



## ***RIPARIAN RECOVERY NETWORK NEWS***

**Riparian: wetlands adjacent to rivers or streams**



**No. 3, May 18, 2018**

### **Who Are We?**

The Riparian Recovery Network is about creating a shared vision for our recovering riparian land that balances our own individual needs with what is required to keep the Wimberley Valley's waterways clean, healthy, and beautiful. The network is about connections - connections with:

- EXPERTS providing learning through seminars, field trips, personal contact, and more ...,
- PLANT RESOURCES including plant identification, recommendations, seeds, and more....,
- EACH OTHER as together we learn and develop the best plan for our individual properties.

### **Texas Parks and Wildlife Tours A Big Success**

Over the past month or so, Ryan McGillicuddy from Texas Parks and Wildlife has conducted three tours of a riparian restoration demonstration site on the Blanco. During the tours he discussed riparian functions, restoration techniques, invasive species management, storm water management, the TreeFolks reforestation effort, and the importance of targeted river access. More tours will be scheduled in the fall. Stay tuned.



## Vegetation Key To Riparian Recovery, Part 2 - Stabilizers

A primary goal of riparian restoration is bank stability. Ask any stream ecologist how to do that and they'll tell you vegetation is the key. While plants categorized as colonizers come in first preparing the way, the real workhorses are called stabilizers. Stabilizers are generally tall, upright plants and can be either woody (trees, shrubs) or herbaceous (sedges, reeds, grasses). They are often slower to establish themselves, but once established stabilizers are there to stay providing the much stability banks need to stand up to flood events. And as roots of woody stabilizers interlace with those of more fibrous herbaceous ones, the result is an even stronger structure sometimes referred to as "riparian rebar." Even when taller trees are felled by fast moving waters, the remaining wood, held in place by its herbaceous friends, provides valuable bank stabilization.

So what happens during a flood event. Given more rigid trunks, some larger trees may be uprooted or otherwise damaged, especially when the waters are unusually swift like they were on Memorial Day 2015. But smaller, more flexible young trees, bushes and grasses simply bend over creating a mat that protects the bank - dissipating stream energy, slowing the water and causing sediment to drop out. And, even if upper growth is damaged, the strong roots remain meaning a shorter time to recovery. That's why layering - older trees surrounded by their younger offspring as well as bushes and grasses - is so important in establishing a healthy riparian buffer.

### Examples of Wimberley Valley Colonizers and Stabilizers



**Bald cypress** is the largest of the Wimberley Valley's stabilizers. And what a display the tall trees create in the fall when they blaze red/orange. Unfortunately, young cypress saplings are often heavily browsed by our valley's abundant deer population or lost without being noticed when mowing extends too close to a stream. So in the Memorial Day flood when the rigid old growth Cypress were downed, there were no smaller trees waiting in the wings to replace them. But, there are signs of healthy re-establishment in places where cypress seedlings, either planted by Treefolks or emerging naturally, are nestled in tall grasses. So, if you are trying to regrow Cypress or other riparian trees, give them the nursery of tall grasses they need to hide from the deer and for protection against inadvertent mowing or trampling.



**Switchgrass**, the tallest and the most important of the stabilizing grasses, grows in clumps as much as 5 feet across and six feet high. Switchgrass is known as a facultative plant meaning it can grow under both wet and dry conditions. This hardy soul even grows well on gravel bars like those created after the Memorial Day flood. There, as on the banks, its superior root strength and stiff leaves and stems dissipate energy and capture sediment under high flow conditions. In eroded uplands areas, Switchgrass serves a similar function by building soil thus preparing an environment within which other plants can thrive. The picture at the left was taken after the 2015 Halloween flood when crushed granite paths were washed out at the Wimberley Village Library. Note how effective the Switchgrass was at holding back the crushed granite.



**Water willow** forms large colonies in shallow water or on the edges of gravel bars. It can even grow in the middle of the channel assuming the water isn't flowing too quickly. This strong-rooted perennial spreads via a dense network of roots and rhizomes. Thus the plant is an important for stabilizing newly formed gravel or mud deposits. During a flood event, the tops may be stripped of leaves or even broken off. But the roots that remain quickly resprout and those washed downstream form new colonies thus creating important new habitat for aquatic insects and small fish.



**Datura (Jimsonweed)** likes disturbed areas whether in riparian areas or in the uplands. Its flowers are showy opening in the evening so they can be pollinated by nocturnal sphinx moths. After a flood, Datura sometimes inhabits gravel bars or other ravaged areas of the bank. People sometimes worry because it looks like it is taking over. But down by the water's edge and over time the more likely outcome is that Datura will be crowded out by slower to emerge plants more suited to wetter areas. In the meantime enjoy the flowers knowing that the plants are serving an important function by quickly stabilizing the stream's banks.

## Upcoming Events/Opportunities

### Treefolks Fall/Winter 2018/2019 Planting

Treefolks will be coming back to Wimberley this fall and is looking for additional sites along the Blanco damaged by the Memorial Day flood. If you qualify, but haven't yet signed yet, or know someone who might be interested you/they can apply at <https://www.treefolks.org/trees-for-the-Blanco/>.

### Cypress Creek Watershed Walks - Last Chance May 19th

There is one more Cypress Creek Watershed walk scheduled for Saturday, May 19th, from 10AM-11:30AM. The The walk focuses on the geology, stream characters and groundwater flow along Cypress Creek at Jacob's Well Natural Area. Advance reservations are recommended and can be made by contacting Tom Jones via text (281-380-2802) or email [wimberleytom@gmail.com](mailto:wimberleytom@gmail.com).

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](mailto:riparian@haysmn.org). And, if you are not currently on our mailing list, use this same address to request

