



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

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



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### **Exploring Riparian Planting Methods**



Through planting events like the one pictured above, Treefolks helped jumpstart the Blanco's recovery after the devastating Memorial Day flood. But beyond just planting seedlings, they taught us that we can speed up natural recovery and add much needed diversity to the Wimberley Valley's riparian areas. The history of our valley includes more than a hundred years over which unrestricted grazing and other misguided practices such as the "War on Cedar" reduced some plant populations to shadows of their former selves. One that comes to mind is Eastern gamagrass, a species that loves moister streamside soils, but also suffers from the fact that cattle savor its taste.

More recently, the Hill Country Alliance sponsored a Riparian Field Day on Sandy Creek in Llano County and provided more planting methods that can be used to further enhance the health and diversity of our riparian ecosystems. For those who aren't familiar with that part of the Hill Country, Sandy Creek starts at Enchanted Rock as pictured on the right and flows for forty-seven miles into Lake LBJ. Just a year ago, Sandy Creek was impacted by the devastating event that caused flooding across Llano and Burnett Counties. The purpose of the workshop was to discuss planting techniques used to repopulate a small section of the creek and assess their success.



Further west, Llano County generally gets less rain than the Wimberley Valley (average annual rainfall 30 vs. 36 inches). But much of the riparian vegetation along Sandy Creek is similar with some plant species more prominent and others less so. For example there is lots of Black Willow, but we saw just one small stand of Bushy Bluestem by a spring that provided the consistent water it needs to thrive. In terms of the earlier plantings, there were clear signs of success - particularly Black Willow cuttings that had clearly started putting down roots and Switchgrass planted from seed that had begun to sprout. But results weren't quite as good as hoped. Two factors were blamed - the planting had been undertaken later in the spring than considered optimal and a hot, dry summer without a few August rains to provide much needed sustenance at a critical juncture for the young plants.

We asked the Hill Country Alliance for permission to share the methods demonstrated that day. Their response was a resounding “YES!!!” So here’s what we learned along with some additions from our own experiences in the Wimberley Valley.

### Using Cuttings



Many woody plants can be propagated from cuttings. At Sandy Creek they were using Black Willow. But the same techniques work with Buttonbush, Sycamore and many other shrubs and small trees. The best time to install cuttings is in late winter or early spring while the plants are still dormant. But bare branches are often hard to recognize. So now is a good time to tag things you want to target before they drop their leaves. Use young branches no more than a thumb in width and several feet in length as demonstrated by the Hill Country Alliance’s Daniel Oppenheimer in the photograph on the left.

To prepare a branch for planting, cut off some of the side branches, but not more than a third or so. You might want to experiment by letting the cutting dry out for a few hours and then soak for a day or so in root stimulator. But you can also just put your cutting straight in the ground. Might be fun to experiment with both methods and see if one works better than the other. To plant you simply need to poke a deep hole in the ground using a rock bar or other digging tool. The stem should penetrate the soil deeply - preferably 1.5 to 2 feet to protect it from spring out of bank flows. Planting deeply also sustains young plants until roots go deeper. Also be sure to tamp down the soil around the planted cutting to ensure good contact.

### Broadcasting Seeds

Riparian seeds can either be purchased from reliable sources such as those listed on the following page. Alternatively you might harvest seeds from your own property or that of a friendly neighbor. If you are gathering your own seeds, make sure you know what you are gathering so you don’t inadvertently introduce/spread unwanted invasives. And don’t harvest seeds before they are ready - usually coincident with when the seeds are prone to drop to the ground. So a good suggestion is to spread a bedsheet under the plant then shake some seed into your hand. When done with hand gathering, you can simply consolidate the seed on the sheet and capture those as well. Or you can simply assist Mother Nature by shaking the sheet over an area across which you want that particular species to spread.

Once you’ve chosen where you want to spread your seeds, consider how well the seed will make contact with the ground. If the soil is compacted, you might want to rough it up with a heavy rack, pick, or shovel. Toss the seed across the area as if you are feeding grain to chickens. Or you can use a cyclone type seeder like those used to spread grass seed. What you want to achieve is seed spread evenly, not in clumps. Your target should be about 25 to 50 seeds per square foot. After spreading, pack the seed down by scuffing a boot heel across the area, sweeping it with a tree branch, or some similar technique for insuring the seed makes good contact with the soil. This can be a good task to assign to children or grandchildren.

### Installing Transplants

Transplants might be things you purchase from reputable native growers like those listed on the following page or plants you propagate yourself. Obligate wetland species that grow at or near the waterline are used to continuously moist soils and occasional root disturbance. So it is

not necessary to baby them. Just pull up the specimens you want to relocate and replant them within a few hours. In the picture on the right, Texas Parks and Wildlife's Ryan McGillicuddy is holding up Sawgrass that he pulled just a few hours earlier from a site on the Little Blanco. Plants important for bank stabilization after flooding like Spikerush and Emory sedge also lend themselves to this kind of harsh treatment. And, because you are replanting them in soil that is already moist consistently, no watering is required.



Facultative species grow higher in the watershed and, thus, need to be watered in initially. Occasional watering during prolonged dry spells may also be a good idea for the first year or so. In terms of spacing of transplants, one to three feet apart is a good rule of thumb. Also deer and beaver are known to damage young plants. So a good strategy is to plant in protected niches to whatever extent is possible. Some people soak transplants in water mixed with a product called Superthrive which you can find at most plant nurseries or on-line. This same product can also be used for cuttings to help stimulate root growth.

### Our Riparian Propagation Experiments



We've been busy too experimenting with propagating obligates. Our first experiment was with Emory sedge. We started by watering every day to keep the soil consistently moist. That quickly became tiresome so we improvised by placing the pot on top of another upside down one. Then we placed both pots in a bucket as shown. No watering needed, just dumping and refilling every few days to insure mosquito larvae didn't have a chance to mature. The same method using WWII era mess pans that held six pots each resulted in both success and failure. Our Bushy bluestem seedlings are doing well.

Our Sawgrass attempt failed to germinate likely due to the fact that the seeds we gathered were not sufficiently mature. But don't despair. We plan to try again with more mature seeds and are gathering other species to try. One unanticipated advantage to this new method is a helper in our mosquito prevention efforts - a friendly toad who took up residence in one of the mess trays.



### Some Places to Purchase Plant Materials

The Hill Country Alliance also provided a few potential sources for native seeds and containerized stock. You might also want to search the Wildflower Center's National Supplier Directory for nearby commercial businesses by going to <https://www.wildflower.org/suppliers/>.

#### Regional Sources for Native Seed

- Native American Seed - <https://www.seedsource.com/catalog/>
- Douglas King Seed - <https://www.dkseeds.com>
- Turner Seed - <https://www.turnerseed.com>

#### Regional Sources of Containerized Stock

- McNeal Growers - <http://www.mcnealgrowers.com>
- Madrone Nursery - <http://home.earthlink.net/~madronenursery/>
- Annual/Biannual Sales - Native Plant Society of Texas, Wildflower Center, etc.

The Riparian Recovery Network News is a periodic Hays County Master Naturalist publication covering topics of interest to the Wimberly Valley community. Please share this newsletter with friends and neighbors. 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 your name be added.

