

Texas Master Naturalists ROLLING PLAINS CHAPTER

NEWSLETTER

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<http://txmn.org/rollingplains>

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Scientists Identify New Plant Species

Eggplant Relative Could be Poisonous



FORT WORTH, Texas — Botanists in West Texas have identified a new species of plant that is likely poisonous — and may be near extinction.

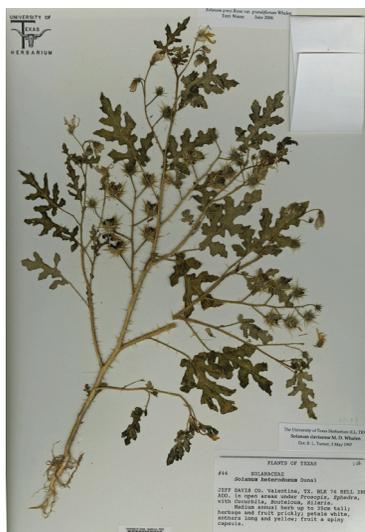
The Fort Worth Star-Telegram (<http://bit.ly/1m47JVd>) reports that specimens of the spiny distant relative of the eggplant had already been discovered twice in 1974 and 1990, but were misidentified.

The study identifying the plant is published in the Aug. 1 issue of the Journal of the Botanical Research of Institute of Texas, which was released Wednesday.

A group of scientists and students from universities in Colorado, Utah and Texas had set out to find the plant that has been named *Solanum cordictum*. The name, which in Latin means “from the heart” is a reference to Valentine, a town of 134 residents where it was found in November by Jeffrey Keeling, a graduate student doing research on his master’s degree in biology at Sul Ros State University in Alpine, Texas.

The three specimens found to date have been pressed and are on display at museums.

The plant is similar to other species in the area but those are perennials, while the newly found species is annual. “It blossoms once and dies, which makes it harder to



E LOCALS

AUGUST 5: Rolling Plains Chapter monthly meeting is at River Bend Nature Center. **Location:** 2200 3rd Street, Wichita Falls, Texas. **Time:** 7:00 PM. **Program:** Jim Hensley will speak on Rainwater Harvesting

AUGUST 2: Dear Fest The chapter will need volunteers to man our booth. **Location:** MPAC **Time:** 9 AM to 7 p.m. **VOLUNTEER OPPORTUNITY**

AUGUST 9: Mussel Watch **Location:** Lake Arrowhead State Park **Time:** 8 AM lead by Penny Miller **VOLUNTEER OPPORTUNITY**

AUGUST 23: Spider Walk
A fun nighttime activity involving spiders . . . yes, really, it’s fun!
Location: Lake Mineral Wells State Park **Time:** 8:30 PM to 10:00 PM Join Park Interpreter, David Owens, at the Amphitheater to learn the importance of spiders in the wild. We’ll show slides and talk about the different types of spiders, then focus on the Wolf Spiders. Afterward, we’ll take a walk down the Trailway with flashlights watching for the eye shine reflection of the park’s Wolf Spiders. Held at the Lone Star Amphitheater in Lake Mineral Wells State Park, 100 Park Road 71, Mineral Wells, TX, 76067.

find,” Keeling told the newspaper.

Despite the perception that most new plants are found in the tropics, Texas, Utah and California are actually hot spots for new foliage, according to, Lynn Bohs, the author of the study identifying the Valentine plant.

The *Solanum cordatum* can grow to about 14 inches tall. Its stems and leaves — each with three or four lobes per side — are speckled with very short hairs and spines about one-fifth of an inch long.

The research was paid for with a five-year, \$4.36 million National Science Foundation grant that aims to better classify and create a comprehensive inventory of all 1,500 species in the genus of flowering plants.

Information from: Fort Worth Star-Telegram, <http://www.star-telegram.com>

Read more here: <http://www.star-telegram.com/2014/07/12/5966069/scientists-identify-new-plant.html#storylink=cpy>

Rolling Plains Chapter Members Activities

July 12th North American Butterfly Count

Jane, Tami, Penny, Dian, Larry, Judy, Paula, Lynn and Terry participated in the North American Butterfly Count held at Lake Arrowhead State Park on July 12.

Butterfly species seen were:
Barred Yellow
Western White
Checkered White
Dainty Sulphur
Hackberry Emperor
Clouded Sulphur
Reakirt’s Blue
Queen



July 22nd Mussel Count at Lake Arrowhead

Jane McGough and Lynn Seman went to Lake Kickapoo to count Mussels July 22. They found mainly dead Southern Maple Leaf species.



Butterflies weren’t the only critters in the park. Along the Onion Creek Trail we were swarmed by all types of grasshoppers small

and big. Turkey Vultures provided a good show at the spillway and a tarantula, Red-eared Slider turtle and a deer gave us a glimpse of the nature around us. The highlight of the day was the King Snake that gave us all a good view as it coiled and slithered from the tree branch over our head. All in all it was a nice morning for a hike. And a sign that no matter the weather or lack of rain, the natural world carries on.



July 19th Amphibian Count

The following frog calls were heard at the Amphibian Count held Saturday night:



Bullfrog
Cricket Frog
Plains Leopard Frog
Spotted Chorus Frog
Plains Spadefoot toad
Woodhouse toad (seen, but not heard)

Participating were Jane, Lynn Seman, Kay Murphy, JJ White and Karen White.

We have added the pond in Martin Plaza Neighborhood Park. They all have too much noise! Guess we should try it at 3 a.m.!!!

Jane McGough

View from the Trail

by Terry McKee

While on the butterfly count in July at Lake Arrowhead State Park, our group stumbled upon another col-



orful item along the Onion Creek Trail. It was as pretty as a butterfly, but it looked like a mass of orange fishing line piled on the ground.

What we saw was a member of the *Cuscuta* genus commonly called Dodder. Dodder is a member of the morning glory family and goes by many nicknames, including Love Vine, Hellbind, Witches' Shoelaces and Devil-guts. This parasitic plant is most often seen in marshes, roadsides, fields and thickets. It is almost always yellowish-orange and looks like spaghetti. It has no leaves, and roots appear only in the very beginning of its life cycle. Dodder has no chlorophyll and can not make its own food like most green plants. This plant grows from seed and sprouts from the ground. It immediately reaches its stem toward a host plant and quickly twines itself around another plant's stem in a counter-clockwise motion. The sprout is on a time-line. If it does not reach a host within 10 days, it will die. Once it gets a firm grip on its host, Dodder will lose connection with the ground and become totally dependent on the host, pulling all the nutrients it needs from the host plant's stem. To do this Dodder has little bumps on its own stem called "haustoria" that are wrapped so tightly against a green plant that the bumps will actually press itself into the host,

stealing nutrients. Dodder does not kill its host, although it will stunt its growth.

Dodder is an annual so it usually dies back in the winter and sprouts from seed in the spring. However, when plants die in the winter, the

haustoria can sometimes stay alive inside the host plant. Once the weather becomes warm again, they can grow new plants already attached to a host.

Dodder seeds are not usually dispersed by animals or wind, but by water and human activity. Dodder should never be mowed as that spreads the plant. The best way to remove is by hand including disposal of the host plant. Dodder is detrimental to potato and alfalfa crops. In cropland, a pre emergent is recommended.

White-tailed Deer have been known to graze on Dodder, while several species of frogs, toads, snake, lizards and mice use the plant for shelter. Even a parasite has some value in nature.

Visitors Can Tour Caprock Canyons State Park on New Shuttle



QUITAQUE — Caprock Canyons State Park has a new tourism shuttle, the Doodlebug. Named for the passenger train that in the 1930s transported its riders to various destinations along the Fort Worth and Denver South

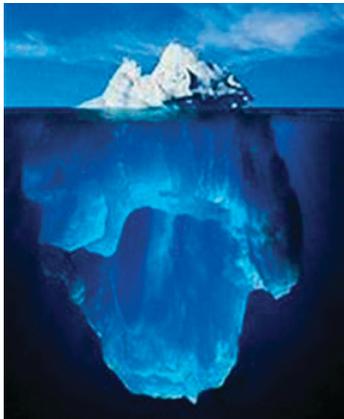
Plains Railroad, the Caprock Canyons Doodlebug will shuttle visitors on scheduled tours following the same route along the 64-mile Caprock Canyons Trailway and on state park roads as well.

Known in its heyday as the "Burlington Doodlebug," the train consisted of an engine and passenger coach. Local residents would travel from town to town by "flagging" it down and having the conductor drop them off at their desired destination.

Caprock Canyons State Park's Doodlebug is an open-air, electric vehicle with a 14-passenger capacity that can travel up to 60 miles on a single charge. Visitors riding in the shuttle will be provided a unique opportunity to discover the Caprock Canyonlands from the comforts of a vehicle to enhance their outdoor experience. Various Doodlebug sightseeing adventures include "Bat Tours" that offer a guided tour down the Caprock Canyons Trailway, where visitors can witness the emergence flight of a half million Mexican free-tailed bats and enjoy spectacular views of the rugged breaks of the Llano Estacado.

For more information on the Doodlebug or to schedule a "Bat Tour," please call Caprock Canyons State Park & Trailway at (806) 455-1492.

14 new species of ‘dancing’ frog have been found in the forests of southern India. The male frogs wave their legs to attract females who might not be able to hear their calls over the sound of rushing water.



Some icebergs are blue for the same reason that the sea is blue. Water molecules, whether in ice or liquid, absorb most of the red wavelengths in sunlight, reflecting only the blue wavelengths. High-density ice that was buried to great depth has few air bubbles and absorbs the most light, and is thus the most blue in color.

Nutmeg is poisonous. Nutmeg is a hallucinogenic drug which is regularly used to flavor such lovely things as custard tarts and fruit cakes. It is also a poison which will kill you while you suffer a variety of extremely revolting side-effects on the way. There have been two recorded cases of death by nutmeg (one in 1908 and one in 2001).



Invasive Spotlight: Lionfish *(Pterois volitans/miles)*

Two virtually identical species of lionfish (*P. volitans* and *P. miles*) were introduced into the Atlantic Ocean via the aquarium trade in the 1980’s. Since that time, lionfish have invaded from Massachusetts to South America, including the Gulf of Mexico and Caribbean.

Lionfish are venomous and indigenous to the west Pacific and Indian Ocean. Adults can live up to 10 years and can grow to a length of 19 inches. The species are known to be aggressive feeders and breed quickly, in some climates they can breed throughout the year. When

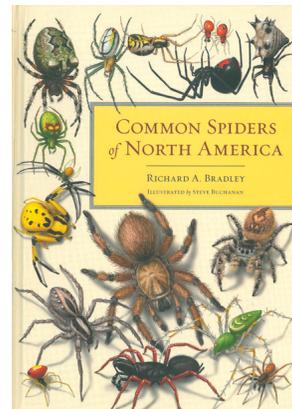


well established, densities can reach over 200 adults per acre.

Recently, a sixth-grader’s project for her school’s science fair made waves among academics studying the lionfish invasion. The 12 year-

RESOURCE CORNER

Common Spiders of North America
by Richard A. Bradley, Steve Buchanan (Illustrator)
Hardback: 288 pages
ISBN-10: 0520274881
Price:\$60.00



Spiders are among the most diverse groups of terrestrial invertebrates, yet they are among the least studied and understood.

This first comprehensive guide to all 68 spider families in North America beautifully illustrates 469 of the most commonly encountered species. Group keys enable identification by web type and other observable details, and species descriptions include identification tips, typical habitat, geographic distribution, and behavioral notes. A concise illustrated introduction to spider biology and anatomy explains spider relationships. This book is a critical resource for curious naturalists who want to understand this ubiquitous and ecologically critical component of our biosphere.

Left: Lionfish have “wrigglers” and fleshy nobs over its eyes and under its mouth to lure in smaller prey fish.

old from Jupiter Florida investigated how far lionfish might travel into less salty waters like river mouths. Shockingly, the student showed that lionfish can survive in far less salinity than scientists predicted--suggesting that more waters could become infested with lionfish.

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