

HCA is a passionate community caring for the unique features, spring-fed streams, heritage ranch lands, spectacular beauty and culture of the Texas Hill Country for the benefit of future generations.

Hill Country

PEDERNALES NEWS

Meadows Center Progresses on Pedernales Gain/Loss Study

For the past year the <u>Meadows Center for Water and Environment</u> at Texas State University has been collecting water samples at 100 sites on the Pedernales River to determine the origins of its flow and overall quality of the water. The analysis and conclusions of this year-long project have been compiled in a master's <u>thesis</u> by Saj Zappitello, a graduate student in aquatic resources. Zappitello, along with the Meadows Center team and some helpful volunteers, gathered and analyzed information about water quality, quantity, and chemistry.

Zappitello used the chemical signatures of the surface water samples as a "fingerprint" to match with the unique chemistry of different groundwater sources. This allows the researchers to determine where the Pedernales River is gaining water from different aquifers, which in turn highlights areas where groundwater-surface water interactions are most crucial to maintaining the River's flow rates and water quality. In fact, Zappitello found that during the dry months, parts of the River are almost completely sustained by groundwater contributions. This information will be an important guide for future policy directives concerning groundwater and surface water management.

The study also found that the water in the Pedernales River (at least during base flow, which is primarily made up of groundwater) is well within EPA water quality standards, which is good news for the landowners in the watershed. Results from the 2015 samples actually show that water quality in the River has generally improved since 1962, the last time a similar study was done.

Zappitello's work is part of an ongoing larger project that aims to answer the question "How much water is in the Pedernales?" This summer, the Meadows Center will continue this in-depth gain/loss study in order to gain a clearer picture of how much water we have, where it comes from, and where it goes, and how our modern day River compares to the 1962 Pedernales River. Due to the excessive rainfall in the early summer, sampling has been a bit delayed, but with the River returning to base flow levels, data collection should start up again soon.

If you are a landowner in the eastern Pedernales watershed and you have a well that you can allow the Meadows Center to sample, we encourage you to contact Jenna Walker, Pedernales Project Manager, at ji1433@texasstate.edu or call (512) 245-9418. Landowner participation and involvement is key to making natural resources management projects successful and we are grateful to all who are willing to help!

For more info about the Meadows Center's Pedernales Project, click here.

Fredericksburg Landowners Coming Together to Fight Invasive *Arundo donax*

This summer, landowners along the Pedernales and its tributaries in the Fredericksburg area have signed on to the Healthy Creeks Initiative, a partnership between Texas Parks and Wildlife (TPWD), Hill Country Alliance (HCA), The Nature Conservancy and the City of Fredericksburg. A key part of Healthy Creeks is treating *Arundo donax*, more commonly known as giant cane. *Arundo* has many adverse ecological impacts, including out-competing native species, excessive water use, and disruption of normal streambank and floodplain functions. The good news is that we still have time to minimize damage caused by *Arundo* in the Pedernales Basin.

Fredericksburg is Ground Zero for *Arundo donax* in the Pedernales, so control efforts are focused at the source in order to prevent the weed from spreading downstream. TPWD and HCA staff have spent time this summer visiting landowners along creeks in Fredericksburg to map the locations and acreage of *Arundo* in preparation for treatment in late summer and into the early fall.



HCA's graduate student intern wanders into the abyss.

Arundo spreads vegetatively (meaning fragments of plants grow into new plants) and burns hot, so cutting and fire control are not viable control options. Instead, our contractors will use an aquatic-approved herbicide mix that is formulated to stick to *Arundo* leaves.

If you or a neighbor has Arundo on their property, we urge you to resist the temptation to mow or cut it! If you are in the Fredericksburg area and are interested in FREE Arundo treatment via Healthy Creeks, contact TPWD at healthycreeks@tpwd.texas.gov. If you have Arundo but you are not in the Fredericksburg area, check out these-guidelines on how to treat Arundo donax on your own property.

PEDERNALES CALENDAR

Land Stewardship Workshop: Welcome to Hill Country Living

Tuesday, July 12th, 8am-3pm First United Methodist Church 105 LBJ Dr., Johnson City

Topics will include feral hogs, tax valuations, and other things about living in the hill country. Most of the agencies serving Blanco County will be attending. Info here.

Email jlbreakiron@ag.tamu.edu.

Lady Bird Day

Sunday, July 24th, 9am-5pm Lady Bird Johnson Wildflower Center 4801 La Crosse Avenue, Austin

Enjoy exhibits, children's activities, book signings and <u>more</u> honoring the former First Lady's environmental legacy and love of the Hill Country. <u>Admission</u> is FREE.

Texas Groundwater Summit

August 23rd-25th
San Marcos Embassy Suites and
Conference Center

Join the Texas Alliance Groundwater Districts for their 5th Annual Texas Groundwater Summit. The summit will include expert presentations and discussions on a variety of groundwater issues. Anyone who works with groundwater or is interested in the future of Texas groundwater is invited to attend!

Detailed Agenda and Registration here.

Night Skies on the Pedernales: Blanco Commissioners Court to Consider Resolution

If someone asks you to list "natural resources of the Hill Country," I doubt most of us would immediately think of the night sky as one. However, a growing body of science is proving the worth of dark night skies for wildlife, particularly for insects and migrating birds. In addition, night-sky friendly lighting actually improves visibility, saves electricity, and helps you sleep better. In the tourist-driven economies of the Hill Country, dark night skies draw star gazers and visitors from around the state.



Given that preserving night skies is a win-win for both wildlife and people, it's no surprise that many cities are instituting night sky ordinances to better preserve our starry skies. The Blanco County Commissioners Court is set to consider a Dark Sky Resolution at its meeting in Johnson City on July 12th. HCA will also have a night skies info table at the "Welcome to Hill Country Living" workshop hosted by A&M AgriLife (events, pg 2).

TCEQ Approves New Air Quality Permits in Blanco Co., Gillespie Co. Pending



The Texas Commission on Environmental Quality (TCEQ) has approved two new air quality permits in Blanco County in recent months, both contested by residents. A concrete batch plant by Austin Ready Mix (139219) was approved prior to the TCEQ's response to public comments. This prompted concerned citizens to file a Motion to Overturn. This case is still in the TCEO docket.

Keep Henly Clean and other citizens contested a new rock crusher in Blanco County by La Bala de Plata (139539), which TCEQ approved on June 8th. The deadline for appeal is July 8th.

There is an active air quality permit application for Limestone Connections Rock Crusher (139317) in Gillespie County. The application notice was published in May and the public comment period has not yet begun.

For information regarding TCEQ permit applications, visit the TCEQ website. To look up the status of specific applications use the online database and the permit numbers provided in parentheses.

Do you have an event or news item that is of particular interest to the Pedernales Basin? Capture a great image of the Pedernales after our recent rains? Have a question or topic that you would like to see covered here?

We want to make this newsletter as informative and helpful as possible for youthe residents, stakeholders and friends of the Pedernales. Please email Katherine@hillcountryalliance.org for inclusion in our next newsletter.

TO UNSUBSCRIBE FROM THIS LIST, EMAIL KATHERINE@HILLCOUNTRYALLIANCE.ORG

