2018 Spring General Meeting

The program for the Tyler County Forest Landowner Association's Spring General Meeting on April 21, 2018 included the an update on the status of the Louisiana Pine Snake, an overview of Tyler County Forestry Soils and the History of Surveying in Texas. A summary of each follows.

<u>Louisiana Pine Snake.</u> Josh Pierce, Wildlife Biologist with the U S Forest Service in Nacogdoches, Texas, reported that the Louisiana pine snake (Pituophis ruthveni) has been listed as Threatened under the Endangered Species Act. Louisiana pine snakes are non-venomous constrictors that live in open pine forests, grow to over 4' in length and spend over half their time underground. They eat pocket gophers and then use their burrows for habitat.

A Louisiana pine snake was last seen in Tyler County in 1994 near Hwy 69 and Hwy 255; another was seen in the 1954-56 timeframe. While none have been sighted since, traps have been placed near Spurger/Hillister and east of Colmesneil. Josh encourages you to contact him or a local Game Warden if you see a Louisiana pine snake. They are black, brown and russet with small heads and pointed snouts.

To prevent the snake from becoming endangered, Louisiana pine snakes in zoos across the country were shipped to four institutions for breeding: the Ellen Trout Zoo in Lufkin, the Fort Worth Zoo, the Memphis Zoo and the Audubon Nature Institute in New Orleans. These institutions are currently releasing their offspring in the Kisatchie National Forest and Fort Polk in Vernon Parish, Louisiana.

Per the U.S. Fish and Wildlife Service website, the basic responsibility of private landowners having Louisiana pine snake populations on their lands is to avoid harassing, harming, killing, trapping, capturing or collecting the snakes. As a result of this listing, there may be further restrictions for areas where pine snakes are known to occur. For example, using intensive mechanical site preparation techniques or clearing pine forests for development or agriculture use may be prohibited. The details are still under review.

<u>Forestry Soils.</u> Julia McCormick, Soil Scientist with the Natural Resources Conservation Service (NRCS) in Jasper, Texas, explained that soil properties include color, drainage classes, texture, structure, depth and Ph.

Soil color gives an indication of the various processes going-on in the soil as well as the minerals in the soil. For example, the red color in our soil is due to the abundance of iron oxide. Dark colored soil is generally due to the accumulation of decayed organic matter. A gray color indicates wet soil.

Drainage classes are defined to specify the how rapidly or slowly the soil drains. Sandy and loamy sandy soils drain more rapidly than thick, dark organic matter which retains moisture and keeps the water table high.

Texture refers to the relative proportions of particles of various sizes such as sand, silt, and clay in the soil. Structure refers to how these primary soil particles -- sand, silt and clay – are clustered. For example, a structure that is 60% clay is good for crops only if it has enough granularity to allow air and water movement through it.

Ph measures the percentage of hydrogen in the soil. Tyler County's soil is acidic in the 5-6 Ph range, where a Ph measure of 7 is considered neutral.

Julia displayed a core sample of the pinetucky soil series that is prevalent in northern Tyler County. The top 8 inches are grayish brown fine sandy load; the next 8-13 inches are yellowish brown fine sandy loam, followed by layers of yellowish brown sandy clay loam. The pinetucky soil which is also acidic is good for longleaf pines.

You can research the soil types on your property on the Texas A&M Forest Service Map My Property website at http://texasforestinfo.tamu.edu/mapmyproperty/.

<u>Texas Land Surveying History</u>. Nedra Foster, Texas Registered Professional Land Surveyor (RPLS), entertained and educated the attendees with information about the history of land surveying in Texas and Tyler County. Surveying was first practiced in Texas to define the boundaries of Spanish land grants. These surveyors used surveyors' chains that were 20 *varas* long. Each Texas vara = 33 1/3 inches.

Texas land was divided into leagues that were 4428.4 acres and into sections that were 640 acres. Mexico would set aside 4 leagues for a city and another 4 leagues for each county's schools. Surveyors used witness trees for corners; bearings were marked with initials on trees. Only the original survey is classified as proven; all subsequent surveys are classified as opinions.

Even though we use GRS coordinates today, the vara is still the official unit of measure for land in Texas.