

ECOLOGICAL SYSTEMS CLASSIFICATION OF TEXAS

Results of a detailed vegetation mapping project of Texas, with particular emphasis on the Hill Country, will be the subject of the October 24th meeting of the Hill Country Chapter, Texas Master Naturalist. Texas Parks and Wildlife specialists Duane German and Amie Treuer-Kuehn will inform us about the current program, which is providing an unprecedented level of accuracy in producing a new land classification map. Begun in 2007, this project provides critical information for

- understanding habitat changes over time,
- guiding specific wildlife studies,
- showing the range of native and invasive species, and
- guiding management decisions affecting land stewardship decisions throughout Texas.

Modern computer technology combines with ‘boots on the ground’ field data collection to yield high quality maps and to uncover a few ecological treasures across the state.

The project builds on groundbreaking work by TPWD in the 1970’s when NASA (Landsat) satellite technology first became available. The science uses imagery based on the reflectance pattern of different wavelengths of light striking particular ground vegetation cover. The current study incorporates vastly improved technology and provides an unprecedented level of precision.

Equally important to the program is the “ground-truthing” element whereby field-based biologists visit the sites, identify the plant species, and corroborate the computer generated characterizations. The history and status of the program will be discussed with emphasis on the Hill Country region where results are largely complete.

The first three phases of the project are completed, defining the ecological characteristics of approximately 47% of Texas’s land mass and which includes 73 defined systems and 288 subsystems. New work focuses on a comprehensive ecological description of major systems and subsystems within the state including correlations of soils, hydrology, geology and vegetation. This project is accomplished through cooperative partnerships with multiple private, state, and federal agencies.

Duane German currently serves as the Landscape Ecology Program Leader at TPWD, a position he has held for the past 6 years. Duane started with TPWD in 1992 after completing his Master’s Degree in wildlife ecology from Texas A&M University.

Amie Treuer-Kuehn is a Plant Ecologist at TPWD. Amie earned her Master’s Degree in biology with a focus on plant ecology from The University of Texas at Arlington. Prior to TPWD, she taught an undergraduate Plant Science course and worked as a field research assistant in Alaska and Texas

More can be learned about the Texas Ecological Systems Classification Project at <http://www.tpwd.state.tx.us/landwater/land/maps/gis/tescp/index.phtml>

The monthly meeting of the Master Naturalist is free and open to the public. Please join us on Monday, October 24th 2011 at the Upper Guadalupe River Authority's lecture hall, located at 125 Lehmann Drive in Kerrville, TX. Socializing begins at 6:30, with the program starting at 7 pm. For more information, please contact our V.P. of Programs, Bob McKinley [830-535-6211 or (713-503-3914 – cell) or email him at bobmac9827@gmail.com

Below are several images that may be used to enhance this article in your publication. The woman in the images is Amie Treuer-Kuehn and we have her permission to use these images.

