The Sabal February 2019

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Plant species page #s in the Sabal refer to: "Plants of Deep South Texas" (PDST).

Editor: Christina Mild <mild.christina@gmail.com> Submissions of relevant articles and/or photos are welcomed.

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NPP meeting topic/speaker:

"Landscaping with Native Plants"—by Ethel Cantu Tues., February 26th, at 7:30pm

This talk is for anyone interested in using native plants in their landscape. Ethel will provide examples for using LRGV natives in landscapes ranging from the wild to the traditional. To illustrate basic design principles, she will share examples from her native plant landscape at Rancho Viejo.

She'll explain guidelines for creating a National Wildlife "Certified Wildlife Habitat," as well as a North American Butterfly Association Certified "Butterfly Garden".

Ethel is aware that not everyone is committed to a "wild" landscape. She will use a traditional landscape from Rancho Viejo to show native species which could be substituted for common exotics.

Ethel's handout will provide detailed information on species recommended in the talk, to help participants make appropriate selections for their own landscapes.

The meeting is at: Valley Nature Center, 301 S Border, (Gibson Park), Weslaco. 956-969-2475.

Photo above: Bladderpod, Physaria lasiocarpa, PDST 154. Volunteer of yards and vacant lots.

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.

> Change of address, missing issue, or membership: <bwessling@rgv.rr.com> President - Ken King - <wk_king01@yahoo.com>



Ethel Cantu, January presenter for NPP

Ethel Cantu, now retired from teaching and administration at TSC and UTB, has been studying native plants of the Lower Rio Grande Valley as a hobby for almost 30 years.

She and her husband Rey worked with Mike Heep, who designed the landscape for their home in Rancho Viejo over 25 years ago. The woods in their backyard were kept in their natural state with paths that wander down to the resaca. All the plants in the landscape are native to the LRGV with the exception of two citrus trees. Ethel and Rey encourage tours of their native landscapes, and each visit reveals new wonders.

Ethel uses her ingenuity. For example, she created orderly brush pile edges to keep the neighbor's lawnmower on his own turf and away from her backyard woods.

For many years, Mike Heep used Ethel and Rey to test-pilot "new" native species for cultivation.

Moctezuma Cypress trees planted along the resaca banks are now majestic giants.

More recently Ethel and Rey installed a landscape at their South Padre Island home that features plants native to the island.

Both are Texas Master Naturalists and Ethel is currently working on certification as a Texas Master Gardener.

Mike Heep sings Ethel's praises on a frequent basis. She is the only gardener Heep has encountered who's been persistent enough to weed bermuda grass from a buffalo grass lawn. If you've ever tried to eradicate bermuda grass, you have a fair idea of what commitment that project involved.

If you want tips on growing something, Ethel is an excellent resource.

McAllen Nature Center & iNaturalist Projects

— January presentation by Raziel Flores and Ernest Herrera: a short commentary.

Raziel and Ernest provided an excellent report on their work at McAllen Nature Center. By directing and training volunteers, these two energetic and enthusiastic young naturalists have created a remarkable nature setting. The statistics they've gathered via eBird and iNaturalist are especially impressive.

Over 947 species of flora and fauna have been documented within McAllen Nature Park on iNaturalist (iNat). An additional 81 bird species are documented for that park on eBird. "It takes a village" to gather this much citizen science: 72 people have documented their observations on iNat, 517 people have helped to identify those observations. Total observations within park boundaries are 4,246. Ernest made 1,147 of those. Among the most impressive are his macro-photos of invertebrates, which take a good bit of intelligence and diligence to observe, photograph and identify.

This type of data can be very helpful in justifying the importance of well-managed natural areas.

This editor was inspired by the presentation to attempt an iNaturalist project for Hugh Ramsey Nature Park. With the patient assistance of Ernest, that project is now up and running.

Once project boundaries are established, older observations submitted to iNaturalist within a specific geographic boundary become part of the overall statistics. Steven Daniel, for example, submitted a Red Saddlebags dragonfly which he photographed 16 years ago in Ramsey Park. Several other participants have documented records from over a decade ago.

Those old nature photos in your digital collection can add to our knowledge of every natural area in the region. There are already 355 species documented for Hugh Ramsey, submitted to iNat by 74 Observers, and ratified by 217 Identifiers. Documented Observations total 895 as of Feb. 9th.

This wealth of statistics might sway governmental entities or justify grant applications to establish better staffing and funding. Beyond that use, photographic documentation will give us better records of fruiting, presence of insect larvae, nesting sites, blooming, and other phenomena which may well surprise us.

If you're interested in participating, a good first step is learning to use your cell phone camera and the simple editing features which are built in. Most cell phones will record the .gps location of your photos, and this is automatically downloaded along with the date your photo was taken.

The iNaturalist website has a series of built-in tutorials which can be helpful as you learn to navigate the site. Citizen Science: It takes a village. Recent, Unpublished Discoveries and a Few Corrections to Plants of Deep South Texas — compiled by Alfred Richardson, Ken King & Christina Mild. Accompanying photographs are by Dr. Alfred Richardson (unless otherwise specified)

Following the publication of "Plants of Deep South Texas" (PDST), corrections and additional information have come to light. Several of those are species explored in this issue. Most bloom during spring.

Two recent reference works were crucial in compiling the information in this issue. These are:

Michael Eason's <u>"Wildflowers of Texas"</u> [http://www.timberpress.com/books/wildflowers_texas/eason/9781604696462]

Powell (A. Michael) and Richard D. Worthington's "Flowering Plants of Trans-Pecos Texas and Adjacent Areas", [https://shop.brit.org/products/trans-pecos]

Diaperia candida, Upright Evax

Asteraceae. (Eason p99.) Photographed at Burns Ranch, near Encinitas. Found in deep sands. Starr & Brooks county border.

This long-stemmed annual (up to 10" tall) is erect and silky. Inflorescences are often hidden or surrounded by leaves.

See PDST 95. The photo on PDST 95 is not correctly identified.

Diaperia candida is usually erect, unlike closely-related and more common *Diaperia verna* (illustrated in PDST and in the photos below). Note the differences between these close relatives, in close-ups of mature inflorescences, as well as overall differences in growth form.

Photos on p 95 and 96 in PDST are both small specimens of Diaperia verna.

Diaperia verna, Many-Stem Evax (Rabbit Tobacco) "Wooly-Face Evax" Asteraceae. PDST 96. (Eason p99. Powell p164-5, 901.)

Wooly annuals with weak taproots. Wooly inflorescences look a bit like clustered wooly faces. This species occurs throughout much of Texas, in almost every county. Spring-blooming.







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Erodium texanum, Texas Stork's Bill, Texas Filaree

(New species for deep south Texas.) Geraniaceae. (Geranium family) (Eason p352. Powell p581, 929.)

The long, thin, pointed fruiting capsules and red-veined leaves distinguish this geranium relative. Pink or purple blooms.

Eason describes the flowers as "in umbels, 5 somewhat unequal petals, pink to rose, to about 1 inch wide." His photo shows vivid dark pink blooms. Powell describes the seed as "tan, ellipsoid-conic, smooth, 4-5 mm long." The bloom in Powell's illustration is purple.

This photo from March 26, 2016 shows immature seed capsules. Most commonly observed in winter and spring.

Eucnide lobata,

(originally identified in PDST p295 as *E. bartonoides*) **Yellow (Lobed-leaf) Rock Nettle.** Loasaceae.

(Eason: compare p256 *E. bartonoides* with pointy leaves and p257 *E. lobata* with rounded leaf margins.)

Eminent botanists in the state have determined that the species which grows on "La Santa Cruz" hill in Rio Grande City is *Eucnide lobata*.

This photo, taken by Ken King via cell phone, shows the 3/4" blooms. Ken says the seeds are tiny.

This beautiful plant grows from rocky overhangs on La Santa Cruz Hill in Rio Grande City. At this time, it is only known to occur in that one location in Texas. It was previously thought to grow only in Mexico.





Verbena plicata. Fan-Leaf Verbena. (*New Species for deep South Texas*) Verbenaceae.

Photographed on El Mesteño Ranch, owned by Camille Rich. In bloom on Feb. 24, 2018. (This perennial wildflower may bloom in winter, spring or summer.)

Deeply-furrowed leaves provide the name: (plicate=deeply furrowed). Height up to 20".

Eason p458.

Powell p879: The most widespread Vervain in the Trans-Pecos. Densely hairy, glandular hairs on stems.

See also: photo on p 7.

This photo shows parasitic Orobanche ludoviciana Louisiana Broomrape

growing adjacent to hostplant leaves, Camphor Weed, *Heterotheca subaxillaris*. This species is shown in PDST, p 342. The correct identification is:

Orobanche ludoviciana.

(the subspecies name has been dropped) Orobanchaceae family.

Eason (p445-6) includes four closely-related species occurring in the state. All are quite similar, and tend to look like dried cone-shaped clumps emerging from the sand except when fresh blooms are present.

Orobanche is closely-related to Indian Paintbrush (*Castilleja sp.*), which is hemiparasitic, i.e. plants which photosynthesize, but their roots must be attached to roots of other species in order to survive.

Powell p 703: Molecular evidence was published in 2008-9 linking the 2 groups and *Castilleja* is now included in the Orobanche family.



Powell p 707: This species may parasitize several other genera, mostly Asteraceae.

Correction for PDST p 341: The photo should be identified as: *Orobanche multiflora* (no subspecies). Found in Starr County in South Texas.

Large Flower Broomrape. (photo below)

Orobanchaceae.



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Silene antirrhina, Sleepy Catchfly

Caryophyllaceae. (Other members of the family: PDST 177-8)

(Species new to deep south Texas.) This species was discovered on a wildflower tour organized annually by Frank Wiseman for NPP and RGVCTMN members. Photos of the blooms are not yet available from this area.

After all the showy blooms have been identified on a typical wildflower tour, one begins to notice the less-showy floral inhabitants. Silene is one such wildflower, with thin, upright growth topped with tiny, ridged seed capsules. Patches on the stems are dark red and sticky; these trap insects. Found in sands north of Raymondville.

Eason p335. Blooms are pink, with five petals, emerging from the top of what becomes the seed capsule.

Powell p417 describes the blooms as: white to pink or pinkish-purple. The 5-petal blooms in his photo, p917, are about 5 times wider than the seed capsule.

108 observations of this species have been posted on iNaturalist throughout the U.S. and one in South America. There is considerable variation in petal structure. It is usually photographed when blooms are present.



Spermolepis echinata, **Bristly Scaleseed** Apiaceae. (Umbel Family)

Photographed on April 2, 2010, along highway 1017, 10 miles west of highway 281.

(Species new to deep south Texas.) (Other Apiaceae species: PDST 68-72.)

Each tiny bloom has five petals. Below the bloom, a fruiting capsule forms, covered in short bristles. This plant has a delicate appearance, with finely-divided leaves and slender stems.

Eason p 78: Low-growing spreading annual to 16" tall.

Powell p 94: Scattered throughout much of Texas and the eastern half of the U.S. Fruits covered with hooked, pointed trichomes (hook-bristled fruits).







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LRGV Native Plant Sources

<u>See also our</u> Sponsors on right

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

These vendors may sell exotics:

National Butterfly Center Old Military Hwy/3333 Butterfly Pk Dr Mission, TX 78572 office 956-583-5400x754 Max Munoz <max@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

M&G Double D Native Plants & Seeds of South Texas, (Gail Dantzker) 956-342-5979; <gdld@att.net> 7500 N 21st St; McAllen, TX 78504 [mandgdoubled.com] Grown at The Woods, Willacy Cty., TX.

Landscapers using Natives:

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

<u>NPP Board & General Meetings are held at</u> <u>Valley Nature Center</u> (4th Tues. each month, except thru summer)

Brd Mtgs 6:30pm — Speaker 7:30pm

2/26/2019, 3/26/2019, 4/23/2019, 5/28/2019, * 9/24/2019, 10/22/2019, 11/26/2019 * (*No meetings during summer or in December.)

S p o n s o r s (Native Plant Nurseries)

Heep's LRGV Native Plant Nursery

Owned and operated by Mike and Claire Heep We grow plants suited to landscaping and revegetation in south Texas. 1714 S. Palm Court Drive, Harlingen, TX 78552 (956) 457-6834 <heep0311@yahoo.com> [www.heepsnursery.com]

Come visit the VNC: 301 S. Border Ave. Weslaco, TX 78596

(956) 969-2475 info@valleynaturecenter.org www.valleynaturecenter.org

A Secret Garden in the Heart of the Rio Grande Valley



Native Plants for Sale

Watch Birds & Butterflies

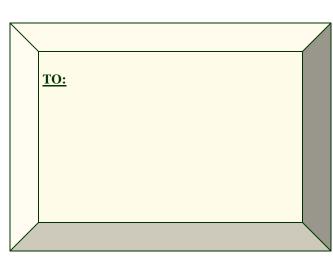
Valley Nature Center -6 acre Nature Park & Trails -Book & Gift Shop--Native Plant Nursery-Meeting Room--Environmental Education and Exhibit Hall-



Photo above: Verbena plicata. Fan-Leaf Verbena. (New Species for deep South Texas) Details on page 4. In some areas of the state, this species is quite common.

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NPP is supported Anyone interes	Project (NPP) has no paid staff or facilitie entirely by memberships and contributions ested in native plants is invited to join.
which they are info	ormed of all project activities and meetings
Valley Nature	Meetings are held at: Center, 301 S. Border, Weslaco, TX.
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NPP meeting/speaker:

The Native Plant Project will present:

"Landscaping With Native Plants"

(and creating certified native habitats in your yard)

-by Ethel Cantu

Tues., February 26th, at 7:30pm

The meeting is held at Valley Nature Center, 301 S Border, (in Gibson Park), Weslaco. 956-969-2475.

We hope to see you there!

<u>Photo below:</u> Ginny Rickard photographed this Bordered Patch butterfly on Feb. 7. Butterfly gardens are especially important in winter, when many species are not in bloom. *Croton humilis*, shown in this photo, is a good source of butterfly nectar, even in the cooler months. (PDST 217)



In this issue: Ethel Cantu's Landscaping with Native Plants, McAllen Nature Center, iNaturalist Projects, <u>Recent, As-Yet-Unpublished Discoveries by Dr. Alfred Richardson and Ken King:</u> *Diaperia candida, Diaperia verna, Erodium texanum, Eucnide lobata, Verbena plicata, Orobanche ludoviciana, Orobanche multiflora, Silene antirrhina, Spermolepis echinata.*