

## Forest Health Highlights in Texas FY 2022

- Texas A&M Forest Service through a partnership with USDA-APHIS, USFS Forest Health Protection and Texas Parks and Wildlife deployed 500 purple panel traps across Texas. Traps were baited with hexenol and concentrated in east Texas and in urban areas along the I-35 corridor from Dallas/Fort Worth to San Antonio. Six new counties were reported during FY 2022, Dallas, Morris, Parker, Rusk, Titus, and Wise. Currently in Texas twelve counties have been confirmed for positive EAB infestations. Positive counties include, in addition, Bowie, Cass, Denton, Harrison, Marion, and Tarrant. The counties of Dallas, Denton, Parker, Wise, and Tarrant are located within the Dallas Fort Worth metroplex while the other counties reside in Northeast Texas within the commercial timberlands of the state. State quarantines have been established for all counties restricting the movement of all ash material outside the county. Texas A&M Forest Service maintains a website (<http://tfsweb.edu/eab>) providing information about EAB and hosts workshops to educate Texans on how to properly identify EAB and how to manage infected trees.
- Oak wilt continues to occur in 76 documented counties in Texas, mostly counties west of I-35 from Dallas to San Antonio across I-20 to Lubbock. Texas A&M Forest Service personnel contribute technical assistance to landowners to help educate landowners and the public and to minimize the impact and spread of this disease. Technical information on oak wilt is made available via a web page devoted exclusively to oak wilt in Central Texas ([texasoakwilt.org](http://texasoakwilt.org)). Almost 165,000 users have consulted this web site for information regarding the identification and management of oak wilt. Workshops and trainings are held across many counties in the state with confirmed oak wilt disease present. During FY 2022, 22 trenches with a combined length of 33,228 feet (15,779 in cost shares) or 6.2 miles (3 in cost shares) were installed to help stop the spread of oak wilt as part of the federally funded Cooperative Oak Wilt Suppression Project. Since the inception of the program in Texas, more than 783 miles of oak wilt trenches have been installed to help control the spread of this deadly disease.
- The spring FY 2022 SPB prediction survey was conducted in 17 East Texas counties (Angelina, Houston, Cherokee, Hardin, Houston, Jasper, Liberty, Nacogdoches, Newton, Polk, Rusk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, and Tyler), and included four National Forests and The Big Thicket National Preserve (BTNP) covering about six million total survey acres. Results from this survey predicted continued low or no SPB activity in Texas for FY 2022. No SPB were collected from survey traps in East Texas in FY 2022, while 5,168 clerids were collected. This is almost twice the 2,379 clerid beetles collected in 2021. The prediction of low SPB activity (from 2021 trapping) proved to be accurate as **NO (0)** SPB infestations were reported in East Texas in FY 2022. Early indications are that southern pine beetle activity in 2023 will continue to be low to none.
- Texas A&M Forest Service continues to administer the Southern Pine Beetle Prevention Program in East Texas. During FY 2022, through funding from USFS-Forest Health Protection, Texas

A&M Forest Service provided over \$150,000 to 49 landowners to assist in the thinning of overly dense pine forests reducing their risk of an SPB attack. Also, during FY 2022 through the SPB Prevention Program more than 2,500 acres of overly dense pine stands were thinned on 36 East Texas forested properties. Since the inception of the program in 2003, more than 1,900 landowners have utilized over \$6.7 million to thin more than 128,000 acres of overly dense pine stands in East Texas.

- During FY 2022 Texas A&M Forest Service forest health staff continued to restore Ponderosa Pine forests in the Davis Mountains region. These forest over the past decade have been subjected to severe wildfires, extreme drought and subsequent mountain pine beetle infestations. This area is home to southern most extent of the Ponderosa Pine population and Texas A&M Forest Service working with USFS-Forest Health Protection, Southern Research Station and The Nature Conservancy has led the way for restoring Ponderosa Pine and working to improve the overall health of existing forested areas.
- Texas A&M Forest Service staff were involved in the survey and collection of baldcypress leaf roller (*Archips goyerana*) in Liberty and Marion Counties. This perennial pest occasionally experiences outbreak conditions and was very active in FY 2022. The collection of eggs for rearing was done in conjunction with Mississippi State University.
- Overall pine mortality was a major concern in FY 2022 across east Texas with areas of Cass, Bowie and Red River Counties especially hard hit. Weather conditions (drought followed by freeze followed by drought) resulted in extreme pine stress. The appearance of ips beetles, ambrosia beetles and deodar weevils resulted in stand-level mortality.
- Texas A&M Forest Service staff recorded an outbreak of the hackberry leaf roller (*Sciota rubrisparsella*) in Tarrant and Dallas County during of September of FY 2022. Foresters and Forest Health Personnel gave recommendations.
- Texas A&M Forest Service staff made numerous site visits across West Texas for juniper mortality. During the drought of FY 2022, high mortality of ashe junipers was observed in Palo Duro Canyon State Park, Caprock state Park, and across West and Northwest Texas. The areas that had issues with decline/ mortality were areas that the juniper density was very high. Cedar bark beetles and other borers were common across the region.
- A perennial regeneration pest in east Texas, TLCA, continues to plague landowners. In 2018 Texas A&M Forest Service initiated a program to assist qualifying landowners by treating TLCA nests with PTM Insecticide (Fipronil). In FY 2022, 26 nests were treated across the sandier regions of east Texas. LeafSaver ant bait has been discontinued and is no longer available for use by landowners. Texas A&M Forest Service management plans have been revised to reflect the threat of TLCA to recommend treatment before planting. UAVs have been used with some success to identify and located mounds prior to treatment.

- Texas experienced a very wet spring followed by droughty conditions over the rest of FY 2022 resulted in widespread decline of Post Oaks (*Quercus stellata*). This weather pattern results in a root/shoot carbohydrate imbalance and causes rapid decline and eventual mortality. Older trees seem to be more susceptible. Mortality is scattered but occurs frequently across the range. Counties that exhibited higher mortality rates during FY 2022 included Anderson, Kaufmann and Grimes Counties.
- During FY 2022 Texas A&M Forest Service staff made numerous recommendations for the treatment of typical pest/disease issues seen in Texas each year. These are minor in nature and usually do not pose any threats to the forests of Texas. Recommendations were made for fungal (mainly Tubakia leaf spots) and bacterial foliage diseases, trunk rot, Pales weevils, twig girdlers, forest tent caterpillars, oakworms, hackberry leaf roller, drippy nut disease, spider mites, pear rust, needlecast, cottonwood leaf beetle, elm leaf beetle, webworms, red-headed ash borers, carpenter ants, carpenter bees, fusiform rust, smooth patch, hypoxylon canker, bacterial wetwood, aphids, mites, leaf miners, galls, bark lice, dogwood anthracnose. In addition, freeze damage was significant after the winter storm Uri in February; wood borers (ambrosia beetles and Ips engraver beetles) and other insects that thrive in stress conditions were common across Texas.