

# The Texas Star

Newsletter of the  
Texas Master Naturalist Hill Country Chapter

JUNE 2013

Volume 11

Number 6

## JUNE 24 MEETING: DROUGHT -- PAST, PRESENT, AND FUTURE

T E X A S

Master  
Naturalist™



Dr. John Nielsen-Gammon, Regents Professor, Department of Atmospheric Sciences, Texas A&M University and Texas State Climatologist, will be our speaker. The ongoing drought in Texas has already set records. Dr. Nielsen-Gammon will present research on the causes and historical context of drought, the ability (or lack thereof) to forecast drought, and the natural and non-natural factors that contribute to the outlook for drought over the next decades. Everyone is welcome to join us Monday, June 24, at 7.p.m. in the Upper Guadalupe River Authority's lecture hall, 125 Lehmann Drive in Kerrville. Arrive at 6:30 to chat with members and guests.

## PRESIDENT'S MESSAGE . . . . Vern Crawford

Do you know any folks interested in becoming Master Naturalists? If so, consider inviting them to our monthly meeting to hear Texas State Climatologist Dr. John Nielsen-Gammon's presentation on Drought: Past, Present and Future, and introducing them to our 2013 Class Training Director, Becky Etzler.

Membership Director Valeska Danielak reports that we already have received over a dozen applications, with the majority coming in via the new online form on our chapter website. Announcements about the upcoming class have appeared in area newspapers, and the new brochures, "Become a Texas Master Naturalist," have been distributed and are being picked up from information racks at area nature centers and other related sites.

Becky reports that there will be 33 units of instruction this Fall, presented by 30 instructors. We will be welcoming several new faculty to this year's class, including Dyanne Fry Cortez, of the TPWD, who will start the classes off with Early Texas Naturalists. Also new to the program this year is Kelly Conrad Bender, who will be covering Hill Country Wildscapes. A entirely new unit in this year's class, Ecology of Darkness, will be presented by Cindy Luongo Cassidy of the International Dark Sky Association.

There will be four field trips offered to the Class of 2013, including an exciting new one to the Canyon Lake Gorge, and again including trips to the Selah Bamberger Ranch Preserve, Kerr Wildlife Management Area, and Hondo Creek Geological Area.

Thanks to Becky and her entire Class Committee for all of the diligent hard work of putting together another outstanding Class Training Schedule, which can be viewed in detail on the chapter website.

Encourage folks who want to be part of this year's class to get their applications in soon. As have most previous years' classes, this year's class is expected to fill up by the July 12 application deadline.

Hope to see you and meet your interested guests at the June 24th monthly meeting.

Vern



Special Recertification

Terri Criswell

2013 Recertification

Warren Ferguson, Michael Foulds, Susan Longacre,  
Virginia Sawin, John Sloan, Harriet Warren, Bob Wiedenfeld

Milestones

Becky Etzler, Kathleen Mundy - Bronze Dragonfly, 250+ hours

Glenn Randow - Brushed Silver Dragonfly, 2500+ hours

From Becky Etzler

**The Deadline for the 2013 HCMN Training Class Application is July 12<sup>th</sup>!**



I am sure we all can remember our days in training.

Not only did we gain an extraordinary amount of knowledge, but we had fun doing it. Many of us also made new friends for life.

Why not share your adventure with your friends, family, neighbors, or that person you just bumped into with your shopping cart? Our enthusiastic voices and stories are the Chapter's best publicity. Let us all put on our recruiter hats and "Help Keep the Hill Country Native."

The application is on the chapter website.

For more information, contact the Class Director, Becky Etzler, at [kritturnurse@aol.com](mailto:kritturnurse@aol.com) or the Membership Director, Valeska Danielak, at [imatxn10@yahoo.com](mailto:imatxn10@yahoo.com).

## WHY REPORT VOLUNTEER HOURS?

For those who are certified and those who are working toward certification, reporting hours is not just for attaining your annual pin and your picture in the newsletter! Here are a few important facts about reporting those hours:

### **Your Hours Mean Real Money**

The current value of each hour that you report is \$19.50. For 2012, the Hill Country Chapter reported 27,806 volunteer hours that amounted to \$542,217.00. Statewide, in 2012 the 44 chapters reported 320,504 volunteer service hours, valued at \$6.25 million. Over 2,077,000 volunteer hours, valued at \$40.5 million, have been reported by the Texas Master Naturalist program to date.

What do these amounts mean? The federal aid grant for the Texas Master Naturalist program supports the Texas Parks and Wildlife Department. While not directly contributing to the state park shortfall, TMN volunteers who work in state parks help to replace the loss of staff diminished by budget cuts. As master naturalists, you, more than most Texas citizens, know the value of our state and local parks, local nature centers, and nature education for young people.

### **The Record Keeper and You**

Sandy Leyendecker is the heroine of our chapter who keeps up with the hours chapter members report. Imagine trying to keep up with the paper work generated by 250 volunteers! Here's how can we help her:

Use the correct Volunteer Project Codes by going to <http://txmn.org/hillcountry/>; mouse over Volunteer; download a Volunteer Projects List and find the correct codes for your projects.

Also, mouse over Volunteer; click Activity Report; download an Excel or Word form and use it to record and report your hours.

Report hours each month. A question we hear often is, "Can you report hours late?" Reporting each month for the previous month is best. If you forget some hours, include them in a later report. Sandy prepares quarterly reports; help her by reporting hours promptly and regularly.

### **Have You Gotten Out of the Habit of Reporting?**

There are trained master naturalists who are providing volunteer service, but for whatever reason, do not report hours. Maybe it seems pointless--or worse, too much like punching the clock. But it means a lot to the program, which really cannot exist without the federal grant that subsidizes it. If it was important to you to learn from the master naturalist program, help the program by reporting the hours you volunteer each month. To quote Mother Teresa, "We ourselves feel that what we are doing is just a drop in the ocean, but the ocean would be less because of that missing drop."

### **What Expenses Associated with Being a Master Naturalist Can You Deduct?**

You should check with your accountant, but IRS Publication 526 states that expenses related to the use of your vehicle in giving services to a qualified organization are deductible. Reliable written records must be kept. Records "may be considered reliable if you made them regularly and at or near the time you had the expenses." The IRS also states: "If you use the standard mileage rate of 14 cents per mile, your records must show the miles you drove your car for the charitable purpose. If you deduct your actual expenses, your records must show the costs of operating the car that are directly related to a charitable purpose."

"Volunteers aren't paid, not because they are worthless, but because they are priceless."

Support the TMN program you love by reporting your hours.

## The Nitrogen Cycle: Essential, Complicated, and Altered by Man

Mother Nature, unlike humans, recycles everything. Just how various things are recycled is illustrated by the water cycle or hydrologic cycle, the carbon cycle, the nitrogen cycle and the phosphorus cycle. Every farmer and every successful gardener needs to know something about these natural cycles. I have written about the water cycle before, and will discuss the carbon cycle in a later column.

Other than water, the most commonly limiting component of plant growth is nitrogen. This may seem strange, since almost 80% of our air is nitrogen and it is one of the more common elements. But the nitrogen in the air, molecular nitrogen ( $N_2$ ), is relatively inert and cannot be utilized by either plants or animals to satisfy their requirements for this essential element. (Nitrogen is necessary for amino acids, proteins, nucleic acids, DNA, chlorophyll, and numerous other components of our bodies and plant tissues.)

I wrote earlier about legumes, plants that have bacteria called rhizobia associated with their roots that have the ability to “fix” nitrogen. That is, they can convert molecular nitrogen into forms that plants can take up and use to make nitrogen-containing compounds. In addition, there are nitrogen-fixing bacteria in healthy soil. These nitrogen-fixing bacteria are the first step in the nitrogen cycle, and they convert molecular nitrogen ( $N_2$ ) into ammonia ( $NH_3$ ).

Other bacteria in the soil then convert the ammonia into nitrates ( $NO_3^-$ ), which is the form plants can best use.

Animals obtain their essential nitrogen-containing nutrients from these plants when they eat the plants, or from animal tissues when they eat animal products. When we digest either animal or plant proteins, these proteins are broken down into their constituent amino acids and then reassembled into proteins for our bodies.

When animals eliminate waste this material contains high levels of nitrogen-containing compounds. And when plants or animals die, their tissues contain nitrogen in many forms. Another group of bacteria and other simple organisms, called detritivores, then decompose this plant and animal material and make the nitrogen contained in these materials available for new plants to take up.

Finally, some nitrogen-containing materials in the soil are converted back to molecular nitrogen, which returns to the air; thus the cycle continues.

This nitrogen cycle has been in existence for millions of years, altered only by the relative numbers of plants, animals, bacteria, etc. But humans have significantly changed the cycle in the last 100 or so years since the discovery of the Haber process for artificially (chemically) converting molecular nitrogen into ammonia, and the subsequent conversion of ammonia into urea and ammonium nitrate, all “chemical” fertilizers now made on a huge scale. The tragic explosion in West, Texas recently was at one such facility. (As a chemist I dislike the use of the term “chemical” in that way—all matter is chemical, and the nitrogen-fixing bacteria process certainly is chemical.)

*continued on next page*

Modern agriculture, and the ability to feed as many people as we do, world-wide, is largely attributable to the use of nitrogen-containing “chemical” fertilizers. Unfortunately, manufactured fertilizers have been and still are being greatly overused, and much of these highly-soluble fertilizers, instead of being recycled, are washing away from the farm fields, golf courses, and suburban lawns into our creeks and rivers and into the ocean.

This causes lakes and parts of the ocean to grow vast quantities of algae because of the fertilization effect. The algae then dies and the decay process of the dead algae then uses up the dissolved oxygen in the water, killing fish and other marine organisms in a process called eutrophication. The “dead zone” in the Gulf of Mexico off the Louisiana and Texas coasts is one example.

I read an astonishing statement in a recent *National Geographic* magazine: “Almost half of the nitrogen found in our body’s muscle and organ tissues started out in a fertilizer factory.”

One of the goals of “organic farming” is to eliminate the use of “chemical” fertilizers and instead rely on recycled nitrogen in the form of compost made from animal and plant waste and a more extensive use of legumes to fix nitrogen the natural way. We can help by doing essentially the same thing in our gardens and lawns. Native plants, having evolved before man-made fertilizers existed, do not need any “chemical” fertilizers. Collecting lawn clippings and throwing them away is throwing away nitrogen.

Until next time...

Jim Stanley is a Texas Master Naturalist and the author of *Hill Country Landowner's Guide*. He can be reached at [jstmn@ktc.com](mailto:jstmn@ktc.com). Previous columns can be seen at [www.hillcountrynaturalist.org](http://www.hillcountrynaturalist.org).

### “Herbs at Twilight” at Riverside Nature Center

Certified traditional herbalist Amy Coward, R.N., joins with certified herbalist and formulator Sally Garrett to expand on their successful herbal programs at Riverside Nature Center. The team will teach a series of evening herb classes, “Herbs at Twilight,” starting Thursday, June 27.

The sessions will meet monthly, on the fourth Thursday of most months, from 6 to 8 p.m. Coward said, “We’re meeting in the evening to accommodate students who aren’t free during the day.” “We’re excited about the variety of topics being offered,” said Garrett. “The first class will be all about kitchen medicine. It’s amazing what simple and healing remedies are found right in the kitchen and spice cabinet.”

A tea-tasting, specific to the herbs of study, will be offered each time, along with a handout and a page of recipes. Both Coward and Garrett are passionate about native herbs and will highlight at least one or more native plants along with others, tried and true, at each session.

In 2012, Coward launched the Native Herbal Garden at RNC, to cultivate only herbs that are native to this area of the country and have medicinal value. “The garden has been well-received by the public,” Garrett added. “It was through this group that Amy and I got acquainted, and I later signed on to assist with the project. We are now teaching an in-depth course in basic herbalism, focusing on native plants and others.” For more information about that course, contact Sally Garrett at 830-562-3682, [sally@earthlightenergies.com](mailto:sally@earthlightenergies.com), or Amy Coward at [greenspiritherbs@yahoo.com](mailto:greenspiritherbs@yahoo.com).

The cost of each class is \$25. Riverside Nature Center members receive a discounted price of \$20. Reservations for each event are encouraged but not required. Call 830-257-4837 for details.

Riverside Nature Center is located at 150 Francisco Lemos St., Kerrville.

From Sarah Hilburn

### Last Chance Forever at the Kroc Center

The students at the Kroc Center got a once in a lifetime opportunity to see the Last Chance Forever birds of prey. The crowd was in awe of the magnificent raptors. Mr. John Karger is a Master Falconer who has trained countless birds, including owls, falcons, hawks, and eagles. Mr. Karger was assisted by Kelly Rayner and our very own Rheda Boardman, who is one of Mr. Karger's apprentices.



The students got to see a Harris's Hawk, Red-shouldered Hawk, Great Horned Owl and a young Bald Eagle. The students closed their eyes and felt the wind under the hawk's wings as it flew over them. Mr. Karger demonstrated how they trained the birds to hunt with a bird decoy.

The staff at Last Chance Forever/The Bird of Prey Conservancy in San Antonio have helped sick, injured, and orphaned birds of prey return to their natural habitat. Birds that are deemed nonreleasable are utilized as educational ambassadors and are provided a permanent sanctuary at Last Chance Forever. Their staff believes that education is the key to making a larger impact in the world, and supports this belief with public educational programming about raptors and practical environmentalism.



Master Naturalists Cynthia and Jim Burgin, Sarah Hilburn, Diane McMahon, Martha Miesch, Pat Nelson, John Sloan, Nina Wagner, and Mary Frances Watson assisted.

From Tara Randle

### New Volunteer Opportunity

There will be a volunteer meeting at the Albert and Bessie Kronkosky State Natural Area on July 17, 2013 at 7:00 pm. The natural area is located at 7690 Highway 46 West, Pipe Creek, TX. The purpose of this meeting is to give an overview of the property, list the objectives and goals, and introduce volunteer opportunities at the natural area. There will also be a time to fill out volunteer paperwork. Bring a portable chair and your own snack and beverage for a Meet and Greet afterwards.

The meeting will be led by the superintendent of the Kronkosky State Natural Area, James Rice. To contact him, call 830-535-4896 ext. 222 or e-mail [james.rice@tpwd.state.tx.us](mailto:james.rice@tpwd.state.tx.us). Please RSVP to Tom Riordan at [tomr63@wildblue.net](mailto:tomr63@wildblue.net) or Tara Randle at [tmrandle@swbell.net](mailto:tmrandle@swbell.net) by July 10.

Ready for some summer reading? Mystery, romance, fantasy--how about something different? Try this best seller: *The Texas Star*. That's right, our own award-winning newsletter. You'll find it's so much more than just a newsletter. The great thing is our website looks the same on your pc, tablet, or phone. You can read it anywhere!

The complete library of *The Texas Star* dating back to the first issue, January 2003 Weed or Wildflower, can be found on our website. Eleven years of newsletters! Each year of newsletters contains eleven monthly issues (we don't publish in December). Each issue is titled with the meeting topic for that month.

You can reach the newsletters three ways.

1. Click on the **Newsletter** tab, then click the year you would like to read.
2. Hover over **Newsletter**, click **Texas Star**; individual issues are listed.
3. Hover over **Newsletter**, hover over **Texas Star**; move to the right and choose a year.

Every issue contains interesting information that continues to be relevant. See how our newsletter has evolved over the years with changes in technology and changes in editorial style. From the early largely text version to the "Master Naturalist lifestyle magazine" that we have now, our newsletter editors have kept us informed and educated.

The newsletter is a labor of love for the editors. Designing the newsletter **each month** takes time -- A LOT OF TIME. Content must be gathered, member submissions formatted, and images and graphics chosen. The newsletter editor waits for the submissions deadline to insure information for the month is as complete as possible. Then it's time to hammer down! Lay out content in a pleasing design, insert and size images, and fact check everything.

Once the editor has the newsletter "complete," the Communications Director gives it a proof. Ask any editor: it is impossible to proof your own work. The webmaster then posts the newsletter on our website and the newsletter editor emails you the link.

If you enjoyed reading the issue, let the editor know. Sending a simple "Thanks, I enjoyed it." makes all the difference in the world. It is gratifying to know that after 30+ hours of work, your efforts are appreciated and enjoyed.

We have had five fearless newsletter editors: Priscilla Stanley, Phyllis Muska, Donna Snow Robinson, Kristie Denbow, and current editor, Lenore Langsdorf. When you see these ladies give them a pat on the back; they worked hard for you. Now, get to reading those *Texas Stars*!

A fawn under the Leopold bench at Cynthia and Jim Burgin's house.



From Tom Hynes

### Some Memories From the Annual Picnic

Some picnic attendees explored the trails of Joshua Springs Preserve in Comfort, prior to socializing over lunch at the chapter's annual picnic. The participants included an avid birder, a geologist, a rock hound, a monarch specialist, and a foreign visitor, and conversations resulted in some very interesting disclosures and discoveries. The site of the picnic was high upon a hill overlooking a beautiful lake. A southerly breeze flowing briskly across that body of water provided ideal temperature conditions. The vantage point also allowed for a sweeping panoramic view of the beautiful blanket of wildflowers. Thirty or more members, spouses, and friends took advantage of the opportunity to enjoy the event.



## Advanced Training

### **MONDAY, JUNE 24 7PM UPPER GUADALUPE RIVER AUTHORITY (UGRA)**

AT 13-141 DROUGHT: PAST, PRESENT, AND FUTURE

Dr. John Nielsen-Gammon is Regents Professor, Department of Atmospheric Sciences, Texas A&M University and Texas State Climatologist. His talk will describe research unearthing the causes and historical context of drought, the ability (or lack thereof) to forecast drought, and the various natural and non-natural factors that contribute to the outlook for drought over the next years and decades. Free; call Tom Hynes, 830-990-5750 for further information.

### **SATURDAY, JUNE 29 8:30-9:30PM GUADALUPE RIVER STATE PARK (GRSP)**

AT 13-140 SLITHERING' SNAKES ALIVE!

Learn how these critters survive and that much of what we think about snakes isn't really true. The program will take place at the amphitheatre behind the Discovery Center inside the park. Call 830-438-7653 for more information.

### **THURSDAY, JULY 25 11AM-NOON WEBINAR**

AT 13-148 RAINWATER HARVESTING - CATCHING IT AND USING IT

This CoCoRaHs Webinar will discuss the process used to collect rainwater from a rain barrel to whole house to commercial size installations. We will discuss the sizing requirements, conveyance, collection tanks, per-filtration/screening, and delivering the water when needed by both gravity and pump pressure. We also will discuss supply and demand and the use of rainwater for irrigation, pets, wildlife, water features and in-home potable and non-potable use. To register, go to [www.cocorahs.org](http://www.cocorahs.org).

### **FRIDAY, AUGUST 2 1-5PM KERR WILDLIFE MANAGEMENT AREA (KWMA)**

AT 13-149 A ADDRESSING RESOURCE CONCERNS IN THE EDWARD'S PLATEAU, PART 1

This first of three seminars will focus on the central components in management of any wildlife species: food, water, and cover. Programs address the diets of native and exotic species, water use, development strategies, and cover requirements. An outdoor tour of sites relevant to topics covered indoors will follow.. Reservation required; call 830-238-4483.

### **WEDNESDAY, AUGUST 7 8AM-12NOON CIBOLO NATURE CENTER, BOERNE (CNC)**

AT 13-151 NATURE BOX WORKSHOP

Nature Box founders Kathy Ward and Kathy Wilson and their team will provide hands-on instruction on the construction and use of Natural Resources of Texas and Snakes of Texas boxes, along with information on other Nature Boxes. Cost: \$15 per person. Limited enrollment; pre-registration is required. Go to [www.cibolo.org](http://www.cibolo.org) or call 830-249-4615.

### **FRIDAY, AUGUST 9 8:30AM-3:30PM MASON MOUNTAIN WILDLIFE AREAS (MMWA)**

AT 13-150 A ADDRESSING RESOURCE CONCERNS IN THE EDWARDS PLATEAU, PART 1

This seminar (the first of three) will focus on the central components in management of any wildlife species: food, water, and cover. Programs address the diets of native and exotic species, water use, development strategies, and cover requirements. An outdoor tour of sites relevant to topics covered indoors will follow. Reservation required; call 325-347-5037.

### **FRIDAY, SEPTEMBER 6 1-5PM KERR WILDLIFE MANAGEMENT AREA (KWMA)**

AT 13-149 B ADDRESSING RESOURCE CONCERNS IN THE EDWARD'S PLATEAU: PART 2

This second of three seminars will focus on natural history and research concerning collared peccary and feral swine. An outdoor tour of sites relevant to topics covered indoors will follow. Reservation required; call 830-238-4483.

**FRIDAY, SEPTEMBER 13 8:30AM-3:30PM MASON MOUNTAIN WILDLIFE AREAS (MMWA)**

AT 13-150 B ADDRESSING RESOURCE CONCERNS IN THE EDWARDS PLATEAU, PART 2

This seminar (the second of three) will focus on natural history, behavior, and research concerning collared peccary and feral swine. An outdoor tour of sites relevant to topics covered indoors will follow. Reservation required; call 325-347-5037.

**FRIDAY, OCTOBER 4 1-5PM KERR WILDLIFE MANAGEMENT AREA (KWMA)**

AT 13-149C ADDRESSING RESOURCE CONCERNS IN THE EDWARDS PLATEAU, PART 3

This third of three seminars is entitled "Ecosystems Approach to Wildlife Management: Putting it All Together--Finding a Cure Rather Than Treating a Symptom." Topics include white-tailed deer management, grazing management, prescribed burning, brush control, and endangered species. The seminar also will include over 30 years of nutrition and genetics research conducted in the Donnie E. Harmel White-tailed Deer Research Facility. An outdoor tour of sites relevant to topics covered indoors will follow. Reservation required; call 830-238-4483.

**FRIDAY, OCTOBER 11 8:30AM-3:30PM MASON MOUNTAIN WILDLIFE AREAS (MMWA)**

AT 13-150 C ADDRESSING RESOURCE CONCERNS IN THE EDWARDS PLATEAU, PART 3

This seminar (the third of three) is entitled "Ecosystems Approach to Wildlife Management--Putting It All Together: Finding a Cure Rather Than Treating a Symptom." Topics include white-tailed deer management, grazing management, prescribed burning, brush control, and endangered species. The seminar also will include over 30 years of nutrition and genetics research conducted in the Donnie E. Harmel White-tailed Deer Research Facility. An outdoor tour of sites relevant to topics covered indoors will follow. Reservation required; call 325-347-5037.

From Sandra and Scott Magee

## Common Texas Hill Country Forbs

Free for iPad from the iBookstore



**Common Texas Hill Country Forbs** is a supplemental reference for selected plants that are common throughout the Hill Country in a variety of habitats. For purposes of this book, a **forb** is a non-woody, herbaceous plant that is not a grass or a sedge.

This book includes both native and non-native species. The non-natives are included because they have adapted to Hill Country environments and now are widespread in many areas. Some are becoming invasive and threaten the native species.

The information covered is intended to aid plant identification by providing multiple images for each plant and highlighting identification characteristics such as bloom color and structure, leaf arrangement, etc. Plant information is organized alphabetically by common names. To facilitate searches in alternate sequences, cross reference lists by Bloom Color, Bloom Period, and Plant Family are provided.

To further aid plant identification, several quick reference tools are included.



We meet on the fourth Monday of most months at 7:00 PM. in the Upper Guadalupe River Authority Lecture Hall at 125 North Lehmann Drive in Kerrville.

Join us at 6:30 for our social half-hour.

Everyone is welcome.

Texas Master Naturalist mission:

To develop a corps of well-informed volunteers to provide education outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities.

**Board of Directors 2013**

- Vern Crawford -- President
- Tom Hynes -- Vice President
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The Texas Star is a monthly publication of the Hill Country Chapter of the Texas Master Naturalist Program. News, stories, comments, and ideas are welcome.

Please email them to:

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LenoreLangsdorf@gmail.com

The Hill Country Chapter does not recommend or endorse organizations or commercial sources mentioned in our newsletter. The opinions expressed are those of the authors and editor.



*Questions about our chapter?*

Email Valeska Danielak,  
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imatxn10@yahoo.com

