and causing some direct mortality prior to the season. The second historic opening of the Morganza spillway also caused deer and other wildlife mortality and had a short tem negative impact on the habitats that were inundated the longest. These and recent past flood events along with 2 years of drought likely are factors contributing to reduced harvests in these flood prone areas. Conversely, the spillway area has rebounded well and the habitat is looking good.

Summer droughts have very negative impacts on browse availability, palatability and nutrient content at a time when doe health and fawn growth, development and survival are most critical. Low fawning rates or survival reduce recruitment, which is critical for sustaining populations. Additionally, dry Junes are especially thought to increase the prevalence of hemorrhagic disease, our most significant deer disease and non-hunting source of mortality.

In conversations with one media representative, it was suggested that gas prices during last year's hunting season were such that many hunters may have opted to just stay home. This is somewhat substantiated by the mail survey which showed the number of days hunted (2,989,600) was down 8.6%. The cost associated with travel to deer leases and WMAs more than an hour or so away can be substantial.

Human expansion and industrial development also impact wildlife habitats and deer carrying capacity. We continue to observe fragmentation and an increase in exurbia in some areas of Louisiana. Energy development in northwest Louisiana has left a large footprint than in previous booms. More intensive forest management practices of the last decade have also impacted the landscape as reduced carrying capacities continue to be observed in some pine dominant parishes and regions. Hog populations are high enough in some areas of the state to affect deer numbers through direct competition for food resources. The mail survey hog harvest (98,200) was up 10%, possibly indicating more hogs on the landscape. Recent research shows that deer and hogs do not mix well and that deer can be displaced by hogs.

Coyote predation, especially on fawns, has become much more of a concern in other southern states in recent years. Coyotes have been in Louisiana for decades and have not limited deer herds in moderate to high productivity habitats. However, the combination of high coyote populations and high hog populations could be a contributing factor, especially in lower quality habitats.

Reports of hemorrhagic disease (EHD or BTV) always indicate that some populations may suffer sufficiently high mortality rates to impact harvest at local levels.

### Mail survey

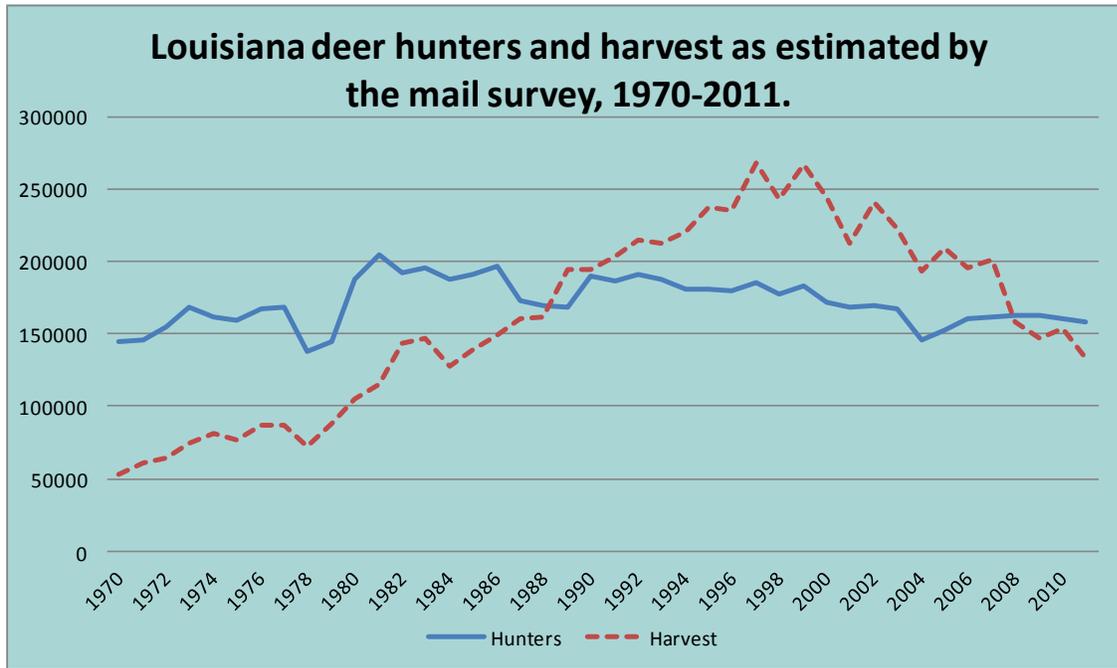
Each year, a 6% sample of licensed hunters between the ages of 16 and 59 receive a harvest survey by mail. Participants return the survey and statistics are compiled. Youth and senior hunters are not included in this survey, so estimates are best used for monitoring long term trends\*. The mail survey index for hunters and harvest for the 2011/12 season is 158,600 and 133,000 respectively. The hunter number index has been relatively stable the last few years. The harvest index was down 13% (Figure 2), and is the lowest estimate since 1984. The harvest sex ratio according to the mail survey was 56% male, 44% female. The number of days hunters took to the woods was down 8.6%.

The harvest allocation by weapon type (Table 1) reveals that modern weapons are still by far the most effective method for harvesting deer in Louisiana. A 4% increase in bow hunters resulted in a bow harvest higher than the primitive firearms harvest.

\*= Future mail surveys will include senior hunters, as they have become a more significant portion of the deer hunters in Louisiana at 26.5%. Previous statistical methods have sampled only hunters as described above.

Weapon	Harvest	%
modern gun	105,200	79%
primitive	12,000	9%
bow	14,000	11%
crossbow	1,800	1%
Totals	133,000	

Figure 2.



Internet/phone reporting results

This year was the fourth year of mandatory tagging and reporting of deer through the system. Results provide a count of male and female deer harvested by parish on private and public lands (Table 2). It is important for hunters to report their deer, so complete data are available for future deer management decisions. There were 253,669 sets of deer tags issued in 2011-12. A summary of the reported non-program private lands harvest along with the public lands, WMA managed hunts, and DMAP totals are presented by parish in Appendix 1. The top total harvest parishes are presented in Table 3 and Figure 3. The top harvest parishes by forested acres per deer are presented in Table 4 and Figure 4. The total harvest count from all sources of data is 76,378. The sex ratio of the 53,860 deer reported taken on non-program private lands was again 58% male and 42% female.

Table 2. Summary of harvest reporting by category, 2008-2011.

Year	Private	Public	WMA managed	DMAP	Total
2008/09	87,237	8,481	2,877	17,976	116,571
2009/10	78,444	9,035	2,335	17,641	107,455
2010/11	74,346	9,742	3,004	17,740	104,832
2011/12	53,860	5,596	2,526	14,396	76,378

Table 3. Top 20 harvest parishes in Louisiana derived from the reporting system through April 15, 2012.

Parish	Harvest	Parish	Harvest
Union	4,343	Iberville	2,004
Bienville	3,434	Tensas	1,957
Claiborne	3,233	Sabine	1,925
Vernon	3,151	Rapides	1,783
Webster	2,807	W. Feliciana	1,776
Bossier	2,623	Beauregard	1,721
Natchitoches	2,357	Morehouse	1,704
Jackson	2,185	St. Landry	1,666
DeSoto	2,147	Madison	1,653
Winn	2,070	Avoyelles	1,603

Figure 3.

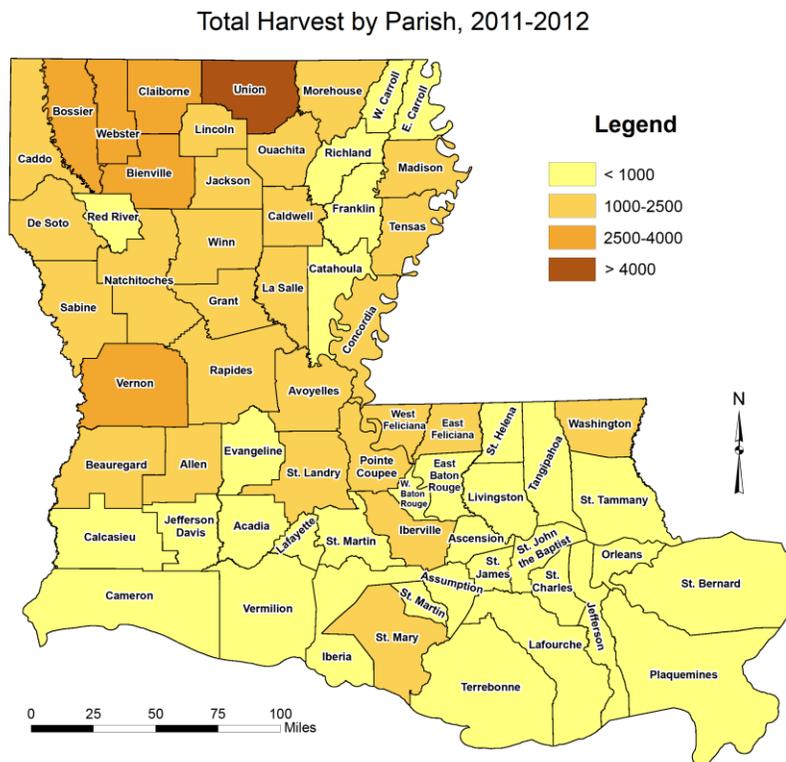
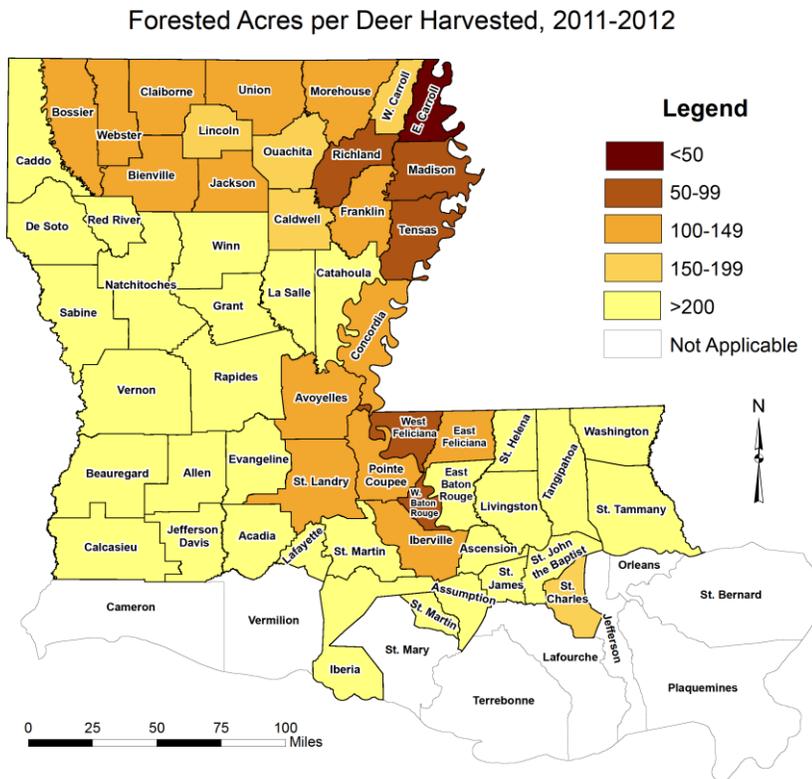


Table 4. Top 20 harvest parishes by forested acreage derived from the new reporting system through April 15, 2012.

Parish	Acres/deer	Parish	Acres/deer
E. Carroll	37	Concordia	120
Tensas	58	Point Coupee	122
Madison	64	Avoyelles	122
W. Baton Rouge	73	Franklin	128
W. Feliciana	92	Iberville	129
Richland	99	Bienville	131
St. Landry	100	Claiborne	135
Webster	102	E. Feliciana	135
Morehouse	106	Bossier	139
Union	110	Jackson	144

Figure 4.



### Mail survey vs. reporting system harvest-

The mail survey index of 133,000 is higher than the reporting system harvest of 76,378 (Table 5). Since the mail survey is a single mailing, there is the potential to bias the index high. The mail survey index is best used to monitor trends over time and not as an absolute count. The new reporting system count likely is low due to less than 100% participation. It is possible that, due to a number of reasons, the statewide harvest from the reporting system will continue to be lower than the mail survey index. Prior to this year, the mail survey and reporting numbers fairly well tracked each other. The larger difference this year may indicate a drop in the number of hunters reporting their deer.

Year	Mail survey harvest index		Reporting system (all sources*)		Difference
2007/08	201,000		na		
2008/09	158,300	-21%	116,571	na	26%
2009/10	147,300	-7%	107,455	-8%	27%
2010/11	153,500	4%	104,832	-2%	32%
2011/12	133,000	-13%	76,378	-27%	43%

\*= DMAP, WMA managed hunts, public and private reporting system total

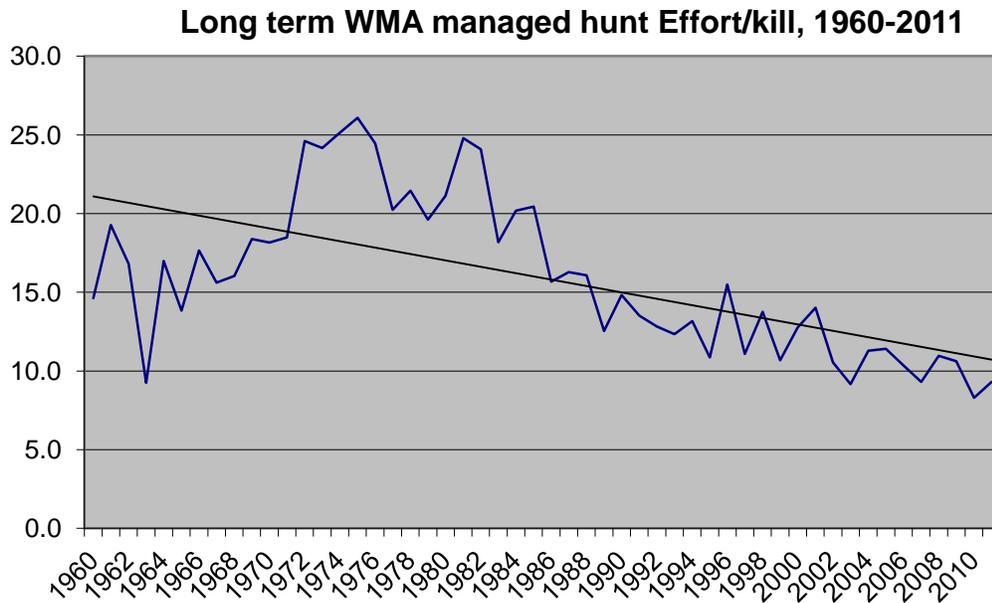
### Wildlife Management Areas-

The Department manages over 1,000,000 acres that provide deer hunting opportunity. Archery and either-sex gun hunts are the primary methods for keeping deer numbers in balance with the habitat. Youth and handicapped hunts also are available on many areas. Bucks only seasons provide extended hunting opportunity and generally are held near or during rut. Harvest rates are highly variable on the WMAs according to deer physiographic region, habitat conditions, and hunter efforts. In some years WMA harvest rates equal or surpass intensively managed DMAP properties. On some WMAs, harvest rates are low due to habitat type, forest conditions, accessibility issues, or other management objectives. In general, WMA deer herds are managed in a way that helps insure long term forest regeneration, diversity, sustainability, and high deer quality. WMAs are not managed for maximum residual numbers, but rather maximum sustained harvest and recreational opportunity, which means deer herds at or below maximum biological carrying capacity.

Conditions were good for managed hunts this year. The recorded harvest for either-sex managed hunts was 2,378 deer on the WMAs this year (Table 6). Managed either-sex hunts had an average hunter success rate of 9.3 efforts per deer (Figure 5). The sex ratio of the managed hunt harvest was 50% male, 50% female. The total recorded WMA harvest, including self clearing data (SCD) was 5343 deer (-12%). The sex ratio for the total WMA harvest, including SCD, was 59% male, 41% female.

Table 6. WMA either sex hunt weekends, 2011 <sup>1</sup> .					
WMA	Hunter efforts	Total harvest	Bucks	Does	Efforts per deer
Loggy Bayou	231	58	22	36	4.0
Jackson Bienville (19-20 Nov)	607	93	42	51	6.5
Tunica Hills	247	21	13	8	11.8
Ben's Creek	550	14	4	10	39.3
Sandy Hollow	161	3	1	2	53.7
Maurepas Swamp	446	28	11	17	15.9
Pearl River	391	6	4	2	65.2
Attakapas	319	11			29.0
Attakapas (3-5 Dec)	no hunt				
Grassy Lake	902	76	35	41	11.9
Pomme de Terre	402	30	14	11	13.4
Sherburne	735	53	27	26	13.9
Sherburne ( 4-5 Dec)	no hunt				
Spring Bayou	477	10	4	6	47.7
Thistlewaite (3-4 Dec)	539	25	11	14	21.6
Thistlewaite	762	22	11	11	34.6
Peason Ridge (Oct 29-30)	468	67	44	23	7.0
Peason Ridge	822	54	25	29	15.2
Clear Creek(Oct 29-30)	722	129	75	54	5.6
Clear Creek	874	60	26	34	14.6
West Bay (Oct 29-30 )	794	94	51	43	8.4
West Bay	669	26	7	19	25.7
Fort Polk	1,702	112	55	57	15.2
Fort Polk (Oct 29-30)	847	152	88	64	5.6
Union (Oct 29-30)	271	55	25	30	4.9
Ouachita	255	32	19	13	8.0
Bayou Macon (12-13 Nov)	211	30	14	16	7.0
Russel Sage	622	81	53	28	7.7
Boeuf	1,302	200	104	96	6.5
Red/Three Rivers	2,398	219	100	119	10.9
Buckhorn	402	61	35	26	6.6
Big Lake	621	105	56	49	5.9
Sicity Island	202	18	10	8	11.2
Sabine (22-23 Oct)	142	24	16	8	5.9
Alexander State Forest (8-9 Oct)	222	12	7	5	18.5
Alexander State Forest (5-6 Nov)	129	17	12	5	7.6
Dewey Wills (10-11 Dec)	975	222	103	119	4.4
Camp Beauregard (25-26 Nov)	424	98	48	50	4.3
Camp Beauregard (10-11 Dec)	301	60	19	41	5.0
	22,144	2,378	1,191	1,171	9.3
2010 Managed Either Sex Deer Hunts	24,925	3,019	0.16		8.3
2009 Managed Either Sex Deer Hunts	27,643	2,603	0.01		10.6
2008 Managed Either Sex Deer Hunts	28,363	2,589	-0.16		11.0
2007 Managed Either Sex Deer Hunts	28,813	3,094	-0.04		9.3
2006 Managed Either-Sex Deer Hunts	30,008	2,895	-0.02		10.4
1= Thanksgiving hunts unless otherwise noted					

Figure 5.



Hunter success and harvest vary, sometimes substantially, from year to year. The long term trend for WMA hunter success illustrates fewer efforts needed to harvest a deer. Additionally, many exceptional deer were harvested on the WMAs.

Due to the 2011 spring flood and Morganza spillway opening, the Sherburne season was reduced. Fewer deer were harvested as a result of this season reduction.

## Appendices

Appendix 1. 2011-12 deer harvest by parish as recorded through the LDWF reporting system, April 15, 2012.

Parish	People per Sq Mi <sup>1</sup>	Acres <sup>1</sup> Land area	Forested land	Forested <sup>2</sup> acres	Non-program private land	Public land*	WMA managed	DMAP	Total	Acres per deer harv.	Forested acre per deer harv. <sup>3</sup>
Acadia	90	419379	0.24	100532	147	1	0	3	151	2777	666
Allen	33	489280	0.70	343916	881	161	94	84	1220	401	282
Ascension	262	186560	0.48	88660	191	5	7	47	250	746	355
Assumption	69	216768	0.52	112409	315	7	3	39	364	596	309
Avoyelles	50	532736	0.37	196104	907	256	124	316	1603	332	122
Beauregard	28	742464	0.80	592461	1251	113	0	357	1721	431	344
Bienville	19	518810	0.87	451470	2228	107	46	1053	3434	151	131
Bossier	117	537152	0.68	365219	2073	151	58	341	2623	205	139
Caddo	286	564480	0.56	313620	1235	10	0	97	1342	421	234
Calcasieu	171	685504	0.39	270336	442	20	0	51	513	1336	527
Caldwell	20	338816	0.76	256017	997	63	198	129	1387	244	185
Cameron	8	840320	0.00	0	114	33	0	7	154	5457	0
Catahoula	16	450368	0.41	183159	507	134	13	149	803	561	228
Claiborne	22	483008	0.90	435693	2625	138	0	470	3233	149	135
Concordia	29	445376	0.38	170753	362	342	230	484	1418	314	120
DeSoto	29	561408	0.78	437109	1956	19	0	172	2147	261	204
E. Baton Rouge	907	291456	0.41	120883	392	5	0	200	597	488	202
E. Carroll	22	269696	0.13	34026	269	25	30	597	921	293	37
E. Feliciana	47	290176	0.70	204297	892	18	0	600	1510	192	135
Evangeline	53	425152	0.49	209704	885	4	0	100	989	430	212
Franklin	34	399104	0.27	108819	451	43	32	321	847	471	128
Grant	29	412864	0.84	346030	751	292	40	10	1093	378	317
Iberia	127	368064	0.28	101286	235	18	0	90	343	1073	295
Iberville	54	395904	0.65	257875	1122	78	31	773	2004	198	129
Jackson	27	364608	0.86	314611	1847	144	46	148	2185	167	144
Jeff. Davis	48	417472	0.14	58574	209	8	0	18	235	1776	249
Jefferson	1484	196160	0.11	21181	68	20	0	0	88	2229	0
La Salle	23	399232	0.86	341475	718	141	233	30	1122	356	304
Lafayette	706	172672	0.13	22492	5	0	0	0	5	34534	4498
Lafourche	83	694208	0.15	104618	460	12	0	316	788	881	0
Lincoln	90	301696	0.78	234787	1362	12	0	38	1412	214	166
Livingston	142	414720	0.76	316643	784	52	0	42	878	472	361
Madison	22	399424	0.26	105549	672	356	32	593	1653	242	64
Morehouse	39	508352	0.36	180565	1354	37	0	313	1704	298	106
Natchitoches	31	803520	0.70	559577	1956	307	20	74	2357	341	237
Orleans	2684	115558	0.00	0	15	0	0	0	15	7704	0
Ouachita	241	390739	0.64	249628	890	119	92	181	1282	305	195

Plaquemine	32	540544	0.03	13902	73	6	0	0	79	6842	0
Point Coup	41	356672	0.40	141702	687	57	30	391	1165	306	122
Rapides	96	846400	0.66	562213	1209	249	147	178	1783	475	315
Red River	25	249152	0.55	137864	587	8	0	81	676	369	204
Richland	38	357440	0.23	80838	608	25	0	180	813	440	99
Sabine	27	553792	0.80	445625	1700	78	66	81	1925	288	231
St. Bernard	145	297600	0.11	31374	32	0	0	0	32	9300	0
St. Charles	169	181504	0.22	39884	166	57	0	42	265	685	151
St. Helena	26	262,000	0.79	206615	563	2	0	331	896	292	231
St. James	86	157504	0.47	73254	172	44	8	124	348	453	211
St. John	197	140096	0.46	64132	156	66	8	0	230	609	279
St. Landry	94	594368	0.28	167290	1194	64	107	301	1666	357	100
St. Martin	66	473536	0.63	296426	525	101	0	203	829	571	358
St. Mary	87	392192	0.33	131208	794	61	139	100	1094	358	0
St. Tammas	224	546688	0.63	346369	413	139	6	60	618	885	560
Tangipahoa	127	505728	0.60	305468	578	53	4	36	671	754	455
Tensas	11	385600	0.30	113863	497	204	104	1152	1957	197	58
Terrebonne	83	803136	0.16	129697	384	18	0	83	485	1656	0
Union	26	561664	0.85	478170	3163	229	55	896	4343	129	110
Vermilion	46	751232	0.10	77283	196	10	0	17	223	3369	0
Vernon	40	850176	0.90	767517	2054	480	452	165	3151	270	244
W. Baton F	113	122368	0.48	58788	396	4	0	402	802	153	73
W. Carroll	34	230016	0.19	44517	253	0	0	3	256	899	174
W. Feliciana	37	259840	0.63	162679	1175	68	52	481	1776	146	92
Washington	66	428544	0.70	301547	963	45	19	0	1027	417	294
Webster	70	380928	0.75	286922	2155	118	0	534	2807	136	102
Winn	18	608320	0.90	546508	1599	159	0	312	2070	294	264
<b>Totals</b>		<b>27764669</b>	<b>0.51</b>	<b>14221733</b>	<b>53860</b>	<b>5596</b>	<b>2526</b>	<b>14396</b>	<b>76378</b>	<b>364</b>	<b>186</b>

change

1= <http://quickfacts.census.gov/qfd/states/22000.html>

2= USDA, Forest Inventory mapmaker, 2007

3= coastal marsh and some prairie parishes excluded from this index. Some agriculture parishes may be biased high.

Additional deer added to WMA managed column where complete harvest data was received by hunters. These deer which would have also been reported through the system were subtracted from the public land column in the parish that the WMA is listed under except Maurepas which was selected by biologists to avoid double counting. This only occurs in some Old Region 7 WMAs

Bens Creek-2

Joyce-4

Maurepas-1

Pearl River-2

Tunica Hills-33