



RIPARIAN RECOVERY NETWORK NEWS

Riparian: wetlands adjacent to rivers or streams



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On the Road to Riparian Recovery

This month marks four springs since the “Memorial Day Flood.” After the devastation, riparian experts like Steve Nelle assured us the Blanco would recover on its own. He and others advised that all we really had to do was leave some of the wood as it would become the “rebar” of new river banks and stop mowing/weed whacking. Mother Nature would take care of the rest. And it has! Within less than six months the healing process began. Places where roots had survived were once again covered with native grasses and sedges. Buttonbush, one of the strongest rooted riparian shrubs, began to regrow. Young trees, particularly Sycamores, quickly sprouted replacing older uprooted giants.



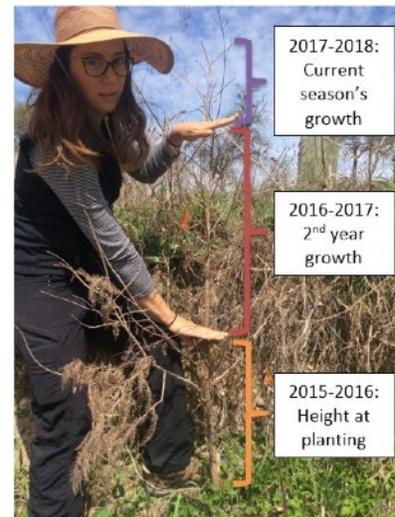
But humans are an impatient species. Experts helped us “accelerate” the natural recovery process. A major concern was stabilizing damaged the river banks so no more soil was lost. Texas Parks and Wildlife, with help from the Hays County Master Naturalists, distributed 15,000 seedling - Spikerush, Emory sedge, Whitetop sedge, and Switchgrass. Landowners who planted a flat or two marveled at how quickly the grasses and sedges spread. Today, Blanco landowner John Davison watches as his dog Zeva gets lost in the rapidly spreading offspring from one flat of Emory sedge he planted.



Native American Seed developed a Riparian Recovery Mix specifically for Blanco recovery efforts. According to their catalog (https://www.seedsource.com/catalog/detail.asp?product_id=4506), this mix, now marketed to other riparian corridors in Texas, is designed to develop “native, deep-rooted, diverse plant communities that work together with big dead wood, limbs, and debris to dissipate floodwater energy, filter and trap sediment, and stabilize soil and plant recovery.” This mix and others that like

moisture (Drainfield, Wetland Fringe, Pollinator Essentials, and Dam Slope, etc.) were used to stimulate recovery at Jackaroo, the Texas Parks and Wildlife demonstration site on the Blanco.

Then came Treefolks, an Austin organization dedicated to restoring urban forests. Along waterways, trees are particularly important for their role in keeping water temperature down in the face of brutal Texas heat. Using both contractors and volunteers, over 200,000 trees were planted along a 30 miles stretch of the Blanco in just four years. The plants were small for a reason and not just to make them easier to plant. Ina Alextos, Treefolks Director of Reforestation, uses an analogy involving a forty year old and a toddler who move to a country where a different language is spoken. Just as the toddler is likely to become fluent in the new language more quickly than most adults, the small seedlings will adjust and soon outgrow larger transplanted trees. In the picture on the right, Ina highlights the growth of a Bald Cypress planted the first year after the flood.



In addition to Bald Cypress, over 18 different kinds of woody plants ranging from tall trees like Black Walnut and Chinkapin Oak to smaller favorites like Buttonbush, Roughleaf Dogwood, and Mexican Buckeye were planted as part of the Treefolks initiative, Trees for the Blanco. Why so many different varieties of both seeds and seedlings? The explanation is complicated, but it all boils down to the old adage, the whole is greater than the sum of its parts. One aspect especially critical along the banks of flood-prone waterways is that, when the roots of multiple species become intertwined, the resultant root “bundle” is even stronger than the roots of any of the individual plants. Another of the great benefits of diversity is a more robust, year-wide wildlife “pantry.” Returning guests at Jackaroo which operates as a vacation rental quickly noticed the difference - more birds, butterflies and squirrels.

So what can we do to continue what these organizations helped us start? Again the answer is doing just a little to assist Mother Nature in sustaining the health of our recovering riparian ecosystems. Giving seed dispersal a boost is one way we can meddle by enabling desirable plants to spread more quickly and widely. But be sure to harvest the seeds when they are ready, generally when the seeds fall easily from the plant. Or as Shannon Brown from Ecosystem Regeneration Artisans, a residential ecological restoration landscaping company, puts it “take only what is given.” She goes on to caution half is more than enough for any harvest. For wind-borne seeds, another approach Shannon suggests is to simply shake the seedheads. John Davison successfully uses this technique to hasten the natural spread of the Switchgrass he got from Texas Parks and Wildlife by simply waiting until the wind is blowing in the direction he wants the seeds to go then shaking.

Floods also spread invasive species and these invaders quickly take advantage of scoured areas gaining a foothold before native species have the opportunity to take hold. Two spread widely by the Memorial Day were Arundo cane and Bastard cabbage. Since then many Blanco landowners have diligently pulled Bastard cabbage and there are signs of progress despite a resurgence with this year's abundant rain. Many area landowners also took advantage of the Healthy Creeks Initiative's Arundo eradication program which provides professional assistance in eliminating this noxious weed.

Other floods, particularly those involving the Wimberley Valley's many creeks have spread different invasives along our waterways including Ligustrum and Chinese tallow. These two are also a problem at Town Creek, part of the National Park Service site honoring LBJ's boyhood home. A recent trip to Johnson City to observe an Earth Day invasives removal event revealed a simple technique for getting these invaders under control. The concept is simple - girdle the tree so its roots are starved of the nutrients provided by the leaves. Eventually the tree dies. That's what happened to Bald Cypress that remained upright after the flood. Many lost most or all of the bark on their trunks, but were able to tap reserves to produce leaves the following spring. Some with sufficient bark remaining continue to recover. But those that had lost too much bark around the circumference of the trunk eventually succumbed from lack of nourishment.

In Johnson City humans were doing the damage. The only tools they used were small pruning saws and inexpensive linoleum knives. Shown on the left is a Ligustrum with several inches of bark removed. The next step is to scrape away the layer that carries nutrients. It should take 6 months to a year for the tree to die. And, if the tree shows signs of continued health more scraping of the wounded area may be needed. A similar technique was used with the Chinese tallow shown on the right. However it was necessary to scrape away more of the bark as tallow trees tend to sprout from their base.



So sit back. Enjoy watching nature at work. And let us know how things are progressing in your neck of the woods.

The Riparian Recovery Network News is a periodic Hays County Master Naturalist publication covering topics of interest to the Riparian Recovery Network community. Please share this newsletter with friends and neighbors who would enjoy information on restoring and enjoying their riparian zone. Send any questions you might have or ideas for future topics to riparian@haysmn.org.

