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Appendix A. Names and Positions of Preparers

The following staff on the National Forests and Grasslands in Texas participated in the preparation of this report:

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Paul Dufour – Timber Sale Contracting
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Steve Clarke – Entomologist
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Rodney Peters – Forest Soil Scientist
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Angelina National Forest

Karen Tinkle – District Ranger
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Caddo/LBJ National Grasslands

Jim Crooks – District Ranger
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Davy Crockett National Forest

Raoul Gagne – District Ranger
Jim McCormick - Biologist

Sabine National Forest

Eddie Taylor – District Ranger
Patricia Johnson - Biologist

Sam Houston National Forest

Tim Bigler – District Ranger
Dawn Carrie - Biologist

Appendix B. Amendments Made Since the Plan Was Completed

In September 2002, an amendment to the Final Environmental Impact Statement for Vegetation Management in the Coast Plain/Piedmont was issued, which simultaneously amended the *National Forests and Grasslands in Texas 1996 Forest Land and Resource Management Plan*. This Non-significant Amendment #4 provides direction for the preparation of site-

specific Biological Evaluations (BEs) including inventory requirements for Proposed, Endangered, Threatened, and Sensitive (PETS) species for the NFGT to make the process of conducting BEs more efficient and consistent throughout the Southern Region of the Forest Service.

C. Status of Previous Action Plan

Important Note: Until a court ruling in July 2003, the NFGT was unable to fully implement its Revised National Forests and Grasslands 1996 Land and Resource Management Plan (the *Plan*) on the

ground due to the ongoing litigation. The following provides an update of those issues identified in previous M&E Reports.

A. Actions Not Requiring Forest Plan Amendment or Revision

Activity	Recommendation	Person(s) Responsible	Status
1. Erosion Control	Continue to assess the effectiveness of the additional post-sale erosion control requirements to prevent sediment from entering streams.	Timber Sale Administrators	Discussed in the body of this report under “ <u>Timber Sale Erosion Control Efforts</u> ”. Forest-level RAPS have further outlined problem sites. Project-level RAPS have identified site-specific problems and made recommendations that are incorporated into EAs/FONSI/DNS to fix.
2. Monitor MIS	Continue to develop population trends for MIS.	Forest Biologists	Ongoing

B. Actions That May Require Amendment or Revision to the Plan

Activity	Recommendation	Person(s) Responsible	Status
1. Plan Amendment	Evaluate the <i>Plan’s</i> Chapter V to determine the critical monitoring elements that can accurately identify effects of management activities on the land. Add any monitoring items not currently found in Chapter V and eliminate those items found not to truly assess effects of management activities. Items to review include: 1. MIS selections. 2. Monitoring questions.	Forest Leadership Team	This task has been re-scheduled and is addressed in Chapter IV of this report.

Appendix D. Summary of Field Reviews/Other Administrative Actions

January 8-9, 2002 - Unannounced Timber Accountability Audit.

Following their review, the Regional Office provided recommendations concerning the calculation of down payments and performance bonds, termination dates for Letters of Credit (LOC), sampling error standards and guidance regarding contracting responsibilities and timber sale documents. This audit included the review of contact documents, financial records and on-the-ground harvesting operations on the Sam Houston NF. Many of these items were addressed in FY 2002, while other actions are ongoing. The report is on file in the Supervisor's Office in Lufkin, Texas.

Due to Columbia Shuttle Recovery Efforts, no Unannounced Timber Accountability Audits were conducted during FY 2003.

April 14-18, 2003 - Biological and Physical Activity Review (BPR).

This review was designed to acknowledge successes, provide recommendations for program improvements, and to address key resource issues the NFGT is facing. During the review, the team visited with staff in the Supervisor's Office, and personnel on the Sabine, Angelina, Davy Crockett and Sam Houston NFs. They also visited with personnel from the Southern Research Station (Wildlife and Silviculture Unit), Texas Parks and Wildlife, and the U.S. Fish and Wildlife Service. The review team did not visit with personnel from the National Grasslands. A review of the Grasslands was scheduled for a later date.

Some of the commendations from the report included:

- The Forest is working with counties to decrease sediment delivery from roads to streams.
- Districts are utilizing State Parks and Recreation department funding/grants (specified for ORV trails) to improve trails.
- In general, the Forest is moving towards closing open trail areas, and restricting use to designated trails.
- Other Forests in the Region can benefit from this Forest's experience in trail management.

Below is a sampling of observations and recommendations found in the report:

- Sediment from some roads is currently being channeled directly into streams via a contiguous ditch-line.
- About one-third of road culverts have been assessed for fish passage and channel alterations.
- Successful trail funding and trail management techniques should be used as a model for trail management on all Districts on the Forest.
- On trails, some stream crossings were not in compliance with the Forest Plan.
- The Forest assessment to prioritize prescribed burn treatment areas based on RCW is positive.

The complete report and its Action Plan is on file the Supervisor's Office in Lufkin, Texas.

September 2-4, 2003 - Biological and Physical Activity Review (Grasslands Unit). This review was also designed to address the same issues as those shown in the BPR above. During the review, the team visited with staff in the Supervisor's Office and personnel from the Caddo and LBJ Grasslands. In addition, they visited with personnel from Natural Resources Conservation Service, Wise County Soil and Water Conservation District, and Wide County.

Some of the commendations from the report included:

- The Grasslands has been innovative in accomplishing road improvements using Wildlife Management Area funding to improve access for hunters and others by surfacing roads.
- Partnerships have been innovative in providing horse and multi-purpose trails in alignment with the niche for the grasslands. Partnering in road and trail maintenance and improvements is setting an example for the Forest, and possibly the Region, in making good use of scarce dollars.
- Off-highway Vehicle (OHV) trail closures and referrals to private providers for OHV areas was well executed.

Some of the observations and recommendations found in the report are:

- Some horse trails are being created, and others are being re-

located, without expertise from soil and water specialists. The Grasslands should consult with soil and water specialists, and others with trail design and expertise, on all future trail locations and relations. Their expertise should also be requested on existing trails.

- One low-water crossing (road) was visited. There was evidence of sediment trapping upstream of the crossing, and road cobble downstream of the crossing. The Grasslands should consider re-routing or closing the existing road, or hardening the road approaches to the stream.
- The NG needs to adopt a comprehensive vegetation classification system to be used in planning and inventory. Ideally, the system chosen could be integrated with other grasslands and with partner groups. An example of such a system is the Nature Serve classification and framework.
- ...the Grasslands needs additional work in strategic direction through a separate or substantial amendment to the Forest and Resource Management Plan.

The report and its Action Plan is on file the Supervisor's Office in Lufkin, Texas.

E. Updated Research Information

Southern Research Station

Below is a list of all ongoing research projects of the Southern Research Station's Nacogdoches Research Work Unit (SRS-RWU-4251) on the National Forests and Grasslands in Texas to include research on the Stephen F. Austin Experimental Forest as of February 2003.

1. Long-term study on woodpecker selection of cavity trees as related to habitat and fungi on the Stephen F. Austin Experimental Forest (SRS-4251-2.1) initiated in 1978 to run until 2007. This study quantifies what trees and snags are selected by the 6 species of woodpeckers in eastern Texas for nesting sites, measures the habitat surrounding the cavity trees, and examines the internal condition of the cavity tree relative to the species of fungi involved in softening the heartwood.
2. Long-term study on inoculation of mature pines in Red-cockaded Woodpecker (*Pico ides borealis*) recruitment stands on the Angelina National Forest (SRS-4251-2.1B) initiated in 1984 to run until at least 2012. Five mature pines in 5 recruitment stands were inoculated with red heart fungus (*Peelings pine*) in 1984 and we currently continue to monitor the inoculated pines for use by Red-cockaded Woodpeckers.
3. Long-term study on the population dynamics of snags in pine-hardwood forests on the Stephen F. Austin Experimental Forest (SRS-4251-2.2) initiated in 1994 to run until at least 2012. Six plots 0.56 ha were selected in 1984 at all existing snags inventoried. Annually, each plot is examined in detail for the height and condition of existing snags and the creation of new snags through tree mortality. Eventually, snag population dynamics data will be available for both pine and hardwood snags in mixed pine-hardwood forest habitat.
4. Long-term study of Red-cockaded Woodpecker use of seed-tree cuts on the Angelina National Forest (SRS-4251-2.4) initiated in 1984 to run until at least 2009. This study previously documented the value of seed-tree and shelter wood cuts to Red-cockaded Woodpeckers, but has been extended to monitor the long-term value of these sites to woodpeckers as the new pine forest regenerates under the residual pines left during irregular seed-tree and shelterwood harvesting. There is a potential problem in these stands for the regenerating pines to form a dense midstory that would be unacceptable to the Red-cockaded Woodpecker. At present, 19 years after the shelterwood harvest, we still see only positive benefits of the irregular shelterwood harvesting technique.
5. Availability, suitability, and use of trees and snags as foraging sites for woodpeckers on the Stephen F. Austin Experimental Forest (SRS-4251-2.5) initiated in 1984 to run until at least 2006. The first component of this study examined

the quality of hardwood snags and use of them by woodpeckers as foraging habitat in bottomland hardwood forests. The results of this part of the study have been published. The second phase of the study will quantify the same variables but with pines in upland pine habitat. A second component of this study examining pine snags is on hold pending sufficient funding to implement the research.

6. Arthropod communities on the boles of longleaf pines on the Angelina National Forest (SRS-4251-2.6) initiated in 1995 with data collected through 1998; data are currently still being analyzed as of February 2002. This study examines arthropod communities on the boles of longleaf pines as affected by pine tree age and hardwood midstory conditions adjacent to pines. Only arthropods on the lower boles of the pines (3, 6, and 9 m above the ground) are being studied, as this area of the bole is important foraging habitat for female Red-cockaded Woodpeckers. A manuscript from this research has been accepted for publication in the Fourth RCW Symposium.
7. Long-term study of the Losses of Red-cockaded Woodpeckers' cavity trees to bark beetles on the Angelina National Forest (SRS-4251-2.7) initiated in 1986 to run until at least 2009. This study examines the high infestation rate of active Red-cockaded Woodpecker cavity trees by southern pine beetles (*Dendroctonus frontalis*) relative to infestation rates of control pine within and outside cavity-tree clusters. Factors possibly related to bark beetle infestation rates are stand disturbance, stand structure, and resin wick volatiles from cavity trees. Results thus far indicate that southern pine beetles do preferentially attack active Red-cockaded Woodpecker cavity trees and that nest trees of the preceding breeding season have the highest probability of being infested. Use of artificial cavity inserts to augment the supply of suitable cavities for woodpeckers does not increase the risk or rate of infestation by southern pine beetles.
8. Avian response to southern pine ecosystem restoration in Red-cockaded Woodpecker clusters on the Angelina National Forest (SRS-4251-2.9) initiated in 1994; data were collected through 1996 and a paper is currently In Press in the Wilson Bulletin on the results of the study. This study examines the relative species richness and abundance of birds in longleaf pine and loblolly-shortleaf pine habitats with and without the presence of a developed hardwood midstory to determine any possibly positive or negative effects intensive Red-cockaded Woodpecker management is having on forest bird communities. Another spring field season is planned for May 2003 to determine how the current TRO prohibiting prescribed burning is affecting Bachman's Sparrows, a grassland species of conservation concern.
9. Effects of midstory foliage on Red-cockaded Woodpecker

- foraging behavior and foraging habitat selection on the Angelina and Davy Crockett national forests (SRS-4251-2.10) initiated in 1989. Data were collected over three years and are still being analyzed. The study evaluates possible negative effects the presence of hardwood midstory may have on Red-cockaded Woodpecker foraging behavior.
10. Red-cockaded Woodpeckers and cavity competitors on the Angelina and Davy Crockett national forests (SRS-4251-2.11) initiated in 1990, field component completed by 1994, some papers already published, still working on some aspects of the data. This study examines use of both active and inactive Red-cockaded Woodpecker cavities by all cavity occupants during spring, late summer, and winter. Thus far, we have not detected any negative impact by any cavity user on the Red-cockaded Woodpecker at the population level.
 11. Red-cockaded Woodpecker foraging behavior and nestling provisioning on the Angelina and Davy Crockett national forests (SRS-4251-2.14) initiated in 1990. Data are still currently being analyzed. Results from portions of this research have been produced as a M.S. thesis. Other aspects of the study are still being analyzed. The study examines how Red-cockaded Woodpeckers partition foraging resources among various group members and quantifies what habitat is used for foraging versus what is available for use.
 12. Pileated Woodpecker (*Dryocopus pileatus*) behavior and habitat use in mature longleaf pine and bottomland hardwood forests on the Stephen F. Austin Experimental Forest and Angelina National Forest (SRS-4251-2.15) initiated in 1992 run until 1996. Two papers have been published from this study and some data are still currently being analyzed for additional papers.
 13. Prothonotary Warbler (*Protonotaria citrea*) nest box selection and reproductive success in eastern Texas on the Stephen F. Austin Experimental Forest (SRS-4251-2.16) initiated in 1997. The study examined selection and use of various types of artificial nest sites by Prothonotary Warblers to explore the possibility that portions of boxes made for Wood Ducks (*Aix sponsa*) could also be used Prothonotary Warblers as nesting sites. A M.S. Thesis has been produced for this project.
 14. Long-term study on responses of hillside seepage bogs and longleaf pine-bluestem savannahs to burning frequency and season (SRS_4251-4.3) initiated on the Angelina National Forest in 1993 to run until 2012. This study also will evaluate the effects of fire frequency on rare plants in oak barrens associated with longleaf pine forests on the Angelina National Forest. The study is on hold because of inability to get prescribed fire implemented at correct timing.
 15. Habitat selection by canebrake rattlesnakes (*Crotalis horridus*) and Louisiana pine snakes (*Pituophis*

ruthveni) on the Angelina and Sabine national forests (SRS-4251-4.5) initiated in 1992. Data are still being collected in this long-term study, which will run likely until 2012. Telemetry studies on these two rare species are being used to examine their movement patterns, geographic distribution, and habitat selection. The Louisiana pine snake appears to be a critically rare species because of the loss of well-burned pine forest habitat and mortality associated with vehicle use of relatively dense forest road systems that occur within the species' shrinking habitat.

16. Study on the distribution and status of the alligator snapping turtle (*Macrolemys temminckii*) in Texas (SRS-4251-4.7) to be initiated in 2000 and conducted in part on the Stephen F. Austin Experimental Forest until 2005. This study evaluates the current distribution status of alligator snapping turtles in eastern Texas and compares it with records of historically known occurrences of the turtle in order to evaluate if populations of the species have decline and a geographic range contraction has occurred. There is the potential to use radio telemetry to monitor movement patterns of turtles on the Stephen F. Austin Experimental Forest. Data are being analyzed for this study.

17. Long-term study on amphibian community succession and recruitment to artificial ponds on the National Forests in eastern Texas (SRS-4251-4.8) to be conducted on the Stephen F. Austin Experimental Forest and

Davy Crockett National Forest, initiated in 2000, and run until at least 2015. This study will examine the anuran species (frogs) that use wildlife ponds on national forests and, through the creation of new ponds, explore the succession of anuran species and predators in newly created artificial ponds.

Forest Health

1. **Southern Pine Beetle Inhibitors.** The USDA Forest Service (FS), in conjunction with the Texas Forest Service, University of Georgia, and Virginia Tech, has developed operational techniques for using verbenone to suppress southern pine beetle (SPB) infestations. Verbenone, an anti-aggregation pheromone of the SPB, is tacked to trees around the front of expanding infestations. Verbenone has been registered for use by the U.S. Environmental Protection. The FS has completed a risk assessment for verbenone. The FS is also studying other inhibitors such as endobrevicomin and green tree volatiles for use by themselves or in conjunction with verbenone. A new project will examine the use of devices that can deliver small measured doses of the semiochemicals at specified time intervals.
2. **Southern Pine Beetle Detection.** The Forest Health Technology Enterprise Team has developed an electronic aerial sketch-mapping system that has been field-tested in Texas for southern pine beetle detection.

The system allows the spotter to record SPB spots by marking a point on a computer screen corresponding to the spot location on a geo-referenced, moving map display. The maps and coordinates are downloaded, and the spots are located for ground-checking using GPS units. Better backdrops are now available, which should make infestation recording easier. The NFT has ordered one system and it will be used this FY.

3. **Area-wide Southern Pine Beetle Suppression.**

Forest Health Protection is investigating the effectiveness of trap trees for reducing SPB infestations. During the current period of endemic SPB activity in Texas, target pines within treatment blocks are baited with SPB attractant in November, and monitored through April. Infested trees are felled and removed. The number of SPB infestations detected the following summer in treatment and check blocks will be compared. No baited have been infested to date, and the project will continue through the onset of the next outbreak.

4. **Integrating GIS, GPS, and Mobile Mapping Technologies to Automate SPB survey and monitoring.**

This project is designed to automate data collection and entry. Potential SPB infestations are detected and entered with digital aerial sketch-mapping. The coordinates are downloaded into a combination GPS unit – data logger, which is used to navigate to the

infestations. The data for the SPBIS database is entered at the spot, and at the office the data is then uploaded into the SPBIS database. To date we have:

- A. Selected the Trimble GEO XT as the field data logger/GPS unit. The system will be designed to work on any unit running Windows CE.
- B. Developed preliminary data entry forms. These were designed to be easy to use, with many drop-down menus.
- C. Field-tested the system on the Tombigbee National Forest. We are revising the data forms based on results of these initial field trials.
- D. Currently working on the link into the SPBIS database. Due to firewall protection, automatic updating of the database is complicated. Working with FHTET to overcome the problems.

Other Projects

Cooperation with local universities and other entities continues as several different studies are being conducted on various units. As one example, a University of North Texas graduate student began collecting baseline vegetation data on the LBJ National Grasslands in 2003 to study botanical diversity. Preliminary data indicates that nine species of plants not known to occur within this part of Texas were discovered which indicates that the LBJ has a very diverse and interesting ecosystem.

Appendix F. Management Indicator Species

See separate document.

Appendix G. Age Class Tables

10-Year Age Class Distribution by Vegetation Group and Forest Type - Acres

2002

Longleaf Pine Woodlands & Savannas

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Longleaf (LL) Pine	1992	25,027	2380	963	648	374	1608	13735	4661	458	25	175	0
	Oct-02	25,124	2053	625	1005	612	353	1611	13641	4576	459	31	158
LL/Shortleaf Pine	1992	699	0	0	0	0	13	405	205	76	0	0	0
	Oct-02	687	0	0	0	0	0	13	405	188	81	0	0
LL Pine/Hardwood	1992	206	0	29	0	0	0	36	141	0	0	0	0
	Oct-02	206	0	0	29	0	0	0	36	141	0	0	0
LL/Slash Pine	1992	956	0	0	11	0	0	915	30	0	0	0	0
	Oct-02	894	0	0	0	11	0	0	853	30	0	0	0
Slash Pine	1992	5,901	0	104	26	55	445	4868	308	95	0	0	0
	Oct-02	6,277	0	0	104	26	59	452	5254	285	97	0	0
Slash P/Hardwood	1992	39	0	0	0	0	0	39	0	0	0	0	0
	Oct-02	85	0	0	0	0	0	0	85	0	0	0	0
Loblolly/LL Pine	1992	1,515	0	0	0	141	113	632	629	0	0	0	0
	Oct-02	1,515	0	0	0	0	141	113	632	629	0	0	0

Total LL Pine	1992	34,343	2,380	1,096	685	570	2,179	20,630	5,974	629	25	175	0
Woodland/Savanna	Oct-02	34,788	2,053	625	1,138	649	553	2,189	20,906	5,849	637	31	158

Dry-Xeric Oak-Pine Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Shortleaf Pine	1992	153,836	23168	10017	4260	1004	663	9211	26275	38784	25150	9860	5444
	Oct-02	149,378	6840	16664	10089	4002	1026	664	9242	24072	37217	24549	15013
Shortleaf P/Oak	1992	3,337	82	51	0	0	0	134	1164	1352	436	118	0
	Oct-02	3,522	16	66	51	0	0	0	134	1140	1452	488	175
Post Oak/ Black Oak	1992	221	0	0	0	0	0	75	52	0	32	0	62
	Oct-02	221	0	0	0	0	0	0	75	52	0	32	62
Scrub Oak	1992	90	0	0	0	0	0	90	0	0	0	0	0
	Oct-02	90	0	0	0	0	0	0	90	0	0	0	0
Total Dry-Xeric Oak-Pine Forests	1992	157,484	23,250	10,068	4,260	1,004	663	9,510	27,491	40,136	25,618	9,978	5,506
	Oct-02	153,211	6,856	16,730	10,140	4,002	1,026	664	9,541	25,264	38,669	25,069	15,250

Mesic Oak-Pine Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Loblolly Pine	1992	330,785	52513	34911	20801	9380	11060	44771	71864	54232	20012	8047	3194
	Oct-02	329,904	14380	41334	34190	20897	9339	11459	44175	70702	52539	19910	10979
Loblolly/Hardwood	1992	19,851	431	565	348	153	1074	2097	3939	6345	3404	1010	485
	Oct-02	19,385	149	281	567	357	264	1024	2098	3950	6065	3111	1519
Yellow Pine	1992	2,853	0	359	0	15	0	170	1715	420	174	0	0
	Oct-02	2,689	0	0	359	0	26	0	179	1707	244	174	0
W Oak/B Oak/ Yellow Pine	1992	2,742	46	93	34	0	0	920	469	540	297	74	269
	Oct-02	2,750	0	46	99	34	0	0	920	469	542	297	343
Southern Red Oak/Yellow Pine	1992	849	0	30	0	0	0	196	163	178	246	27	9
	Oct-02	986	0	0	24	0	0	0	196	165	306	261	34
N Red Oak/Hick/ Yellow Pine	1992	217	0	0	0	0	0	0	105	0	88	24	0
	Oct-02	228	0	0	0	0	0	0	0	105	0	92	31
Total Mesic Oak-Pine Forests	1992	357,297	52,990	35,958	21,183	9,548	12,134	48,154	78,255	61,715	24,221	9,182	3,957
	Oct-02	355,942	14,529	41,661	35,239	21,288	9,629	12,483	47,568	77,098	59,696	23,845	12,906

Mesic Hardwood Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
W Oak/R Oak/ Hickory	1992 Oct- 02	16,786 22,811	2293 641	1049 1975	604 1198	301 809	609 298	1770 647	3722 2228	3185 6342	1847 4362	1049 2476	357 1835
White Oak	1992 Oct- 02	34 34	15 0	0 15	0 0	0 0	0 0	6 0	13 6	0 13	0 0	0 0	0 0
Sweetgum	1992 Oct- 02	23 23	0 0	0 0	0 0	0 0	0 0	0 0	23 0	0 23	0 0	0 0	0 0
Beech/Magnolia	1992 Oct- 02	805 811	0 0	0 0	0 0	0 0	0 0	0 0	28 0	474 28	86 480	123 86	94 217
Total Mesic Hdwd Forests	1992 Oct- 02	17,648 23,679	2,308 641	1,049 1,990	604 1,198	301 809	609 298	1,776 647	3,786 2,234	3,659 6,406	1,933 4,842	1,172 2,562	451 2,052

Bay-Shrub Wetlands

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Sweetbay/Swamp Tupelo/R Maple	1992 Oct- 02	502 680	0 0	0 0	0 0	0 0	0 0	0 0	94 38	253 229	0 253	155 5	0 155
Undrained Flatwoods	1992 Oct- 02	1,975 1,975	1659 1659	25 0	0 25	0 0	249 0	11 249	0 11	0 0	31 0	0 31	0 0

Total Bay-Shrub	1992	2,477	1,659	25	0	0	249	11	94	253	31	155	0
Wetlands	Oct-02	2,655	1,659	0	25	0	0	249	49	229	253	36	155

Bottomland/Streamside Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Btmldnd Hdwd/ Yellow Pine	1992 Oct-02	8,402	389	73	495	69	344	144	1191	3076	1657	43	921
Swamp Chestnut Oak/Cherrybark	1992 Oct-02	11,285	306	374	100	0	3676	953	964	1387	1393	1613	519
Oak/Cherrybark	1992 Oct-02	11,154	88	222	318	90	0	3676	953	901	1381	1431	2094
Sweetgum/Nuttal Oak/Willow Oak	1992 Oct-02	17,475	299	1170	372	1109	2564	593	2812	1908	1133	2030	3485
Oak/Willow Oak	1992 Oct-02	16,995	55	255	1165	420	1109	2576	593	2319	1934	1055	5514
Sugarberry/Am Elm/ Green Ash	1992 Oct-02	1,321	0	0	0	0	145	0	170	924	82	0	0
Elm/ Green Ash	1992 Oct-02	1,321	0	0	0	0	0	145	0	170	924	82	0
Laurel Oak/ Willow Oak	1992 Oct-02	1,967	31	63	15	0	126	0	92	452	964	26	198
Willow Oak	1992 Oct-02	1,967	0	31	63	15	0	126	0	92	452	964	224
Overcup Oak/ Water Hickory	1992 Oct-02	6	0	0	0	0	0	0	0	6	0	0	0
Water Hickory	1992 Oct-02	6	0	0	0	0	0	0	0	0	6	0	0
Baldcypress/ Water Tupelo	1992 Oct-02	13	0	0	0	0	0	0	0	0	13	0	0
Water Tupelo	1992 Oct-02	11	0	0	0	0	0	0	0	0	0	11	0
Sycamore/	1992	50	0	18	0	0	0	0	0	32	0	0	0

Pecan/A Elm	Oct-02	50	0	0	18	0	0	0	0	0	32	0	0
Brush Species	1992	172	0	0	172	0	0	0	0	0	0	0	0
	Oct-02	172	0	0	0	172	0	0	0	0	0	0	0
Total Bottomland/ Streamsides	1992 Oct-02	40,691 39,980	1,025 411	1,698 727	1,154 1,636	1,178 1,192	6,855 1,178	1,690 6,867	5,229 1,734	7,785 4,380	5,242 7,922	3,712 5,152	5,123 8,781
Total All Types		Approximate	Years										
	Year	Acres	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
	1992	609,940	83,612	49,894	27,886	12,601	22,689	81,771	120,829	114,177	57,070	24,374	15,037
	Oct-02	610,255	26,149	61,733	49,376	27,940	12,684	23,099	82,032	119,226	112,019	56,695	39,302

10-Year Age Class Distribution by Vegetation Group and Forest Type - Acres

12/4/2003

Longleaf Pine Woodlands & Savannas

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Longleaf (LL) Pine	1992	25,027	2380	963	648	374	1608	13735	4661	458	25	175	0
	Oct-03	24,902	1887	603	984	602	384	933	13446	5222	590	81	170
LL/Shortleaf Pine	1992	699	0	0	0	0	13	405	205	76	0	0	0
	Oct-03	687	0	0	0	0	0	13	405	188	81	0	0
LL Pine/Hardwood	1992	206	0	29	0	0	0	36	141	0	0	0	0
	Oct-03	206	0	0	29	0	0	0	36	141	0	0	0
LL/Slash Pine	1992	956	0	0	11	0	0	915	30	0	0	0	0
	Oct-03	894	0	0	0	0	11	0	271	612	0	0	0
Slash Pine	1992	5,901	0	104	26	55	445	4868	308	95	0	0	0
	Oct-03	6,310	0	0	104	26	59	397	5324	303	97	0	0
Slash P/Hardwood	1992	39	0	0	0	0	0	39	0	0	0	0	0
	Oct-03	85	0	0	0	0	0	0	85	0	0	0	0
Loblolly/LL Pine	1992	1,515	0	0	0	141	113	632	629	0	0	0	0
	Oct-03	1,673	122	0	0	0	141	113	571	726	0	0	0
Total LL Pine	1992	34,343	2,380	1,096	685	570	2,179	20,630	5,974	629	25	175	0
Woodland/Savanna	Oct-03	34,757	2,009	603	1,117	628	595	1,456	20,138	7,192	768	81	170

Dry-Xeric Oak-Pine Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Shortleaf Pine	1992	153,836	23168	10017	4260	1004	663	9211	26275	38784	25150	9860	5444
	Oct-03	149,749	5203	17803	9585	5028	950	556	8567	24097	34375	26819	16766
Shortleaf P/Oak	1992	3,337	82	51	0	0	0	134	1164	1352	436	118	0
	Oct-03	3,579	16	66	51	0	0	0	134	949	1563	589	211
Post Oak/ Black Oak	1992	221	0	0	0	0	0	75	52	0	32	0	62
	Oct-03	221	0	0	0	0	0	0	75	52	0	32	62
Scrub Oak	1992	90	0	0	0	0	0	90	0	0	0	0	0
	Oct-03	90	0	0	0	0	0	0	90	0	0	0	0
<hr/>													
Total Dry-Xeric Oak-Pine Forests	1992 Oct-03	157,484 153,639	23,250 5,219	10,068 17,869	4,260 9,636	1,004 5,028	663 950	9,510 556	27,491 8,866	40,136 25,098	25,618 35,938	9,978 27,440	5,506 17,039

Mesic Oak-Pine Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Loblolly Pine	1992	330,785	52513	34911	20801	9380	11060	44771	71864	54232	20012	8047	3194
	Oct-03	330,822	9070	43694	32242	24699	10360	8116	41313	72042	55338	21184	12764
Loblolly/Hardwood	1992	19,851	431	565	348	153	1074	2097	3939	6345	3404	1010	485
	Oct-03	19,242	0	430	611	365	232	427	2328	3801	5866	3430	1752

Yellow Pine	1992	2,853	0	359	0	15	0	170	1715	420	174	0	0
	Oct-03	2,689	0	0	359	0	26	0	127	1759	244	174	0
W Oak/B Oak/ Yellow Pine	1992	2,742	46	93	34	0	0	920	469	540	297	74	269
	Oct-03	2,683	0	46	99	34	0	0	104	1197	563	297	343
Southern Red Oak/Yellow Pine	1992	849	0	30	0	0	0	196	163	178	246	27	9
	Oct-03	1,071	0	85	0	24	0	0	196	165	261	306	34
N Red Oak/Hick/ Yellow Pine	1992	217	0	0	0	0	0	0	105	0	88	24	0
	Oct-03	228	0	0	0	0	0	0	0	105	0	92	31

Total Mesic Oak-Pine Forests	1992	357,297	52,990	35,958	21,183	9,548	12,134	48,154	78,255	61,715	24,221	9,182	3,957
	Oct-03	356,735	9,070	44,255	33,311	25,122	10,618	8,543	44,068	79,069	62,272	25,483	14,924

Mesic Hardwood Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
W Oak/R Oak/ Hickory	1992	16,786	2293	1049	604	301	609	1770	3722	3185	1847	1049	357
	Oct-03	22,653	593	1886	1145	883	298	612	1926	6135	4498	2422	2255
White Oak	1992	34	15	0	0	0	0	6	13	0	0	0	0
	Oct-03	34	0	15	0	0	0	0	6	13	0	0	0
Sweetgum	1992	23	0	0	0	0	0	0	23	0	0	0	0
	Oct-03	23	0	0	0	0	0	0	0	23	0	0	0
Beech/Magnolia	1992	805	0	0	0	0	0	0	28	474	86	123	94

	Oct-03	811	0	0	0	0	0	0	0	28	480	86	217
Total Mesic Hdwd	1992	17,648	2,308	1,049	604	301	609	1,776	3,786	3,659	1,933	1,172	451
Forests	Oct-03	23,521	593	1,901	1,145	883	298	612	1,932	6,199	4,978	2,508	2,472

Bay-Shrub Wetlands

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Sweetbay/Swamp	1992	502	0	0	0	0	0	0	94	253	0	155	0
Tupelo/R Maple	Oct-03	680	0	0	0	0	0	0	38	229	253	5	155
Undrained	1992	1,975	1659	25	0	0	249	11	0	0	31	0	0
Flatwoods	Oct-03	1,975	1659	0	25	0	0	249	11	0	0	31	0
Total Bay-Shrub	1992	2,477	1,659	25	0	0	249	11	94	253	31	155	0
Wetlands	Oct-03	2,655	1,659	0	25	0	0	249	49	229	253	36	155

Bottomland/Streamside Forests

	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
Btmld Hdwd/	1992	8,402	389	73	495	69	344	144	1191	3076	1657	43	921
Yellow Pine	Oct-03	8,526	177	310	26	541	69	325	140	883	3271	1658	1126
Swamp Chestnut	1992	11,285	306	374	100	0	3676	953	964	1387	1393	1613	519
Oak/Cherrybark	Oct-03	11,047	75	235	288	57	63	3676	953	871	1302	1170	2357
Sweetgum/Nuttal	1992	17,475	299	1170	372	1109	2564	593	2812	1908	1133	2030	3485
Oak/Willow Oak	Oct-	16,995	55	255	1051	534	1046	2639	527	1813	2485	993	5597

	03												
Sugarberry/Am	1992	1,321	0	0	0	0	145	0	170	924	82	0	0
Elm/ Green Ash	Oct-03	1,321	0	0	0	0	0	0	145	170	924	82	0
Laurel Oak/	1992	1,967	31	63	15	0	126	0	92	452	964	26	198
Willow Oak	Oct-03	1,967	0	31	63	15	0	126	0	92	425	198	1017
Overcup Oak/	1992	6	0	0	0	0	0	0	0	6	0	0	0
Water Hickory	Oct-03	6	0	0	0	0	0	0	0	0	6	0	0
Baldcypress/	1992	13	0	0	0	0	0	0	0	0	13	0	0
Water Tupelo	Oct-03	11	0	0	0	0	0	0	0	0	0	11	0
Sycamore/	1992	50	0	18	0	0	0	0	0	32	0	0	0
Pecan/A Elm	Oct-03	50	0	0	18	0	0	0	0	0	0	32	0
Brush Species	1992	172	0	0	172	0	0	0	0	0	0	0	0
	Oct-03	172	0	0	0	172	0	0	0	0	0	0	0
Total Bottomland/	1992	40,691	1,025	1,698	1,154	1,178	6,855	1,690	5,229	7,785	5,242	3,712	5,123
Streamsides	Oct-03	40,095	307	831	1,446	1,319	1,178	6,766	1,765	3,829	8,413	4,144	10,097
Total All Types	Year	Approximate Acres	Years										
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101+
	1992	609,940	83,612	49,894	27,886	12,601	22,689	81,771	120,829	114,177	57,070	24,374	15,037
	Oct-03	611,402	18,857	65,459	46,680	32,980	13,639	18,182	76,818	121,616	112,622	59,692	44,857

Appendix H. Acronym Listing

A

APD Application for Permit to Drill
ASQ Allowable Sale Quantity
ATV All Terrain Vehicle
AUM Animal Unit Month

B

BBS Breeding Bird Survey
BMP Best Management Practices

C

CCS Challenge Cost Share
CFR Code of Federal Regulation
CISC Continuous Inventory of Stand Conditions
CY Calendar Year

D

DFC Desired Future Condition

E

EA Environmental Assessment
EIS Environmental Impact Statement
EPA Environmental Protection Agency

F

FDR Forest Development Road
FHWA Federal Highway Administration
FW Forest Wide

G

GIS Geographic Information System
GPS Geographic Positioning System

H

HBI Hilsenhof's Biotic Index
HMA Habitat Management Area

I

ID Interdisciplinary
INFRA Infrastructure

J,K,L

LBJ Lyndon B. Johnson
LE&I Law Enforcement & Investigations
LEO Law Enforcement Officer
LRMP Land & Resource Management Plan

M

MA Management Area
MIS Management Indicator Species
MMBF Million Board Feet
MOU Memorandum of Understanding

N

NEPA National Environmental Policy Act
NF National Forest

NFGT National Forests & Grasslands in Texas
NFMA National Forest Management Act
NFT National Forests in Texas
NG National Grassland
NRCS Natural Resource Conservation Service
NRHP National Register of Historic Places
NTMB Neotropical Migratory Birds

O

OHV Off-highway Vehicle
ORV Off-road Vehicle

P

PEP Plantation Evaluation & Performance
PMT *Permanently Marked Trail*
PPV Public Private Venture

Q,R

RCW Red-cockaded Woodpecker
R.O. Regional Office
ROD Record of Decision

S

SFASU Stephen F. Austin State University
S&Gs Standards & Guidelines
SMZ Streamside Management Zone
S.O. Supervisor's Office
SPB Southern Pine Beetle

T

TADRA Texas Arabian Distance Riders Association
TAMU Texas A&M University
TES Threatened, Endangered & Sensitive
TFS Texas Forest Service
TNHP Texas Natural Heritage Program
TNRCC Texas Natural Resource Conservation Commission
TPWD Texas Parks & Wildlife Department
TRC Texas Railroad Commission
TRTR Ten Percent Roads & Trails Funds
TXDOT Texas Department of Transportation

U,V

USDI United States Department of the Interior
USFS U.S.D.A. Forest Service
USFWS U.S. Fish & Wildlife Service
USGS United States Geological Service
VQO Visual Quality Objective

W,X,Y,Z

WMA Wildlife Management Area
WSR Wild & Scenic River

Appendix I. Comment Form for the FY 2002-2003 M&E Report

We would like to hear your reactions to this report and any suggestions on how we might improve it in the future. We tried to provide you with clear and understandable information about how the NFGT are being managed. Did we meet our goal? Are there topics of interest that were missed? Could you find what you were looking for? Did we present the discussion in a way that was clear and understandable?

This form is provided for your convenience. Just remove this page and list your comments and address in the space below, then mail it to:

National Forests and Grasslands in Texas Project Analysis Team (PAT) 415 S. First Street, Suite 110 Lufkin, TX 75901

Name:
Address:
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You can also contact us via e-mail at mailroom_r8_texas@fs.fed.us (type PAT in the subject line) or if you prefer to comment by phone, please call us at the Forest Supervisor's Office at (936) 639-8501 (and ask for a member of the PAT).



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