



The Sabal

March 2015

Volume 32, number 2

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March 2015 Mtg., Native Plant Project:

Tues., March 24th, 2015: at 7:30pm

The Native Plant Project will present:

“Wildflower Tour of the Lower Rio Grande Valley ”

by Carol Goolsby & Ann Vacek

Carol Goolsby is an environmental educator at Quinta Mazatlan. Ann Vacek has been studying the native plants of the LRGV for many years. This presentation will be great!

The meeting is held at:

Valley Nature Center, 301 S. Border,
(in Gibson Park), Weslaco. 956-969-2475



It's easy to overlook the wildlife potential of the Common Sunflower, Mirasol. Fortunately, it comes up in many farm fields, and sometimes avoids mowers and plows. It provides pollen, nectar, and seeds. PDSTp105

The Sabal is the newsletter of the Native Plant Project.

It conveys information on native plants, habitats and environment of the Lower Rio Grande Valley, Texas.

Previous **Sabal** issues are posted on our website [www.NativePlantProject.org].

Electronic versions of our **Handbooks** on recommended natives for landscaping are also posted there.

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Soil/Humus Creation/Preservation

Moving to the banks of the Arroyo Colorado in Harlingen in 1989 was a real shock to me. Our previous stint in the LRGV was in Brownsville, at El Rancho Grande Apartments, where anything and everything grew.

Max Pons of the Nature Conservancy later told me that parts of Brownsville have 7 ft. of topsoil from river delta deposition.

Our Harlingen yard was nothing but sticky or cracked clay. The bulk of what grew on or near the arroyo bank was guinea grass. I was clueless to identify it and had no idea whether it played an important role in the environment. I asked Richard Moore about it. "Kill it with RoundUp," he told me. The rest of the story is a history of revitalization and return of the diverse shrubs and trees of the Arroyo Brush. Hundreds of years of seeds and roots were in the soil awaiting their chance to grow.

The soil in the entire yard needed improvement, which has taken years. At that time, yardmen would leave black-bagged grass clippings at the curb. Sitting in the sun, undergoing anaerobic fermentation, those clippings were chemically and physically hot. After I chopped down enormous clumps of guinea grass with the lawn mower, I'd cover the remaining root and base with a thick layer of fermenting grass. The smell was pretty bad, and it attracted flies, but it improved the soil quickly and decomposed those enormous guinea grass roots into topsoil.

My mom visited and raked a bunch of leaves. "I want to spread these on that bare spot on your hill," she said. It was fine with me, but I was sure they'd blow away. In what seemed like no time, the soil where she spread them had improved, and plants started to take hold there.

Some wildflowers seem to grow only in certain soils. We had a large load of topsoil brought in to fill the top terrace on our arroyo slope. **Baby Blue Eyes** appeared there in the spring. They were my first poster child for good soil. When an irrigation pipe on the terraces broke and washed much of the soil down the succession of terraces, a trail of Baby Blue Eyes showed exactly where that soil had gone. Now that we've added lots of organic matter to the vegetable garden, Baby Blue Eyes grow there also.



The cheapest way to add organic matter to soil is to use bagged leaves left out for the brush truck. For many years, at Ramsey Park, we've found leaves to be excellent mulch for new garden projects.

One winter, a very large indigo snake apparently spent many nights on an area heavily-blanketed with leaves. We would look for his(her?) impressive impression in the leaves every morning.



Above are what is now called "South TX Sand Scorpionweed," *Phacelia patuliflora* var. *austrotexana*. I still call them **Baby Blue Eyes**. And I've never seen a scorpion anywhere near them... (Our topsoil must have been a sandy loam.) PDST p282.

One year, Ramsey volunteers spent lots of time rescuing plants from a mature ebony forest in Brownsville, "Gloor Woods." Building lots were being sold. During spring, we were delighted to find large colonies of **Pink Mint**, *Stachys drummondii* (below) buzzing with pollinators and nectarers of all kinds. Few plants bloom so early in the spring.

That colony was growing in the very rich humus below mature ebony trees, which makes this another poster child for adding organic matter to your soil. PDST p291.



Brush Piles

Every nature park I know of has a continual barrage of broken or dying limbs, and thorny brush or prickly pear which needs to be trimmed away from faucets, pathways, and parked cars.

And every new employee of a nature center, it seems, feels that limbs should be taken to the curb for brush pickup. Many people feel that brush piles are unsightly. And they can be, if large cut ends of branches protrude toward the eye of the visitor, or the pile is adjacent to a trail, where something pretty could be growing.



Tournefortia volubilis, Googly-Eye Vine, PDST p150 (left) and *Snailseed Vine* PDST p322 (right) have been planted near this small brush pile. Hopefully they will use it as a support.

In many “natural areas” where this attitude is held, one finds concrete structures resembling logs, or metal benches resembling limbs. “Fake Nature” sells very well; just check out the garden section of any store. Why mimic nature? Use the real thing!

On Ramsey Park’s south side, we’ve tried to tuck brush piles discretely beneath overhanging branches, often using them as supports for vines, especially **milkweed, marine ivy and morning glory** (photo insets above, left to right, PDST p79, p424, p195).

Along the upper mown trail, brush piles also serve to slow down and absorb rainwater runoff from higher areas of the park, as the brush becomes topsoil.

I generally build brush piles with the idea that they will decompose quickly, to add organic matter to the soil. Because we have vast colonies of *Dicliptera vahliana* (PDST p49), I readily cover sections of those colonies with brush piles. Improving the soil with decaying limbs might eventually bring in more plant diversity to the area. Birds enjoy perching there and poop favorite seeds.

Another approach to brush piles is to build them for the express purpose of providing for wildlife.

Mark Conway replied to my query about the value of brush piles in nature parks. His comments follow:

“One of the easiest, most effective and cheapest things a person or group can do for wildlife is to create brush piles. Wildlife will use brush piles of all sizes; however, larger ones will attract more (wildlife) variety. The limbs will create more surface area and com-

plexity and the decomposing vegetation will provide a habitat for invertebrates that will in turn be eaten by birds and other critters.

For best wildlife viewing, brush piles should be located at least 25 feet off the main trails to minimize disturbance. Brush piles can also provide protection for animals such as the Texas Tortoise and Texas Horned Lizard during cold spells and extreme heat events.”

Brush piles for wildlife use can be quite large, using the largest logs for lower layers, and stacking smaller limbs in horizontal layers or in a teepee fashion. The idea of this type of brush pile is that the base will not decompose quickly, and large gaps in the base will allow entry of larger animals.

Texas Tortoises should begin to appear on trails as temperatures rise. We’ll need to watch for the males, making their way across highways, in search of mates. They are heedless in quest of females.

This photo shows the natural tendency of a Texas Tortoise to slide under available cover to hide from predators or disturbance. They like their privacy from time to time.



Short, Woody Colonies of Arroyo Banks

A strong case against mowing banks of the Arroyo Colorado, which IBWC repeatedly insists upon.



I have canoed and boated on the Arroyo Colorado for many years, usually for the Christmas Bird Count. On many of those excursions, we found vast areas of the banks dry and devoid of vegetation, trodden by livestock, and littered by fishermen. This December, the banks were covered with vast colonies of **Dewberry, Zarzamora, PDST p368, Rubus riograndis** (photo above). Even former eroded ravines were covered with this protective and wildlife-beneficial species. Humans can eat the berries!

In May of 2009, at Ramsey Park, we established a "Wetland Shrubs Garden" fairly high on the arroyo bank, with Mike Heep's plants and advice.

That garden was submerged in muddy waters from the arroyo's flooding for 43 days in 2010.

Two species in that garden not only survived, but did quite well, the Dewberry mentioned above, and the colony-forming woody shrub shown below, which roots at the nodes, protecting soil from erosion.

Hierba negra, Sprawling Lippia, Lippia alba, PDST p417, has formed a vast colony, about 4' in height, providing habitat for a vast assortment of wildlife.

Neither of these species, which occur on undisturbed banks of the Arroyo Colorado, and which withstand the floods which we can expect, will function to their potential if they are



constantly mown to 1" in height, or scraped from the arroyo banks until all that remains is compacted soil. This is the impact IBWC has had in March 2015 for at least 3.5 miles along the Arroyo.

Photo right:

Sea Ox Eye Daisy, PDST p90
Borrchia frutescens

Along undisturbed arroyo banks (which are rare to uncommon on private land or wherever IBWC can easily access wide banks with heavy equipment), there is great diversity of native flora.

Sea Ox Eye Daisy is another low-growing, woody, colony-former. Vast colonies of this species grow perhaps 3 ft. tall, along arroyo banks, along saltier banks near the coast and on seemingly dry, salty soil elsewhere.

This is a species which should not be mown. Solid colonies of Sea Ox Eye seem to deter the growth of such trees amongst their colonies. They promote healthy banks resistant to erosion.

Hachinal is the most threatened species featured on this page. I find it only in places where fresh water collects or flows down a gradual slope. Hachinal is another woody, colony-forming species, about 4 ft. in height. I found an increase in this uncommon shrub along the arroyo's banks following the floodwaters of 2010. After recent removal of vegetation from the arroyo's banks by IBWC, this shrub will take years to reappear, unless adequate rainfall is present and future disturbance is minimal. I imagine that few of our readers have seen this species in the wild. It is an excellent specimen for cultivation. In July 2007, Frank Wiseman's Hachinal was almost leafless. We investigated, finding many sphinx moth larvae (right). Obviously, this is a host plant. In Texas, Hachinal is found only in the LRGV.

Photo lower right:

Hachinal

Willow-Leaf Heimia
Heimia salicifolia
PDST p299

Years of mowing our arroyo banks has resulted in vast acres of guinea grass and a paucity of native species diversity. It has degraded a once healthy riparian corridor holding a vast array of native flora. Soil erosion is next.



March Wildflowers

Rain in early March has already brought about massive blooms on Colima (right) PDST p377 *Zanthoxylum fagara*. A break in the rain and appearance of the sun brought forth pollinators of all kinds on the afternoon of March 9th. Many trees, shrubs and wildflowers have



begun to bloom. PDST contains around 900 species, many of which are blooming now. Other species are present now only as seedlings. Once again, I urge readers to consult [www.seed-source.com] to see pictures of wildflower seedlings. If we don't save the seedlings, we won't see the wildflowers.

Above: Basket Flower, PDST p117 *Plectocephalus americanus* is in the seedling stage in early March. It can grow to 5' tall. My first sighting was on arroyo banks in Harlingen just before it was mown down with the guinea grass. It is often plentiful at Sabal Palm Grove in Brownsville and seed is available from the website above.

Left: Texas Thistle, PDST p92, *Cirsium texanum*, with a pollinating Monarch butterfly. We are not plagued as yet by inva-

sive thistle species. This is a native. Note the spiny texture below the Thistle bloom vs. the "basket weave" of the Basket Flower bloom bud (above right). Each of these species provides pollen, nectar, seed and fluff.

Right: Amapola del Campo, Buttercup, Pink Evening Primrose, PDST p341, *Oenothera speciosa*.

This is one of the few wildflowers which persist in mown lawns and fields. It is, of course, less plentiful after mowing, but appears to grow close enough to the ground to avoid complete extinction.

Most wildflowers are exterminated by mowing before seed is mature, in every yard and roadside.



Floodway Management, by Christina Mild

As I compile this issue on March 10th, the effect of IBWC's recent "flood control management" methods have become apparent, especially from bridges and on-the-ground exploration.

This project included easily-accessible banks from the 77/83 bridge in Harlingen to Hwy. 509, San Benito.

IBWC, in citizen forums held in the past, has always promised to "remove blockages within the channel" of the Arroyo. A press release to the Valley Morning Star in spring 2015 proclaimed the same. They have not, to my knowledge, ever brought to the Harlingen area, equipment which makes it possible to remove anything from the channel (place where water usually flows?) of the Arroyo. By contrast, any cut vegetation which fell towards the arroyo was left in place on the banks. Crews apparently lacked a steel rake to pull the vegetation onto the bank, or did not see reason to do so. I see this detritus as a future logjam in the "expected flood."

IBWC's stated management strategy has been to remove all vegetation, down to the level of a few inches, for 50' upwards from the banks. In reality, most land has been stripped bare of anything green, entire trees uprooted, much of the soil has been compacted and many stripped areas appear to extend much further than 50' upwards from the bank. Following 3" of rain from March 9-10, many pools have appeared on newly-compacted clay areas of the arroyo's banks in places where water was previously absorbed by the active "sponge" properties of a vegetated floodplain.

In contrast, numerous agencies throughout the U.S. and the world have adapted totally different strategies.

The Nature Conservancy has developed a program entitled "Floodplains by Design," which they're promoting all over the country. They summarize: "Healthy floodplains act as sponges that absorb the impact of heavy storms..., filters that keep sediment and runoff out of rivers, and maintain incredibly productive fish and wildlife habitat." They continue: "Perhaps the biggest challenge of all is that discussion over floodplain management has often been characterized as an either-or proposition, pitting environmental concerns against economic and social interests."

"Friends of the Cacapon," based in West Virginia, provides information on how river banks can be maintained as "healthy" floodplains: Excerpts from their webpage follow: "A major key to protect ... river property is to maintain, stabilize, and repair (the) riverbank. This river edge is the bulwark that holds in the soil and prevents your property from washing away. It is an essential part of the whole ecosystem.

If your riverbank has been scoured bare of vegetation, you are causing problems to yourself and to the river. The worst problem for the river ... is sediment dispersing and settling of small particles of soil washing from your banks and settling into the river, smothering spawning beds of fish, killing aquatic organisms, and ruining good water quality. Here are some causes of stream bank deterioration:

- Mowing grasses at the edge of your bank; cutting down trees, or removing other vegetation.
- Permitting ...activities that compact the soil and destroy plants.
- Permitting all terrain vehicles (ATVs) to tear up the bank.

Stabilize your riverbank. Vegetation is an excellent bank stabilizer, and you should **make every effort to keep existing trees, shrubs, flowers, and grasses intact.** These plants hold the soil in place with their root structures, as well as provide shade and habitat for fish and wildlife.

If your bank is in good condition, maintain it and fortify it by planting patches of low-growing groundcover plants ...; or taller plants such as ... milkweed; native shrubs such as buttonbush ...; understory trees; and canopy trees such as river willow..." [<http://www.cacaponriver.org/>]

Rainwater Retention: IBWC's goals are to send as much storm water runoff through the Arroyo as quickly as possible, to prevent municipal flooding. Rainwater is a precious resource, far cleaner than what comes from our tap. Unfortunately, city building codes do not encourage or entice businesses or individuals to capture and store rainwater. Most parking lots in the LRGV are not designed for rainwater collection in "bioretention" vegetated swales, as is common in San Antonio, Austin and Houston. Locally we remain focused on drought, dam levels and municipal flooding.

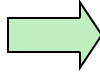


Left: Rainwater retention tank at VNC.
Right: Lady Finger Cactus, PDST p165. *Echinocereus pentalophus*. NPP members have rescued many species of cactus, including this colony-forming ladyfinger, from steep banks of the arroyo where bridge-building was imminent. This cactus will probably bloom towards the end of March. Recent rain should bring abundant blooms.



LRGV Native Plant Sources

See also our
Sponsors
on right



Perez Ranch Nursery

(Betty Perez & Susan Thompson)
12 miles north of La Joya, TX
(956) 580-8915
<PerezRanchNatives@gmail.com>

NABA Butterfly Park

Old Military Hwy/3333 Butterfly Pk Dr
Mission, TX 78572
office (956) 583-5400
Marianna Trevino Wright, Exec.Dir.
cell 956-648-7117
<marianna@nationalbutterflycenter.org>
[http://www.nationalbutterflycenter.org]

Rancho Lomitas Nursery

(Benito Trevino)
P.O. Box 442
Rio Grande City, TX 78582
(956) 486-2576 *By appt. only

Valley Garden Center

701 E. Bus. Hwy. 83
McAllen, TX 78501
(956) 682-9411

Landscapers using Natives:

Williams Wildscapes, Inc.
(Allen Williams)
750 W Sam Houston
Pharr, TX 78577
(956) 460-9864
[www.williamswildscapes.com]

Landscaping, Etc. Inc.
Noel Villarreal
125 N. Tower Rd, Edinburg
956-874-4267
956-316-2599

Sponsors (Native Plant Nurseries)

Heep's LRGV Native Plant Nursery

Owned and operated by Mike and Claire Heep
We grow plants suited to landscaping
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(956) 457-6834 <heepsnursery@gmail.com>
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Below: Wild Tomato, *Solanum lycopersicum*, PDST p401. Introduced from S. America and naturalized. Edible. (Mild's yard)



NPP Board & General Meetings
held at Valley Nature Center
(see ABOVE)

(Fourth Tuesday each month)

Board Meetings 6:30pm.
— Speaker 7:30pm.

Meeting Dates for 2015:

April 28, May 26, Sept.22, Oct.27, Nov. 24.

FROM: NPP; POB 2742; San Juan, TX 78589

The **Native Plant Project (NPP)** has no paid staff or facilities. NPP is supported entirely by memberships and contributions. Anyone interested in native plants is invited to join. Members receive 8 issues of **The Sabal** newsletter per year in which they are informed of all project activities and meetings.

Meetings are held at:

Valley Nature Center, 301 S. Border, Weslaco, TX.

Native Plant Project Membership Application

Regular \$20/yr. Contributing \$45/yr

Life \$250 one time fee/person

Other donation: _____

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TO:

NPP January meeting/speaker on:

Tues., March 24th, 2015: at 7:30pm

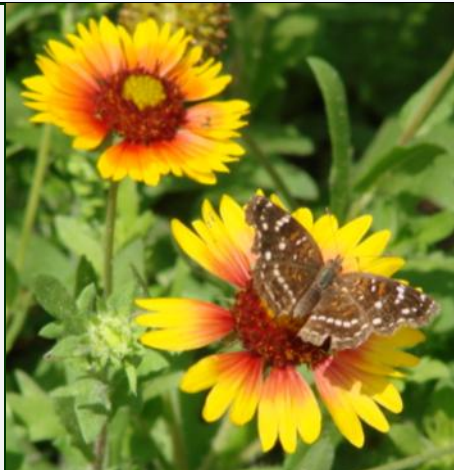
The Native Plant Project will present:

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at:

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(in Gibson Park) Weslaco. 956-969-2475**

Gaillardia pulchella
var. *australis*.
S. Indian Blanket,
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our showiest and
most dependable
bloomers.
(Spring -Summer)
(PSDT p100)
Valleywide distribu-
tion.



March is a good month to start scouting for many things, including Pearl Net Leaf Milkvine in bloom, above. (PSDT p80)