# Texas A&M Forest Service

# FOREST STEWARDSHIP BRIEFINGS

Timber & Wildlife & Water & Soil & Best Management Practices & Forest Health & Recreation & Aesthetics

FOREST STEWARDSHIP VALUES

from TFS website

For more information:

- https:// tfsweb.tamu.edu/ Stewardship/
- https:// texasforestinfo. tamu.edu/ stewardship/values
- https:// tfsweb.tamu.edu/ ContactUs/
- https://texasforest info.tamu.edu/My LandManagement Connector/

#### **INSIDE THIS ISSUE:**

<u>New</u> CRP Forestry Initiative

Online Tool - Plan My Land Operation

Urban Forest Inventory and Analysis

Feral Swine Control Funding

Carbon Sequestration

Forest Stewardship is the active management of forests and related resources to keep lands in a productive and healthy condition for present and future generations; and to increase economic, environmental, and social benefits. The Forest Stewardship Program addresses the improvement and maintenance of timber, wildlife, soil and water, recreation, aesthetics, and forage resources on private lands

Texas A&M Forest Service (TFS) staff are available to answer forest-related questions and give technical assistance by phone, email, or site visit. You, as a landowner can have a Forest Stewardship Plan written for your property to help you manage your land and meet your goals. Private forestry consultants/management services can also write management plans for landowner.

through landowner assistance.

From TFS's Stewardship Values dashboard, you can see current economic and environmental values from 622,540 acres of forest and woodlands that are managed under a Forest Stewardship plan in Texas. Currently we see:

Economic Growth - When landowners take steps to steward their land, such as harvesting and replanting trees, managing vegetation, and protecting soil and water resources, forests can produce up to 53 more tons of wood per acre during their lifetime over non-managed forests. This additional wood provides greater financial returns to the landowner, more local jobs, and increased economic impact. Counting all the Texas properties with implemented Stewardship plans, this comes to an increased productivity of \$20,000,000/yr.

Improved Air Quality - Trees remove carbon dioxide from the atmosphere and give us clean air to breathe. They store the carbon in their wood (carbon sequestration). Excess carbon carries a cost. If our air quality declines, the cost of food and health care will rise. Active forest management, following good stewardship principles, reduces the costs associated with air emissions and protects Texas lands for future generations. Carbon Sequestration Value of Texas forests under Stewardship plans - \$54,000,000/yr.

Protected Water - Almost half of freshwater in Texas originates on forestland. Forests filter rainwater, reduce flooding, and protect waterways from erosion and extreme temperature changes. Stewardship efforts reduce the cost of air emissions and protect Texas lands. Water Resource Value of Texas forests under Stewardship plans - \$407,000,000/yr.

Wildlife Provisions - Good forest management, such as leaving Streamside Management Zones, planting native mast producing species, leaving standing dead trees, and installing supplemental food plots can all help enhance wildlife on your property. Wildlife values on our Stewardship properties are calculated to be \$11,000,000/yr.

Other facts:

- Managed forestland in East Texas supplies 725,000 people with clean drinking water.
- \$1 spent on forest management save taxpayers \$7 in water treatment costs.
- The timber produced on managed forestland directly contributes \$475 million to the Texas economy.

#### March 2021

#### from USDA FSA News Release published January 25, 2021, on "Morning Ag Clips" website

For more information:

- https:// www.morningagcli ps.com/usda-offersnew-crp-forestmanagementincentive/
- https:// www.farmers.gov/ service-center-

The U.S. Department of Agriculture (USDA) is making available \$12 million for use in making payments to forest landowners with land enrolled in the Conservation Reserve Program (CRP) in exchange for their implementing healthy forest management practices. Existing CRP participants can now sign up for the Forest Management Incentive (FMI), which provides financial incentives to these landowners to encourage proper tree thinning and other practices.

"We are offering CRP landowners an opportunity to use forestry practices for a more targeted approach to improve forest health and wildlife habitat on their land," said Richard Fordyce, administrator for USDA's Farm Service Agency (FSA). "The Forest Management Incentive enables landowners to maximize the conservation outcomes on their land, such as supporting wildlife, conserving soil, and improving water quality."

Right now, less than 10% of land currently enrolled in CRP is dedicated to forestland. But, these nearly 2 million acres of CRP forestland, if properly managed, can have enormous benefits for natural resources by reducing soil erosion, protecting water quality, increasing water quantity, and diversifying local farm operations and rural economies.

Only landowners and agricultural producers with active CRP contracts involving forest cover can enroll. However, this does not include active CRP contracts that expire within two years. Existing CRP participants interested in tree thinning and prescribed burning must comply with the standards and specifications established in their CRP contract.

CRP participants will receive the incentive payment once tree thinning and/or other authorized forest management practices are completed.

The incentive payment is the lower of:

- The actual cost of completing the practice; or

- 75% of the payment rate offered by USDA's Natural Resources Conservation Service (NRCS) if the practice is offered through NRCS conservation programs.

Signup for this program began January 19, 2021. FSA will announce a deadline later this year. Interested producers should contact their local FSA county office.

#### About CRP:

**NEW CRP FORESTRY INCENTIVE** 

CRP is a land conservation program administered by FSA. In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are 10-15 years in length. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.

# ONLINE TOOL - PLAN MY LAND OPERATION

**Plan My Land Operation** has been rebuilt using a new technology since Adobe Flash is no longer supported by web browsers. This new version matches the Map My Property user interface, is mobile accessible, and includes many exciting new features.

Nationwide overlay layers and datasets for contours, flood zones, hydrography, par-

cels, soils, and wet areas are now available, greatly expanding the utilization of this application. Enhanced features provide additional options for map symbology, support for KML file import/export, and the ability to "undo" unwanted drawing edits. New data from the NRCS soils (SSURGO) database regarding site index and regeneration have also been added to assist forest management operations.

from Texas Forest Info Notification of Update

For more information:

 https:// texasforestinfo. tamu.edu/pmlo/

# URBAN FOREST INVENTORY AND ANALYSIS

The Forest Inventory and Analysis (FIA) program maintains a systematic grid of permanent sampling plots (FIA core plots) across the United States. This grid is used to inventory and monitor the Nation's forests. The urban FIA inventory uses the same sampling frame as the core FIA program, and data are used to produce estimates of the quantity, health, composition, and benefits of urban trees.

During the 2015 field season, a full, intensified collection of FIA data was performed in Houston, Texas. An analysis of this urban forest data in Houston reveals that this area has an estimated 33.3 million live trees with tree canopy that covers 18.4 percent of the city. Roughly 19.2 million of the city's trees (about 58%) are located on private lands.

The most common tree species are yaupon, Chinese tallowtree, Chinese privet, Japanese privet, and sugarberry.

Trees in Houston currently <u>store</u> about 2.0 million tons of carbon (7.5 million tons of carbon dioxide [CO2]). This ecological

service is valued at \$272 million. In addition, these trees <u>remove</u> about 140,000 tons of carbon per year (513,000 tons CO2 per year), valued at \$18.6 million per year, and about 2,400 tons of air pollution per year, a value of \$20.4 million per year.

Houston's urban forest is also estimated to <u>provide</u> 126 million cubic feet of net wood volume and to <u>reduce</u> annual residential energy costs by \$53.9 million per year. Reduction in runoff provided by the trees in Houston is estimated at 173 million cubic feet per year with an associated value of \$7.8 million per year. The compensatory value of the trees is estimated at \$16.3 billion.

The information presented in this "Houston's Urban Forest" report can be used to improve and augment support for urban forest management programs and to inform policy and planning to improve environmental quality and human health in Houston. The analysis also provides a basis for monitoring changes in the urban forest over time.

### FERAL SWINE CONTROL FUNDING

The United States Department of Agriculture (USDA) recently announced it is awarding approximately \$1.5 million to the Texas State Soil and Water Conservation Board (TSSWCB) to fund three additional pilot projects to control feral swine in Texas. These projects are a part of the Feral Swine Control Pilot Program (FSCPP).

Feral swine cause a high level of economic, biologic, and natural resource damage. The species are also a threat to Texas waterways and ecosystems.

TSSWCB will work in partnership with Natural Resources Conservation Service (NRCS), Animal and Plant Health Inspection Service (APHIS), local Soil and Water Conservation Districts (SWCDs), Texas A&M Natural Resources Institute (NRI), the Texas Wildlife Damage Management Association (TWDMA), and Texas Farm Bureau to administer the FSCPP.

Landowners in the project areas may be eligible for assistance to trap feral swine on their property. Pilot projects consist of three fundamental elements, the removal of feral swine by APHIS, restoration efforts supported by NRCS, and assistance to producers for feral swine control.

The first round of funding covered the Canadian River Watershed, Upper Leon River Watershed, and the Upper Red River Watershed that encompass Hartley, Oldham, Potter, Eastland, Comanche, Erath, Hardeman, Wilbarger, Wichita, and Clay counties in Texas. <u>This</u> round of funding will focus on three additional project areas in the following counties: Dallam, Nueces, San Patricio, Bee, Williamson, and Milam. from the publication "Houston's Urban Forest, 2015" published April 2017

For more information:

- www.srs.fs.usda.gov /pubs/rb/ rb srs211.pdf
- www.fia.fs.fed.us/

from TSSWCB news release dated Jan. 15, 2021

For more information:

- https:// www.tsswcb.texas. gov/news/tsswcbreceives-additionalfunding-usda-nrcsaddress-feral-swine -texas
- https:// www.tsswcb.texas. gov/feral-swinetexas
- Liza Parker: 254-773-2250, or lparker@tsswcb. texas.gov.

Distribution of this newsletter is provided free of charge to professional foresters, state and federal agency professionals, county judges and commissioners, state senators and representatives, various forestry-related associations, and others.

PLEASE ADVISE US IF YOU WISH YOUR NAME REMOVED FROM OUR MAILING LIST.

This newsletter is also available on the web at tfsweb.tamu.edu/StewardshipPublications. If you would rather receive this newsletter electronically (by e-mail), contact us at the address, phone number, or e-mail address above.

The Texas A&M Forest Service is an Affirmative Action/Equal Opportunity Employer committed to Excellence through Diversity.

Editorial Advisor: Joe Pase, TFS-Retired; Lufkin, Texas

#### CARBON SEQUESTRATION

Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide; the long-term storage of carbon in plants (including trees), soils, geologic formations, and the ocean.

From Encyclopedia Britannica, Inc.: Carbon is transported in various forms through the atmosphere, the hydrosphere, and geologic formations. One of the primary pathways for the exchange of carbon dioxide (CO<sub>2</sub>) takes place between the atmosphere and the oceans. There, a fraction of the CO<sub>2</sub> combines with water, forming carbonic acid (H<sub>2</sub>CO<sub>3</sub>) that subsequently loses hydrogen ions  $(H^+)$  to form bicarbonate  $(HCO_3^-)$  and carbonate  $(CO_3^2^-)$  ions. Mollusk shells or mineral precipitates that form by the reaction of calcium or other metal ions with carbonate may become buried in geologic strata and eventually release CO2 through volcanic outgassing. Carbon dioxide also exchanges through photosynthesis in plants and through respiration in animals. Dead and decaying organic matter may ferment and release CO<sub>2</sub> or methane (CH<sub>4</sub>) or may be incorporated into sedimentary rock, where it is converted to fossil fuels. Burning of hydrocarbon fuels returns CO2 and water  $(H_2O)$  to the atmosphere.

*Forest Fact:* Every 100 ac. of managed forestland in Texas sequesters an additional 32 tons of carbon each year compared to unmanaged forests, which is \$495 on the carbon market.



Texas A&M Forest Service P. O. Box 310 Lufkin, TX 75902-0310 Phone: 936-639-8191

Email: dwork@tfs.tamu.edu