

Texas Master Naturalists ROLLING PLAINS

NEWSLETTER

Vol. 7, No. 4

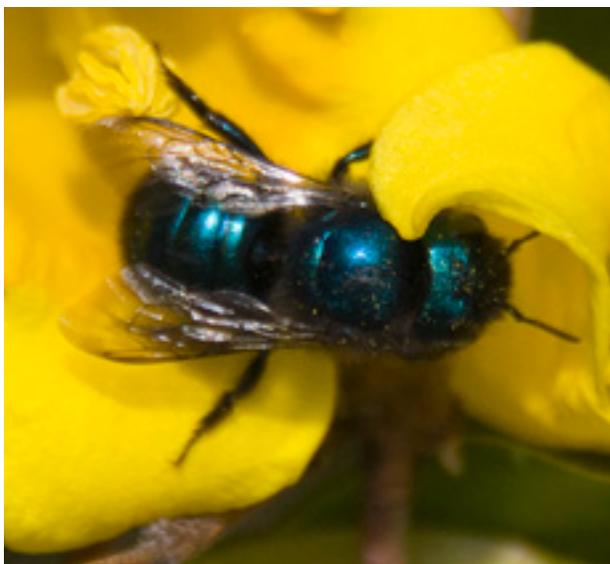
<http://txmn.org/rollingplains>

April 2015

The Blue Orchard Mason Bee A Native Pollinator

by Paula Savage

Last fall I purchased a bee house made of hollow bamboo tubes in hope of adding bees to my backyard menagerie. This spring, I was excited to see blue mason bees collecting pollen from my blooming Carolina Jasmine. Now if they will just find and use the bee house I'll be a happy naturalist.



Here is more about the Blue Orchard Mason Bee from *Beatriz Moisset and Vicki Wojcik of the Pollinator Partnership*.

There are a number of bees, called mason bees, that are very good at pollinating fruit trees, so much so that they are also known as orchard bees. They are related to other orchard pollinators like the leaf cutter bees featured in previous Pollinator of the Month highlights (see Leaf Cutting Bees, *Megachile* spp.). Mason bees (members of the genus *Osmia*) and leaf cutter bees (members of the genus *Megachile*) are similar in many ways: they carry pollen on their bellies rather than on their hind legs and they nest in holes. When building their nests, mason bees do not use cut leaves the way that leaf cutters do; mason bees use clay to make partitions and to seal the entrance. This unique mud-building behavior leads to their common designation as masons.

Honeybees are very important to commercial agriculture, but native bees like the blue orchard bees are better and more efficient pollinators of native crops. There are 140 species of *Osmia* in North America. They are all known for visiting fruit trees, such as apples, plums, pears, almonds, and peaches. The blue orchard bee or *Osmia lignaria*, is prized for its efficiency pollinating fruit trees and is one of the few native pollinators that

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APRIL 7: Rolling Plains Chapter monthly meeting is at River Bend Nature Center. **Location:** 2200 3rd Street, Wichita Falls, Texas. **Time:** 7:00 PM. **NO REGULAR MEETING WILL BE HELD BECAUSE OF SPRING MASTER NATURALIST TRAINING.**

MAY 5: Rolling Plains Chapter monthly meeting is at River Bend Nature Center. **Location:** 2200 3rd Street, Wichita Falls, Texas. **Time:** 7:00 PM. **Program:** Brian Sissel of Brian's Bees will be specking about Bee Keeping and Bee Removal.

JUNE 2: Rolling Plains Chapter monthly meeting is at River Bend Nature Center. **Location:** 2200 3rd Street, Wichita Falls, Texas. **Time:** 7:00 PM. **Program:** Shannon Rutledge-Hopkins. She runs P.L.A.N.T.S. Preserving Local Agri-History of North Texas in Seeds: A Seed Library.

2015 Annual Re-Certification Pin





is managed in agriculture.

Blue orchard bees are about the same size as a honeybee but there are a few key points that help you tell them apart. Blue orchard bees are a dark metallic blue, not striped brown and orange like the honeybee. If you pay attention to where they carry their pollen you can also easily tell apart masons and other leaf cutters from honeybees – honeybees carry round balls of pollen on their hind legs.

Masons are solitary like most native bees. This means that each one tends to its own brood, instead of having a queen and worker bees. However, they seem to like the company of others of their kind and happily build their nests next to each other. They also readily accept the hollow tubes provided by the orchard grower for this purpose. This proves to be very beneficial to the fruit tree grower because it makes it easy to manage this valuable orchard helper.

Not only commercial fruit growers, but home gardeners too the opportunity to have some orchard bees in their own gardens by placing hand-made or store-bought bee houses or bee blocks in their yards.

The blue orchard bee season is early spring. Once they emerge they promptly mate, search for empty holes that are the right size and shape and go to work stocking their nests. The favorite food for their brood is fruit tree pollen plus some of their nectar. Females collect this food, bring it to their nests, and knead it into a ball, mixing it with nectar and their own saliva. Once they have a food store that is big enough, they lay an egg on top of this mass and seal-off the chamber or cell. Afterward, they build a little mud wall and start gathering food for the subsequent cell. They work this way until there are five to eight cells each with food and one egg. Then, they seal the entrance to the hole with a thicker mud wall. The larvae grow and, by the end of summer, metamorphose into pupae and later on into adults, which remain safe and sound inside the nest until the next spring. The new generation emerges the next spring usually in perfect timing with the blooming peach or apple trees.

A quick fact – the first brood cells that the orchard bee makes (those that are furthest back) will develop into female bees, while the ones closer to the entrance of the nest will become males. Scientists believe that bees do this for one of two reasons. Males need to emerge first so that they wait for new females during mating season – putting them closer to the entrance helps them emerge first. Bees also suffer nest predation, and the brood closer to the entrance would be predated first. Females are much more important to the reproduction of a species than males are. Putting the males as a barrier increases the survival and fitness of the species.

Feds Ban Four Snake Species

The federal government announced the banning of four large constricting snake species from import into the U.S. and interstate travel. The ban on green anaconda, reticulated python, Beni anaconda and De-Schauensee's anaconda will go into effect in April.

Hydrilla Harbor Bacteria that Kills Birds

Invasive Asian hydrilla is common in most of the lakes and reservoirs that attract large flocks of birds. Some of these bodies of water act as death traps because of a highly toxic bacteria hiding on hydrilla leaves. While eagle deaths have garnered the most attention, no bird is safe.

Go Birding with Members of the North Texas Bird and Wildlife Club

Saturday morning, **April 4**, you are invited to join some experienced birders for a bird hike. Meet the group at 7:30 a.m. at the Bechtold property.

Directions: Take 287 toward Henrietta. Just past Jolly, you will see the Boddy Road. Go past Boddy to Brown Road and turn right. Follow Brown road to the end of the road, and it leads right into the property.

Wear boots, bring binoculars and water.

Advanced Training Scheduled for May

Below you'll find a schedule for our upcoming training on May 16th. Be sure to mark your calendar ... it'll be an Advance Training opportunity AND one you will NOT want to miss if at all possible.

The training will take place at Lake Arrowhead State Park. We'll use the Dining Hall for the training.

We plan on a working lunch so you'll have to bring yourself something to eat.

For smart phone users please download the APP: http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/texas_nature_trackers/app.phtml before the class.

Don't have a smart phone? Don't worry, you can still report your sightings using iNature.org using a computer. You'll have to link to the Texas Nature Tracker, Cullen will cover that information in more detail in the class.

Here's the schedule:

9 – 11:30AM – Texas Mussel Watch – classroom (Marsha)

11:30 – 12:30PM – Texas Nature Tracker and iNaturalist – classroom (Cullen)

12:30 – 3:30PM – practice making observations in iNaturalist – field

Chapter Activities for March 2015



March started out with the chapter's spring training for new master naturalists at Midwestern University. Jim Hensley, chapter president, welcomed the new class of trainees and led the program orientation.



TMN trainees earned their stripes as they helped out with landscaping at our chapter partner, Wild Bird Rescue Center

Above and Right: Betty Brown instructs trainees on what needs to be done to improve the landscaping at Wild Bird Rescue March 21, 2015.



Quail Index Study Training Set for April 29th

by Larry Snyder

Quail Index Study training will be led by Becky Ruzicka at Lake Arrowhead State Park, April 29th in the late afternoon. Exact time will be announced via e-mail. We are looking at 4—4:30 pm.

The training will be considered Advance Training IF you haven't already had it.

The study is best suited for someone that has pretty good hearing, reasonably fit (I can do it so if you're able to walk, you should be able to too). The roads at the site are dirt and there's deadlines that must be met. So if rain is in the forecast we may have to do our work at a moment's notice to meet the deadlines. Those roads get really sketchy after even a little bit of rain. But, I encourage you to come to the training if you're interested.

As always, if you have any questions, please feel free to contact me.

Larry
940-781-8516

THE NEW WILD FOR TEXAS COLLECTION



IS HERE!



The New Hummingbird and Rattlesnake License Plates are available now!

For only the 2nd time in a decade, Texas Parks and Wildlife Department is introducing new conservation license plates!

Joining the infamous Horned Lizard are the Lucifer Hummingbird and Western Diamondback Rattlesnake, which together we fondly call the Wild for Texas Collection. \$22 from the sale of each plate will support a vast array of projects to protect all native Texas wildlife, including threatened and endangered species.

Now, you can give your vehicle a personal touch and show your love for Texas wildlife.

- **Only \$30*/year**
- **Benefits native Texas Wildlife – \$22/plate goes to support wildlife projects**
- **Available for your car, truck, motorcycle, trailer and RV.**

How to get your new Wildlife license plate:

- **Easy to order: order online or at your local county tax office.**
- **No need to wait: You do not have to wait for your vehicle registration renewal notice to order a plate.**

Find answers to your questions here: <http://conservationplate.org/faq.phtml#nogo>



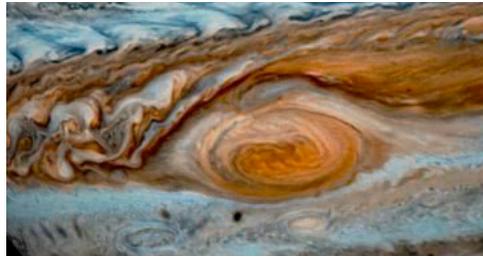
The Horned Lizard is still available and also benefits native Texas Wildlife.

www.ConservationPlate.org/wildlife

Thank you for your support of Texas Parks & Wildlife.

*in addition to your regular registration fee.

After analyzing new data, NASA experts now believe that Jupiter's Great Red Spot is actually a product of simple chemicals being



broken apart by sunlight in the planet's upper atmosphere. This contradicts the other leading theory that the reddish chemicals come from beneath Jupiter's clouds.



North America's blue grouse migrates the shortest distance of any bird. It lives in the mountainous pine forests in winter, then travels just 984 feet to deciduous woodlands in the spring.

When lightning strikes the ground, it vaporizes silicon oxide in the dirt. If the soil also contains carbon, perhaps from dead leaves, it will steal oxygen from the silicon oxide, turning it into pure silicon vapor. As the silicon recombines with oxygen in the air the reaction creates an orb of light called ball lightning



which only lasts a few seconds.

Invasive Species Spotlight: **Hello Bastard Cabbage (*Rapistrum rugosum*)** **Goodbye Bluebonnets**

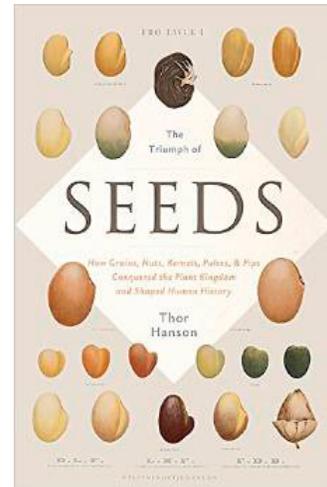
Bastard cabbage is native to the Mediterranean, northern Africa, central Europe and temperate Asia. This species was introduced through contaminated seed mixes. It is an annual herbaceous plant that grows from 1 to 5 feet in height and has a large taproot. The leaves are deep green, lobed, wrinkled and can have a reddish cast.



Bastard cabbage flowers from early spring into summer, bearing clusters of small, showy yellow flowers at the tips of its branches. Seeds from this plant germinate early in the growing season and quickly establish a blanket of leafy rosettes forming a mono culture. The dense patches easily out compete seeds and seedlings of native plants, especially the beloved bluebonnet.

RESOURCE CORNER

The Triumph of Seeds
 by Thor Hanson
 Hardcover: 304 pages
 ISBN-10: 0465055990
 Price: \$26.99



We live in a world of seeds. From our morning toast to the cotton in our clothes, they are quite literally the stuff

and staff of life, supporting diets, economies, and civilizations around the globe. Just as the search for nutmeg and the humble peppercorn drove the Age of Discovery, so did coffee beans help fuel the Enlightenment, and cottonseed help spark the Industrial Revolution. And from the Fall of Rome to the Arab Spring, the fate of nations continues to hinge on the seeds of a Middle Eastern grass known as wheat.

In nature and in culture, seeds are fundamental—objects of beauty, evolutionary wonder, and simple fascination. Yet despite their importance, seeds are often seen as a commonplace, their extraordinary natural and human histories overlooked. Thanks to Thor Hanson and this stunning new book, they can be overlooked no more.

The Triumph of Seeds takes us on a fascinating scientific adventure through the wild and beautiful world of seeds. It is essential reading for anyone who loves to see a plant grow.

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