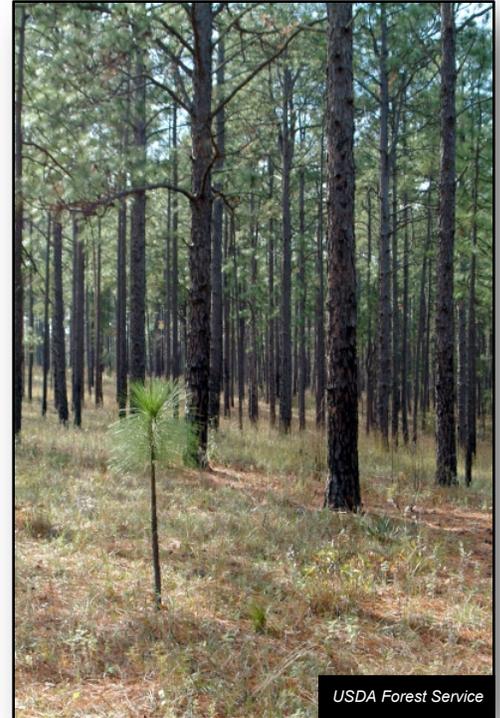
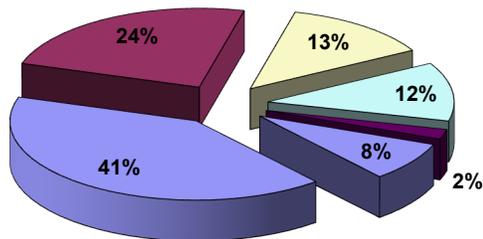


The Resource

Texas' forests are prized for their scenic beauty, supporting tourism and outdoor recreation and providing wildlife habitat throughout eastern Texas. Texas' forests cover 63.3 million acres. Of this, 12.1 million acres are in East Texas where the climate supports commercial forest. Trees are harvested from these lands for a myriad of forest products. The majority of the forest land in East Texas, some 92%, is in non-industrial private ownership, while approximately 6% are in national forests, and 2% in other public ownership. Major forest types in East Texas include loblolly-shortleaf pine, longleaf-slash pine, mixed oak-pine, oak-hickory, and oak-gum-cypress (see pie chart). Forest land in Central/West Texas is almost all non-commercial and is 95% privately owned.. Only 2.5 million acres are classified as commercial, 5% of the total.



East Texas Forest Type Distribution



■ Loblolly-Shortleaf ■ Oak-hickory □ Oak-pine
□ Oak-gum-cypress ■ Longleaf-slash pine ■ Other

Forest Influences and Programs

♣ The **Southern pine beetle (SPB)** is the most important forest insect pest in Texas. Historically, the most severe SPB problems in the South have occurred here. However, since 1994, SPB populations in Texas have been very low. **No SPB infestations were reported on state, private, or federal lands in Texas from 1998 through 2011.** A trapping system developed by the Texas Forest Service and now used in 16 southern and northeastern states is used to forecast annual SPB infestation trends. Traps are deployed in the early spring to predict SPB infestation levels for that year. Early indications are that southern pine beetle activity in 2012 will continue to be very low. Also, private landowners in East Texas have been participating in the Southern Pine Beetle Prevention Project since 2003. This project provides cost-share funds to landowners for first thinning of pine stands determined to be high hazard to SPB. Since the project began, over 87,000 acres have been thinned. In 2011, 156 new cost-share cases were approved for thinning almost 8,000 acres.

♣ **Drought, fire and pine engraver beetles dominated the forest health scene in TX in 2011.** “Texas has experienced its most severe one-year drought on record.” (John Nielsen-Gammon, Texas State Climatologist). Also, 2011 was the driest October 2010 – September 2011 (12 months) on record with 7.18” (statewide average) of rainfall (normal is 14.94”; record low was 7.35” Oct 1901-Sep 1902). At the end of September, 86% of Texas was in exceptional drought according to the National Drought Mitigation Center. In addition, oppressive summer heat with temperatures over 100° broke records across the state, especially for consecutive days and total number of days with temperatures equal to or above 100°. August 2011 in Texas was the hottest month ever recorded for any state in the US with an average temperature of 88.1°. Columbia University's Lamont-Doherty Earth Observatory has analyzed tree-ring data and calculated how drought conditions dating back over 450 years (to 1550 in Texas) ranked on the standard Palmer Drought Severity Index (PDSI). From this study, it was concluded that 1789 was the only year in the last 461 years when Texas had a drought as severe as 2011. In some areas of central and west Texas, the drought may be causing “landscape level” changes in the vegetation with millions of acres being impacted. This year's drought was estimated to have caused \$5.2 billion in agricultural losses through August. La Niña is back with no clear end in sight to the ongoing drought which could last well into 2012.

From January 1 to November 9, 2011, the Texas Forest Service and volunteer fire departments have responded to 26,150 fires that have burned 3,906,998 acres. Several fires this year made national news. In particular were the Bastrop Complex in September which burned 34,000 acres and destroyed 1,649 homes and the Possum Kingdom Complex in April which destroyed 168 homes. The Bastrop fire was the most destructive wildfire in Texas history. Statewide, 2,555 homes were destroyed by fires this year. April was a bad month with six fires that were over 100,000 acres each. The largest was the Rockhouse Fire in west Texas which burned 314,444 acres. Resources mobilized through the Texas Interagency Coordination Center (TICC) from January through October 2011 included 16,242 personnel, 107 crews, 239 dozers, 954 engines, and 246 aircraft. From January 1 to October 5th, dozens of air tankers (including a DC-10 and several “scooper” aircraft from Canada), SEATs (single engine air tankers), helicopters, and fixed-wing air attack aircraft have flown more than 16,000 accident-free hours and have dropped more than 33 million gallons of water and retardant. On October 6, county judges had implemented outdoor burn bans in 251 of 254 Texas counties.

With the exceptional drought conditions across most of the state in 2011, pine engraver beetles began attacking drought-stressed pine trees in East Texas. Presently, it is impossible to estimate pine tree mortality caused by pine engraver beetles, but without doubt this has been a VERY BAD YEAR. Next summer FIA crews plan to check plots across East Texas to estimate damage from drought, engraver beetles, and other factors.

♣ **Oak wilt** (*Ceratocystis fagacearum*) continues to occur in over 70 counties in Texas, mostly between Dallas and San Antonio. Urban and rural oaks are affected. Trenches placed between diseased and healthy trees sever interconnected root systems and halt the spread of the disease. Texas Forest Service personnel contribute technical assistance to landowners to help minimize the impact of this tree disease. Technical information on oak wilt is made available via a web page devoted exclusively to oak wilt in Central Texas (www.texasoakwilt.org), developed by the Houston Advanced Research Center (HARC), the USGS National Biological Information Infrastructure (NBII), USDA Forest Service Forest Health Protection, the Lady Bird Johnson Wildflower Center, and the Texas Forest Service.



♣ **Exotic invasive species** are gaining increased attention as a serious problem impacting forests. The new *Invaders of Texas* program is taking the message of exotic invasive pests to the general public by enlisting the aid of trained citizen scientists to detect and report invasive species in their neighborhoods. **Numerous articles** about exotic pests that are

present or are potential Texas invaders have been prepared by Texas Forest Service forest health specialists and others and are posted at the Texas invasives partnership web site (<http://www.texasinvasives.org>).

Forest Health Assistance in Texas

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