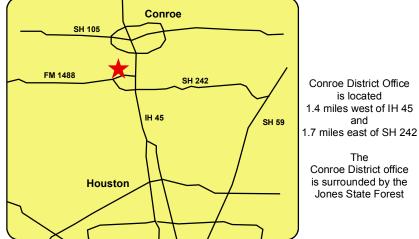




The Texas A&M University System



# Legend

Roads

Creeks

----- Pipeline

is located **Ponds** 1.4 miles west of IH 45

Conroe District Office

Red-cockaded The Conroe District office woodpecker cluster is surrounded by the Jones State Forest (RCW)

### **Trail Information**

Multi-use trails

Horseback Riding

**Hiking** 

**Biking** 

Hiking trails

Hiking / Jogging Sweetleaf Nature Trail

Middle Lake Trail

- M Office
- Nature Classroom / Outdoor Gardens
- Bird Viewing at RCW Clusters
- Fishing
- Picnicking (no camp fires)
- Orienteering Course
- Geocache
- Trail Rest Area

Forest and recreation areas are open daily (gates close at dark)

> **District office hours** Monday - Friday 8am - 5pm

Recreation area requires sign-in at entrance gate

**Sign-in at District Office** to obtain lock combination to the Nature Trail

Follow all posted federal and state regulations

> For emergency **CALL 911**



### William Goodrich Jones **State Forest**

an urban wilderness

Conroe District Office 1328 FM 1488 Conroe, TX 77384 (936) 273-2261 ionesstateforest@tfs.tamu.edu

## JONES STATE FOREST ENVIRONMENTAL LEARNING CENTER

#### **WILDSCAPE GARDENS & POLLINATOR GARDENS**

Conservation is a key message at the Texas Forest Service's Jones State Forest Environmental Learning Center encompasses over 1,700 acres. Wildscape and pollinator gardens are both hands-on learning outdoor classrooms. Texas Wildscapes is a habitat restoration and conservation plan for rural and urban areas which includes the ingredients essential to a variety of wildlife – food, water, shelter, and space. To restore and conserve wildlands, it may be necessary to plant and maintain native vegetation, install birdbaths and/or ponds, and create structure. Though feeders can supplement native vegetation, they can never replace it. The goal is to provide places for birds, small mammals, and other wildlife to feed and drink, escape from predators, and raise their young.

Pollinator gardens attract everything from bees to butterflies to birds which are all essential to a healthy forest. These hard-working animals help pollinate over 75% of our flowering plants, and nearly 75% of our crops. Hummingbirds, bats, bees, beetles, butterflies, and flies carry pollen from one plant to another as they collect nectar. Without them, wildlife would have fewer nutritious berries and seeds, and we would miss many fruits (like blueberries), vegetables (like squash), and nuts... Visit <a href="www.fws.gov/pollinators/">www.fws.gov/pollinators/</a> or <a href="www.heartwoodtmn.org">www.heartwoodtmn.org</a> for more information and upcoming local classes or events. Jones State Forest is excellent habitat for bird watching and checking out butterflies and dragonflies. For information about plants which yield species you might see while visiting, drop by the Texas Forest Service (TFS) office for a list of them.

#### RAINWATER HARVESTING DEMOSTRATION (COMING SOON)

Rainwater harvesting is an innovative alternative water supply approach anyone can use. Here in the gardens, rainwater harvesting captures, diverts, and stores rainwater for later use. Captured rainwater is often used in landscaping, because the water is free of salts and other harmful minerals and does not have to be treated. It is also useful in attracting and providing water for wildlife. Implementing rainwater harvesting techniques directly benefits our state by reducing demand on the water supply, and reducing run-off, erosion, and contamination of surface water.

Visit http://rainwaterharvesting.tamu.edu/rainwaterbasics.html.

#### TEXAS MASTER NATURALIST (TMN) – HEARTWOOD CHAPTER

Texas Master Naturalists are an essential part of the volunteer program at the forest. Friends of Jones State Forest or Amigos del Bosque volunteer hundreds of hours each year maintaining the gardens and trails, teaching adult and youth classes and hosting a variety of training workshops. For information on the TMN program go to <a href="www.heartwoodtmn.org">www.heartwoodtmn.org</a>. Partnerships between Texas Forest Service, SFASU and US Forest Service facilitate with community outreach.

#### **LONE STAR COLLEGE SYSTEM – MONTGOMERY**

Academy of Lifelong Learning (ALL) at the Lone Star College near the forest offers adult classes in conjunction with outdoor learning opportunities. ALL at LSC-Montgomery provides environments in which active older adults enjoy opportunities for continued intellectual and personal growth. Classes are offered in the spring, summer and fall. For classes being offered in partnership with Texas Forest Service, visit <a href="www.lonestar.edu/ALL-Montgomery.htm">www.lonestar.edu/ALL-Montgomery.htm</a> or contact the Texas Forest Service office at <a href="jonesstateforest@tfs.tamu.edu">jonesstateforest@tfs.tamu.edu</a> or 936/273-2261.

#### **COMPOSTING BIN – In Your Backyard**

Near the gardens is a composting bin. All organic matter eventually decomposes. Composting speeds the process by providing an ideal environment for bacteria and other decomposing microorganisms. The final product, humus or compost, looks and feels like fertile garden soil. This dark, crumbly, earthy-smelling material works wonders on all kinds of soil and provides vital nutrients to help plants grow and look better.

Decomposing bacteria, fungi, and larger organisms (such as worms, sow bugs, nematodes, and numerous others) need four key elements to thrive: nitrogen, carbon, moisture, and oxygen. For best results, mix materials high in nitrogen (such as clover, fresh grass clippings, and livestock manure) and those high in carbon (such as dried leaves and twigs). If there is not a good supply of nitrogen-rich material, a handful of general lawn fertilizer will help the nitrogen-carbon ratio. Moisture is provided by rain, but you may need to water or cover the pile to keep it damp, being careful not to saturate the pile. Turning or mixing the pile provides oxygen. Frequent turning yields faster decomposition. Visit <a href="http://aggie-horticulture.tamu.edu/publications/landscape/compost/">http://aggie-horticulture.tamu.edu/publications/landscape/compost/</a>.

#### **RED-COCKADED WOODPECKER HABITAT**

Nesting season for the Red-cockaded woodpecker (*Picoides borealis*) starts around mid-March and lasts until late July on the Jones State Forest. Red-cockaded woodpeckers (RCW) are the only woodpeckers to excavate nests and roost sites in living trees. Living in small family groups, Red-cockaded woodpeckers are a social species, unlike others. The family group may include the male and female, their chicks, and young adult "helpers". These helpers, typically related young from a previous nesting season, help build cavities and care for the future chicks. Pecking a cavity in a live tree takes up to a year or more. Uniquely, the birds peck the bark around the entrance to get the sap (resin) flowing around the hole. The sticky sap keeps predators like snakes away from the adjacent cavity. The RCW diet consists of insects found under the bark and along the branches of pine trees. Females lay 2-4 eggs during a breeding season.

The Red-cockaded woodpecker is one of only two woodpecker species protected by the Endangered Species Act. The other species is the Ivory-billed woodpecker (which is assumed to be extinct). Jones State Forest (named in honor of the father of Texas forestry and conservation in 1948) is home to about 10 RCW family groups; however, with the ever growing urban constraints placed upon the forest and RCW habitat, the population is not growing but stable.

Visit <a href="https://www.fws.gov/rcwrecovery/rcw.html">www.fws.gov/rcwrecovery/rcw.html</a> for more information.

#### **HABITAT RESTORATON**

While visiting the William Goodrich Jones State Forest (purchased in 1926) you will notice some areas that have been exposed to fire recently or you may see dark marks on the tree trunks going up from the ground several feet. This is not from a wildfire but from a controlled "prescribed burn". In an effort to restore the balance in the pine forest ecosystem, fire is commonly used as a management tool. Fire is a natural ecological disturbance that has influenced the natural history of North America and has been used widely to manage habitat for wildlife. On the Jones State Forest, fire is used primarily to control understory plant species that could impact the endangered red cockaded woodpecker, by eliminating plant structures which predators might use otherwise to access the RCW cavities.

#### **TRAILS & PAVILION**

The main trail system is about 15 miles long. The multiuse trails are used for such things as horseback riding, walking, jogging, and nature watching. The Sweetleaf Nature Trail (est. 1952) is one mile long and its hiking trail meanders along Rice Branch crossing the creek in two places. Interpretive information and exhibits encourage "teachable moments" in the natural environment. Pick up a trail guide at the TFS office or at one of the trail kiosks. A respite from study and hiking is offered to students and teachers at the covered pavilion, located behind the TFS office next to the educational gardens.

#### **CHIMNEY SWIFT TOWER (COMING SOON)**

Chimney swifts, birds that nest and roost in chimneys, have been abundant in the past in North America. But by the late 1980s, the number of swifts migrating to North America from the Amazon River Basin had declined. A growing number of people across North America are now constructing nesting towers and conducting chimney swift conservation projects in their own communities. With *chimney swift towers*, concerned bird conservationists are helping create more habitat for these beneficial, insect-eating birds. Visit www.chimneyswifts.org.

#### **EARTHSCOPE & HOUSTON NETWORK OF ENVIRONMENTAL TOWERS**

Jones State Forest is host to monitoring equipment arrays. One that constantly monitors movement of tectonic plates is linked to EarthScope. The other system is part of an air quality array installed by University of Houston called Houston Network of Environmental Towers (H-NET) and monitors air quality around the Greater Houston area continuously for air pollutants and ozone.

#### **BAT HOUSES**

Bats are hard at work around the state forest, fulfilling tasks that are vital to healthy ecosystems and human economies. Many of the more than 1,100 bat species consume vast amounts of insects, including some of the most damaging agriculture pests. They also pollinate countless plants, ensuring the productions of fruits. Visit www.batcon.org.

#### LANDSCAPING WITH TREES IN MIND

Notice how the trees in the gardens near the office have been incorporated into the landscape design. When selecting trees to plant, it is important to envision the size of the trees at maturity so that adequate space is provided for them as they age. Keep in mind that some love shade and some prefer full sun. For information about planting the right tree in the right spot contact a professional forester with Texas Forest Service at <a href="http://texasforestservice.tamu.edu">http://texasforestservice.tamu.edu</a> or a landscaper.

#### **EAST TEXAS BLUEBIRD TRAIL**

The state forest is home to over 15 bluebird boxes. Once one of the more common birds in North America, by the early 1960's the bluebird population was in decline and intensive conservation efforts were needed to ensure the species survived. Concerned bluebird enthusiasts saw the impact that habitat loss was having on these birds, and began replacing the lost nest cavities with man-made "nestboxes." Soon "Bluebird Trails" began to appear across the country and cavity-nesters of all types, including the bluebirds began to recover. The Texas Bluebird Society is working to establish "bluebirds across Texas", and you can help. Visit www.texasbluebirdsociety.org.