



## Naturalist Notes



Left to right: Angie Bennett, Jesus Zepeda, and Tammy Edwards at the Baytown Nurture Nature Festival. Attendance was ~ 500 people!



### Opossum, Oh Please

I eat rats and roaches and  
Rabies that drive you mad

I eat ticks that give you Lyme disease and  
Fleas that kill your dogs

I eat things that disgust you and  
Food you throw away: Rotten morsels

I could save your life but you shun my  
Triangle head and plague-mask

I'm tired of playing dead  
I demand respect

So, stop calling me 'Possum  
It's Opossum, If you please!

Margo Stutts Toombs 2021

<http://www.MargoStuttsToombs.com>

### Katy Prairie Conservancy Awarded \$2 million in Funding for Wetlands Conservation

The Katy Prairie Conservancy’s Coastal Prairie Strategic Habitat Initiative II project funded by this grant involves the permanent preservation of a 2,433-acre ranch in Jackson County with a conservation easement. The grant will also support the restoration of 360 acres on the Texas mid-coast to increase acreage of suitable roosting and foraging habitat for upland, shorebird, and waterbird species. The Katy Prairie Conservancy’s Coastal Prairie Strategic Habitat Initiative II project also includes the donation of additional conservation easements on more than 900 acres of farm and ranch land in Jackson and Brazoria Counties.

Katy Prairie Conservancy



**GARDEN  
FOR WILDLIFE™**  
— 45TH ANNIVERSARY —

Leaves are starting to change color and begin to fall to the ground. Did you know that leaving the leaves in your yard or garden not only saves you time and energy but also benefits wildlife?

**Here are a few good reasons to put down the rake:**

- **Many wildlife species use the leaf layer as their primary habitat:** salamanders, chipmunks, wood frogs, box turtles, toads, shrews, earthworms, millipedes, and thousands of insect species

- **Provide food for wildlife:** creatures like earthworms and millipedes reside in and decompose leaf litter, and also are themselves a source of food for bigger wildlife like birds and toads
- **Increase fertility of your soil:** as the leaves decompose, nutrients are added to your soil, and also allows for greater water retention

National Wildlife Federation

## Book Review

### A Thirsty Land: The Fight for Water in Texas

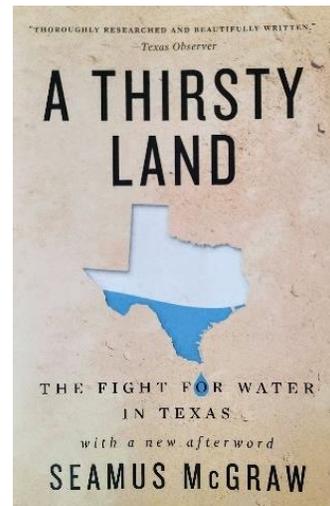
By Seamus McGraw

University of Texas Press, 2018 with a 2020 Afterword

Seamus McGraw has written a very readable book about water resources in Texas and the battles fought over them in the last century. This book will help you put a lot of current events in perspective.

McGraw lays out the issues and the history in a series of stories and essays. These include:

- The 1950 – 1957 drought when Comal Springs dried up, and the 1968 State Water Plan
- The proposed Marvin Nichols dam in NE Texas and changing views on large projects
- How Comanche Springs in Fort Stockton dried up in 1951 due to massive pumping by a few big farmers
- The Ogallala aquifer under the panhandle shared by multiple states with different water laws
- The Edwards Aquifer Authority's formation and the long battle started by the Endangered Species Act
- The over-allocated Rio Grande and inter-basin water transfers
- The 2011 draught and its effect on rice farming, Dow Chemical, and the bays
- The shifting balance of power between cities and rural landowners



McGraw uses these stories to bring out the common threads that run through them all. Private property conflicts with the public good. Water laws give surface water to whomever has the “first in time, first in right” but groundwater to whomever has the biggest pump by the “rule of capture.” People sue, and slowly, legislation is passed with great effort and then often overturned in court. The threat of federal intervention forces action. River basin authorities and groundwater authorities are formed and stakeholders begin to compromise. We are at a turning point between seeing water as a limitless resource and understanding it as a shared commodity.

The book also discusses solutions to future shortages, such as re-use and recycling, aquifer storage, and desalination. I did not know Texas already has large desalination plants, mostly desalinating brackish groundwater. There’s plenty that can be done. Here’s my favorite quote, from State Representative Lyle Larson: “Either we’re all Texans or we’re not.”

By Mimi Posey



## Organism of the Month

### Bushy Bluestem (*Andropogon glomeratus*)

Bushy Bluestem (*Andropogon glomeratus*) is a grass native to much of the non-arid United States, including the eastern half of Texas. It flowers in sessile spikelets toward the upper part of the 2-5 ft. stems in fall and winter when the fine hairs of the bold, feathery racemes are abundant. The sheaths surrounding the racemes take on an orange color in fall.

Found in moist or semi-moist soils in full sun, Bushy Bluestems have blue-green summer foliage and coppery winter foliage. It grows in sunny but moist, low-lying grasslands and roadside ditches. Nice stands of Bushy Bluestem can be found at the Houston Arboretum, among other places.

The seeds of Bushy Bluestem are eaten by birds and small mammals and it provides nesting material for birds and native bees. It also provides good cover for small animals and winter food for prairie chickens, field sparrows, juncos, and other songbirds. Occasionally the grass is browsed by deer, bison, and pronghorn antelope and serves as a larval host for skipper and satyr butterflies.



Janice Barlow

Source: wildflower.org



### Texas Pollinator Bioblitz – Goldenrod Visitors

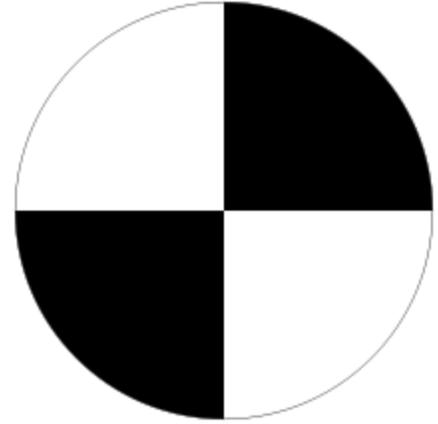
Wasps – Red-marked Pachodynerus, Coarse-backed Red Paper, Five-banded thynnid, Thread-waisted wasp species. Bees – Western Honey, Eastern Carpenter. Flies – Northern plushback (right), black-shouldered drone, secondary screwworm.

Irmi Willcockson

## Water of the Month - Turbidity

Turbidity is defined as the relative clarity of a liquid. The more material in the water, the higher the amount of scattered light and the greater the turbidity.

For freshwater, one easy way to measure turbidity is to use a Secchi disk with alternating black and white quadrants. The 8 in diameter disk is lowered into the water until the quadrants are indistinguishable. The depth is recorded as the Secchi depth.



In Houston, large rain events lead to increased turbidity in lakes and bayous. Armored catfish, an invasive species, burrow into muddy banks and can also increase bayou turbidity.

Turbidity in drinking water by itself has no health effects. However, it can interfere with water purification and provide opportunities for microbial growth.



## Host Plant Specialization in Butterfly Caterpillars

Milkweed, with the “Swamp Milkweed” *Asclepias incarnata* being a favorite among just a handful of milkweed species, is the most ideal host plant species for the caterpillar stage of the Monarch Butterfly. The purpose of the host plant is to provide food for the caterpillar so that it has sufficient energy to progress to the next metamorphic stage, the pupa. It is in the pupa stage that the caterpillar spins a cocoon, a “chrysalis”, from which the caterpillar will morph into a Monarch butterfly.

In performing this service, the host plant will be defoliated. This usually occurs in a very short time frame and quite suddenly the plant will look terrible, barren and without hope for future growth. But leave it be. If the plant was healthy to begin with it will make a full recovery and again provide for the next Monarch Caterpillar brood.

The Monarch Caterpillar is like most butterfly caterpillars in that it is host plant specific, it will only eat milkweed. This is because as the Monarch evolved it developed the capability to defeat the milkweed’s inherent defenses, such as its toxicity, and also the enzymes needed to digest its leaves. A benefit to the gardener is that the result of this specialization is that the rest of the nearby plants are safe from the Monarch caterpillar, it will not eat or otherwise damage them.

So, with butterfly caterpillars specializing in host plants, is it possible to make plantings that will attract specific butterflies? Yes! If you want Pipevine Butterflies, plant pipevine. For the Orange Sulfur butterflies, plant alfalfa. For the Variegated Fritillary, plant violets, passion vines or flaxes. And since we also want to provide nectar and pollen producing plants for butterflies and other nectar eating pollinators, the good news is to go ahead and plant them, the butterfly caterpillars will not eat those plantings but only their host plants.

Note: In selecting host plants for the Monarchs, native milkweed is best. “Tropical” or “Mexican Milkweed”, *Asclepias curassavica*, is eaten, but the science is not entirely clear on whether it adversely affects Monarch migratory patterns. To limit the presence of the parasite *Ophryocystis electroscirrah* (OE), it’s best to cut down the milkweed during the winter.

One additional benefit of selecting and planting host plants for butterfly caterpillars is that caterpillars are a very beneficial food for birds, especially at the nesting stage. So, providing for butterfly caterpillars has many benefits with little downside.

Greg Brazaitis

iNaturalist Observation by: kazumiterada



## The Poem of the Possum

He eats grapes.

    And sour grapes

        And rotten sour grapes

            And moldy rotten....

No

This is where he draws the line.

This cute creature with curved black-tipped ears

Streaks through the yard to escape his fears.

With his grey, white wiry fur begging for petting.

He is the possum.

The Awesome possum.

Excerpt from poem by Carrie Carter