# Texas A&M Forest Service

#### August 2016

BRIEFINGS

# FOREST STEWARDSHIP

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

# ALDO LEOPOLD AWARD WINNERS

from TPWD News Release, April 20, 2016

For more information:

- http:// tpwd.texas.gov/ newsmedia/ releases/? req=20160520b
- http:// tpwd.texas.gov/ landwater/land/ private/ lone\_star\_land\_ste ward/

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

Ranch Rejuvenates Dormant Spring

There's an App for That - Austin Trees

Working Like Dogs

Research on the Effects of Drought

Texas Water Explorer Website When Richard Taylor and his late wife Sally moved to Texas in 2001 and bought land in the heart of Mason County, they knew their work was cut out for them. The land, which had been overgrazed and overworked for years, was in desperate need of restoration. Fifteen years later, the Taylors' dedication to habitat and wildlife conservation has earned their Blue Mountain Peak Ranch recognition as the 2016 Leopold Conservation Award recipient for Texas.

Given in honor of renowned conservationist Aldo Leopold, the prestigious award is conferred each year by Sand County Foundation, a nonprofit organization devoted to private land conservation, in partnership with the Texas Parks and Wildlife Department's Lone Star Land Steward Awards program.

When the Taylors purchased Blue Mountain Peak Ranch, they dreamt of rehabilitating the land to what it looked like before European settlement in the 1800s, with more live oak savannah grassland in the uplands and a higher density of woody plants restricted mainly to the draws.

"The goal we have for the ranch is simple: we want to increase species diversity and put water in the aquifer," said Taylor. "We asked ourselves what could possibly bring back the plants and animals we love to see everyday, and we found that back around 1800 was a good period of time because there were a lot more species here."

While they spent several years working to clear the Ashe juniper that dominated much of the landscape and allowing the native herbaceous plants to recover, Taylor began applying prescribed fires on sections of the ranch every year. With the exception of a 10-acre educational demonstration plot, Taylor eradicated all the juniper, restoring the potential for livestock grazing and allowing the grassland and wildlife to flourish.

The quantity and quality of the ranch flora has thrived under Taylor and Paris' management. They have made improvements to rainwater catchment and infiltration through increased ground cover, reducing soil runoff and erosion, which has led to improvements in wildlife habitat for blackcapped vireos, Texas horned lizards and spot-tailed earless lizards.

With assistance from TPWD, the ranch undergoes an annual deer survey for harvest recommendations and has made significant improvements in buck quality and age structure. To control the feral hog population, Taylor uses a combination of trapping and hunting, which has resulted in the removal of hundreds of hogs over the years.

The ranch has also served as a study site for multiple graduate level projects by Texas Tech on the effects of prescribed burning and for species such as the Texas horned lizard. Beyond the ranch, Richard and Sally co-founded The Conservation Agency, a scientific nonprofit dedicated to the conservation of natural biodiversity.

"If this is work, this is my most favorite job in the world," Taylor said. "I look forward to going out even when it's hot out. I consider it to be fun. This is the most fun I've ever had." from TSSWCB article, "Ranch Rejuvenates Dormant Spring," July 26, 2016

For more information:

- https://goo.gl/ UdqJqV
- http:// www.tsswcb.texas. gov/brushcontrol

### **RANCH REJUVENATES DORMANT SPRING**

Charles J. "Chuck" Knibbe, along with his wife Sharon and their children, is a fifth generation owner and operator of the Knibbe Ranch located approximately 28 miles north of San Antonio in Comal Co.

The ranch is characteristic of the area with its rolling hills, picturesque meadows, the Guadalupe River as its southern boundary, along with creeks and springs on the property. The focal point, however, is Shannon's Spring located on the ranch.

Named after Chuck and Sharon's daughter, the spring was long active on the ranch until a heavy overgrowth of "thirsty" Ashe juniper (cedar) invaded the landscape. Deciding to do something about the problem, Chuck heard about the **Water Supply Enhancement Program** through the Texas State Soil and Water Conservation Board (TSSWCB).

Brush has invaded millions of acres of rangeland and riparian areas in Texas, reducing or eliminating stream flow and aquifer recharge through interception of rainfall and increased evapotranspiration. Brush control has the potential to enhance water yield, conserve water lost to evapotranspiration, recharge groundwater and aquifers, enhance spring and stream flows, restore native wildlife habitat, and improve livestock grazing distribution.

The purpose of the Water Supply Enhancement Program is to increase available surface and ground water supplies through the targeted control of waterdepleting brush in areas in need of water conservation. The State Conservation Board allocates program cost-share funding to landowners giving priority to projects that balance the most critical water conservation need of municipal water user groups with the highest projected water yield from brush control.

"Voluntary land stewardship, on a grand scale, is a cornerstone solution for water supply issues in Texas. The efforts of private landowners to control waterdepleting brush are vitally important to the ecological health of our productive rangelands across the state," said Rex Isom, Executive Director of the TSSWCB.

For more information about the Texas State Soil and Water Conservation Board's efforts to enhance public water supplies through the targeted control of waterdepleting brush, please contact Johnny Oswald at (325) 481-0335 or joswald@tsswcb.texas.gov.

### THERE'S AN APP FOR THAT - AUSTIN TREES

from Texas A&M Forest Service website

For more information:

- http:// tfsweb.tamu.edu/ content/ article.aspx? id=24427
- http:// mycitystrees.com
- http:// www.treesearch.fs.f ed.us/pubs/50393

For the first time ever, a census for trees is available in a new, easy-to-use application developed by Texas A&M Forest Service (TFS). **My City's Trees** enables civic leaders, community planners, elected officials, and anyone with access to the Internet, to learn about Austin's urban forest, and explore Urban Forest Inventory and Analysis data by land cover, city growth, watersheds, and eco-regions.

"This free, publicly accessible web tool allows community members to work together to better understand, conserve, and protect the trees where they live, work, and play," said TF Urban and Community Forestry Program Coordinator Paul Johnson. "They also can use this information as a starting point when creating longrange, community tree plans."

My City's Trees can be useful in defining urban forest management and tree health care options, allocating resources and prioritizing programs that will better protect community trees.

With this app, you can find out the 10 most common trees in Austin; how much storm water runoff trees help control; how many trees are in the Barton Spring Zone; and much more. Users can even check out the composition of the Austin urban forest; how many trees are in the city – and find out who owns them.

## WORKING LIKE DOGS

A reoccurring challenge in the fight against invasive species is getting ordinary Texans, who are at risk of spreading invaders, to take action. Luckily, a couple of dogged canines are on the case.

Working Dogs for Conservation, a nonprofit organization founded in 2007, trains conservation detection dogs that can sniff out unwanted invasive species among their many conservation efforts. They travel the world hunting invaders everywhere from Guam to Iowa, and now they're in Texas to raise awareness about invasive species.

The Northeast Texas Conservation Delivery Network (CDN), a collection of conservation agencies and organizations including Texas Parks and Wildlife, brought the Working Dogs for Conservation to Texas to help with public outreach.

"By bringing Working Dogs for Conservation and using a dog's natural ability to draw attention, we believe this project will surpass its goal of educating the public in a lasting way about the threat of nonnative invasive species" said Laura Speight, the Northeast Texas CDN chair.

This spring, the Working Dogs for Conservation conducted demonstrations, searches for emerald ash borer, and voluntary boat inspections for zebra mussels. They made their final Texas public appearance for 2016 at the Toyota Texas Fest in Frisco in May. Visitors met the dogs, learned more about their work, and even seaw them search a boat. Toyota Texas Fest visitors also saw demonstrations on how boaters should properly clean, drain, and dry their boats. By using interactive games and displays, visitor also learned more about aquatic invasive species threatening Texas.

The working dogs themselves were all adopted from animal shelters, chosen for their ability to focus on a tennis ball. They need that focus when trying to track down tiny invaders. These dedicated dogs can search an entire boat for zebra mussels in about three minutes versus up to an hour it could take humans, all for the simple reward of getting to play with a toy.

The Working Dogs' work is just part of a larger invasive species public awareness effort. This summer, Texas Parks and Wildlife and a coalition of partners are relaunching a zebra mussel awareness campaign in North and Central Texas and a giant salvinia campaign in East Texas. The campaigns seek to remind boaters to clean, drain and dry their boats every time they leave the water to prevent the spread of destructive invasive species. from iWire April 2016 newsletter, www.TexasInvasives.org

For more information:

- https://youtu.be/ D\_fXTeqGy\_8
- http://wd4c.org/
- www. TexasInvasives.org

### **RESEARCH ON THE EFFECTS OF DROUGHT**

The U.S. Forest Service has released a new report that provides a national assessment of peer-reviewed scientific research on the impacts of drought on U.S. forests and rangelands.

The ability to quantify and predict the impacts on forests and rangelands is critical to developing and implementing management actions to increase resiliency and adaptation. Options to mitigate drought include altering structural or functional components of vegetation, minimizing drought-mediated disturbance such as wildfire or insect outbreaks, and managing for reliable flow of water. Some of the topics addressed:

- Physiological Responses of Forests to Future Drought
- Impacts on Forest Dynamics, Structure, Diversity, and Management
- Forest Biogeochemistry in Response to Drought
- Insect and Pathogen Responses to Drought
- Fire and Drought
- Detecting and Monitoring Large-Scale Drought Effects on Forests
- Economics and Societal Considerations of Drought in Forests and Rangelands

from USDA Forest Service book "Effects of Drought on Forests and Rangelands in the United States: A Comprehensive Science Synthesis," January 2016

For more information:

• http://goo.gl/ AQAQcM 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 http://tfsweb.tamu.edu/main/article.aspx? id=1180. If you would rather receive this newsletter electronically (by e-mail), contact us at the address, phone number, or e-mail address above.

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#### <u>Editorial Board</u>

- Rusty Wood, TPWD, Nacogdoches, Texas
- Joe Pase, TFS-Retired, Lufkin, Texas

### TEXAS WATER EXPLORER WEBSITE

The Nature Conservancy has a very informative website for the public to explore. "Texas Water Explorer" is an online tool full of information on the freshwater resources of Texas. Go to **www.texaswaterexplorer.tnc.org** to find information on:

- Water quantity Explore trends and patterns in Texas surface and groundwater supply and water use, aquifer conditions, and river flows.
- Water quality Learn about Texas water quality concerns and trends and patterns in water quality parameters.
- Ecosystem health Learn about aspects of Texas freshwater ecosystem health, including health of biological communities, recreation supported by healthy ecosystems, and common impacts.
- Economic productivity See how local Texas economies depend on water.
- Water governance Learn about the different programs that govern water in Texas.
- Water Conservation Explore aspects of water use efficiency and water conservation by various water use sectors across Texas.

Check out the interactive maps as well.



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