

Gideon Lincecum Chapter Texas Master



Naturalist™ NEWS

October/November, 2013

From the President:

I'm frightened!!! Not because it's October 31, 2013, and I've seen a ghost---but because I seem to have lost track of time! Where did 2013 go?

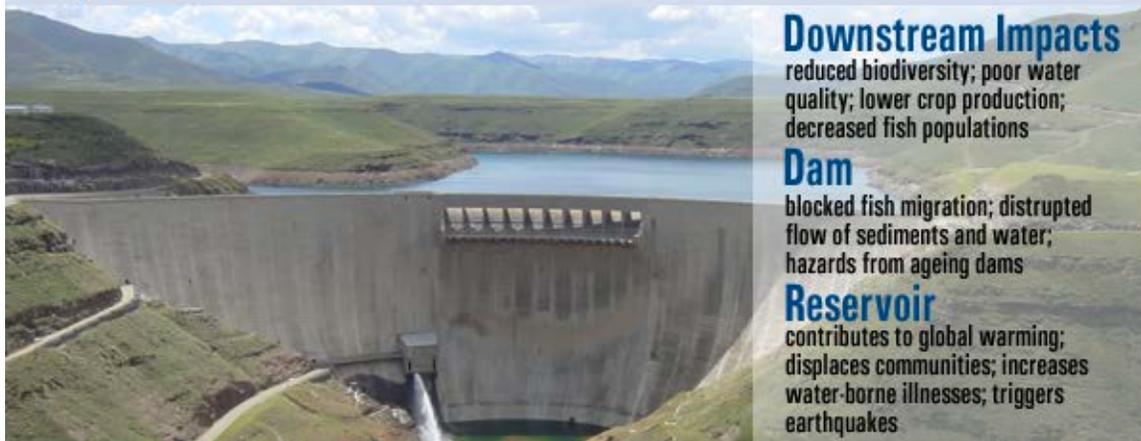
The Texas seasons don't seem as clearly defined as the Winter, Spring, Summer or Fall I remember in Illinois. In Texas, Summer seems *to go on forever!* I actually pulled out my TMN Manual and reviewed the chapter on Weather and Climate to help me understand the Texas seasons and the recent rainfall patterns. I didn't find an answer. Instead, I was distracted by the last paragraph of page 5 of the weather chapter. Does it say, "The seasons are caused by the tilt of the Sun on its Axis"? I know the earth has an axis; I didn't know the sun had an axis. This 'axis' thing really confused me so, I went to an internet site and learned about 'precession' and 'the lag of seasons' and then, I decided to stop searching. Seasons exist because the earth rotates on its axis and rotates around the sun. I'd better attend the 2014 Training Class on Weather, which will be taught by Dr. Nielson-Gammon.



I'm looking forward to the program that Wes Davenport will present after our chapter meeting Saturday, Nov 16 at Winedale on Climate. I hope he will provide more insight into the science of climate and man's affect on the earth's climate.

Speaking of manmade changes, please consider the following statement I read in Marc Reisner's book, *Cadillac Desert, The American West and Its Disappearing Water*: "By erecting 30,000 dams of significant size across the American West, they (the Bureau of Reclamation and The Corp of Engineers) dewatered countless rivers, wiped out millions of acres of riparian habitat, shut off many thousands of river miles of salmon habitat, silted over spawning beds, poisoned return flows with agricultural chemicals, set the plague of livestock loose on arid land--in a nutshell, they made it close to impossible for numerous native species to survive." Talk about manmade effects!

Impacts of Dams



Downstream Impacts

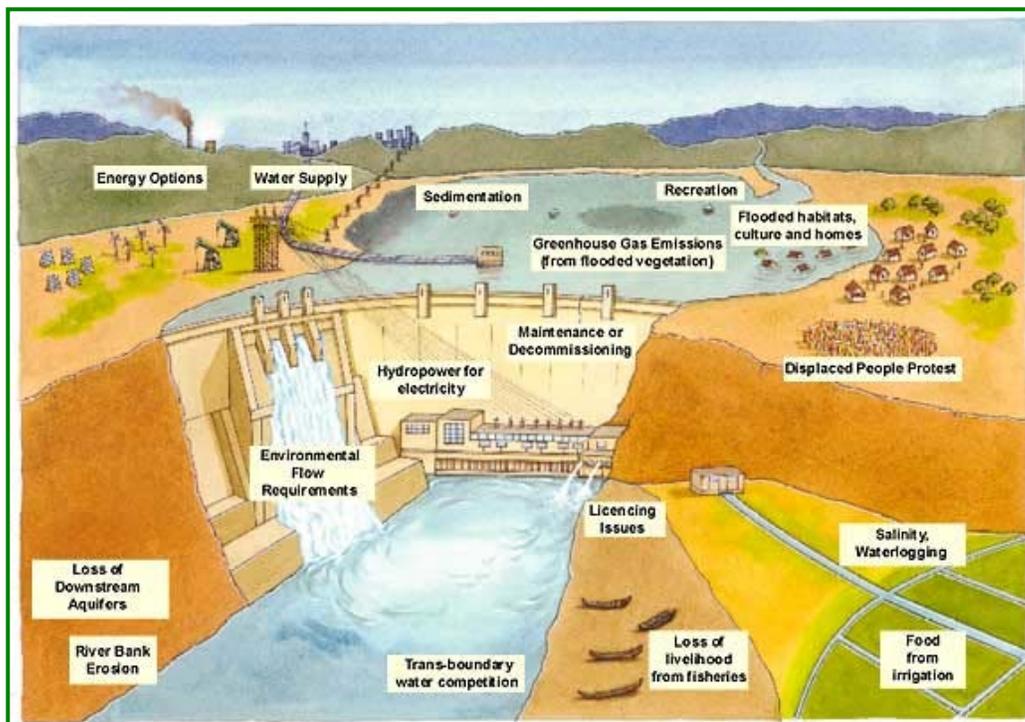
reduced biodiversity; poor water quality; lower crop production; decreased fish populations

Dam

blocked fish migration; disrupted flow of sediments and water; hazards from ageing dams

Reservoir

contributes to global warming; displaces communities; increases water-borne illnesses; triggers earthquakes



Water is a Hot Topic in our local news. What I learned at the Lone Star Water Forum was it's important to learn as much as you can about what the Texas State water plan is and how local groundwater conservation districts work. Good management of water resources is as important as good land stewardship.

I'm very grateful for the TMN program because it gives me a sense of balance. I can have an individual and as part of an educated corps of volunteers a collective positive affect on my environment. By learning from previous mistakes and practicing good land stewardship I have an opportunity to leave my homestead better for future generations.



Thanks to all of you who helped Natalie James at Brenham Elementary; with Outdoor Classroom at Lake Somerville, all who helped with the L.A.N.D.S. Quail day program; and all who attended the annual State Texas Master Naturalist Meeting. October has been a busy month of learning and volunteering!

At our November meeting we will complete a slate of officers for 2014. If you would like to volunteer or nominate another member for a chapter board position please attend the Nov 16 meeting or contact Cindy Hobbs (cndy_hobbs@yahoo.com). Officers will be installed at our December Social on December 7, 2013.

See you soon,

Cindy

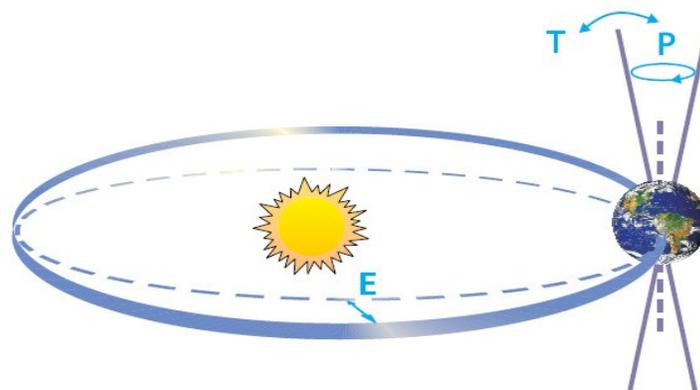
[Common Myths About Climate Change \(Continued\)](#)

Contributed by Wes Davenport

Myth: Natural Cycles Explain Climate Change, Man Has Nothing To Do With It

- We should be delighted that this is a myth because if it were true we would be headed into a new Ice Age. As destructive as Global Warming has been and will continue to be in the immediate future, it is not nearly as destructive as an Ice Age would be to civilization. Natural cycles either increase or decrease the Sun's affect on our global climate. The greater the time that the earth's land mass spends

closer to the sun, the more solar energy we receive which warms the climate. The more time it spends further from the sun the less solar energy we receive which cools the climate. There are three key cycles to consider: the 'eccentricity' cycle period is around 100,000 years. This causes the orbit of the earth to elongate or become more elliptical. Imagine that the more elliptical it becomes, the less time during the year it spends near the sun. So the planet receives less solar energy and cools a bit; the 'obliquity' cycle tilts the earth every 41,000 years and that causes the land mass of the northern hemisphere to face more towards the sun or less towards the sun; The 'precession' cycle occurs about every 26,000 years and influences the wobble of the polar axis. This also influences earth's climate by causing winters and summers to be warmer or colder depending on the amount of land surface being more or less exposed to the sun. These cycles are called the Milankovitch Cycles



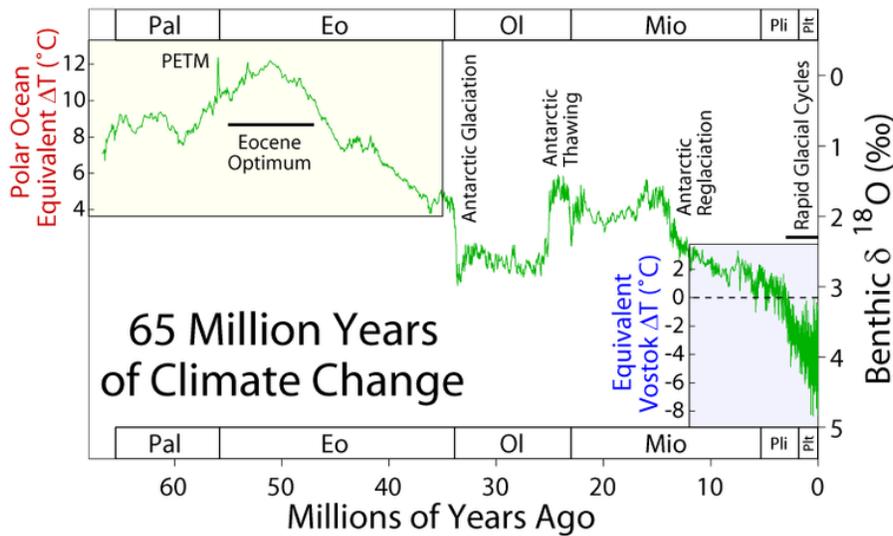
Milankovitch Cycles. Schematic of the Earth's orbital changes (Milankovitch cycles) that drive the ice age cycles. 'T' denotes changes in the tilt (or obliquity) of the Earth's axis, 'E' denotes changes in the eccentricity of the orbit (due to variations in the minor axis of the ellipse), and 'P' denotes precession, that is, changes in the direction of the axis tilt at a given point of the orbit. Source: Rahmstorf and Schellnhuber (2006).

Is global warming a natural cycle? Or is global warming affected by human influence? What does the science say? Both are true. In the natural cycle, the world can warm, and cool, without any human interference. For the past million years this has occurred over and over again at 100,000 year intervals. About 80-90,000 years of ice age with about 10-20,000 years of warm period.

The difference is that in the natural cycle [CO2 lags behind the warming](#) because it is mainly due to the [Milankovitch cycles](#). Now CO2 is [leading the warming](#). Current warming is clearly not natural cycle. The earth's natural cycles, if human industrial output had not been involved, would have us near or slightly below thermal equilibrium, possibly slightly cooling.

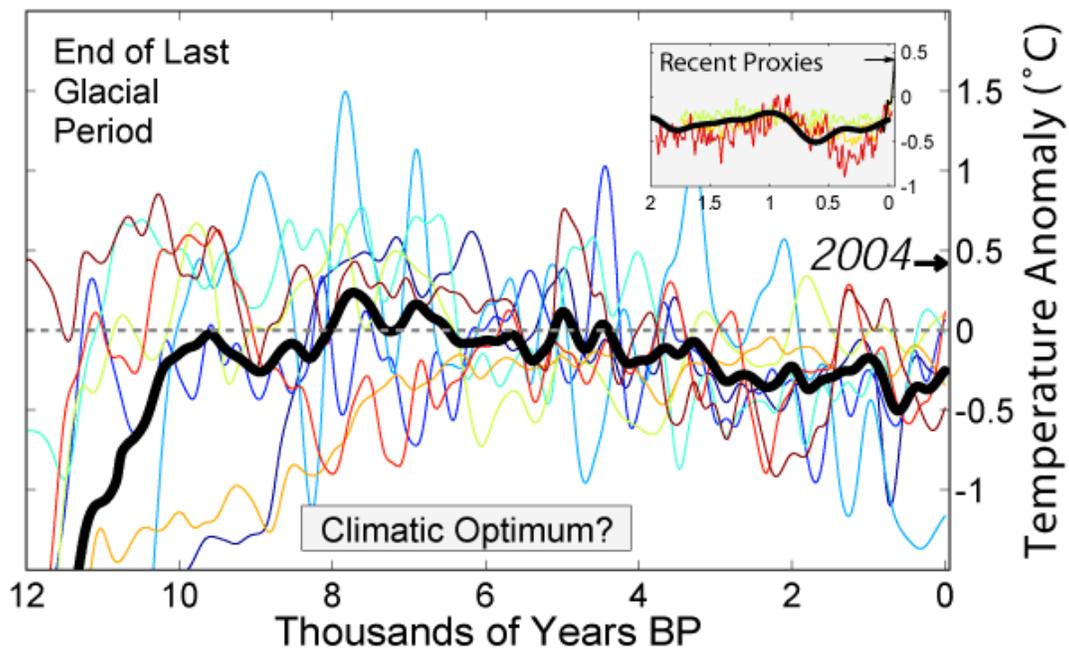
65 Million Years

The image below shows the climate was much warmer prior to 7 million years ago. Here we can see the Eocene optimum and the PETM event, which is assumed to have involved a methane hydrate clathrate release that caused a temperature spike.



12,000 Years

Holocene Temperature Variations



The Holocene temperatures peaked around 8,000 years ago. This temperature peak was associated with the perihelion phase of the [Milankovitch cycles](#). That was when it is estimated that the natural cycle [climate forcing](#) was at maximum, including associated [climate feedbacks](#). Since then the forcing levels

have been slowly dropping and the temperature has been following the slope of forcing in line with the changes in the [Milankovitch cycle](#) forcing combined with system feedbacks.

Recent significant changes in climate forcing due to [human cause factors](#) have produced a net positive forcing causing temperatures to rise. This is a departure from the natural cycle.

- [Holocene Temperature Variations](#)
- [Holocene Temperature Variations Sources](#)

The current global mean temperature (GMT) is above the temperature peak associated with the forcing imposed on the climate system when we came out of the last ice age.

Source: http://www.globalwarmingart.com/wiki/Image:Holocene_Temperature_Variations_Rev.png

Myth: There Is No Scientific Consensus on Climate Change

There has been scientific consensus on climate change since 2004 as verified by Dr. Naomi Oreskes. I have included comments from her study below.

Naomi Oreskes, PhD*

“The author is in the Department of History and Science Studies Program, University of California at San Diego, La Jolla, CA 92093, USA. E-mail: noreskes@ucsd.edu”

“That hypothesis was tested by analyzing 928 abstracts, published in refereed scientific journals between 1993 and 2003, and listed in the ISI database with the keywords “climate change”

“Remarkably, none of the papers disagreed with the consensus position”.

“This analysis shows that scientists publishing in the peer-reviewed literature agree with IPCC, the National Academy of Sciences, and the public statements of their professional societies. Politicians, economists, journalists, and others may have the impression of confusion, disagreement, or discord among climate scientists, but that impression is incorrect”.

Since the initial study by Dr. Oreskes, there have been several additional studies: 2009 Peter Doran and Maggie Zimmerman found that 97% of actively publishing climate scientists agreed that humans were significantly changing global temperatures, 2010 William Anderegg led a study that found that 97% of scientists who published climate papers agreed with the consensus. The most recent study headed by Dr. John Cook of the Global Change Institute of the University of

Queensland, Australia and conducted with help from Skeptical Science, Brisbane, Queensland Australia reviewed 21 years and over 12,000 climate papers from peer reviewed scientific journals and the found the level of consensus to be 98%.

So why do we keep hearing that there is no consensus or that consensus is decreasing? In 1991, Western Fuels Association spent half a million dollars on a campaign attacking the scientific consensus. Political pollster Frank Luntz advised Republicans to focus on casting doubt on consensus in a memo leaked in 2002. A 2012 analysis of conservative syndicated columns found that the number one climate myths promoted by conservative columnists was: "there is no scientific consensus."

Myth: We Must Act Radically and Immediately

Those who have been arguing for urgent action too often demand that we stop using fossil fuels immediately and move to the use of renewable energy only. That is neither economically nor politically feasible. Energy companies have huge investments in infrastructure that must be recovered and there is not enough alternative energy available to make the switch now

Conclusions:

Climate change is real, it is happening now and is moving faster than anyone has so far predicted. Man is responsible for bringing about a warming trend when the natural cycles are headed into a cooling period.

We will need a mix of fossil fuels, renewable energy, nuclear energy and whatever new source of energy that we can create that successfully decreases our dependence on fossil fuels in a rational manner. Bader al Lamki , Director of Masdar Clean Energy said it well: "You can talk about environmental sustainability all you want, but there has to be economic sustainability too."

We do need to move forward with a phased approach to such an energy mix resulting in gradually reducing our dependence on fossil fuels and increasing the use of alternative fuels. We need to better understand how our Earth functions and how our actions influence it. We need to find ways of determining which species will be able to adapt to Climate Change and which ones we will lose. All of these actions will require funding. How will we pay for it? One thing that we do not need is untried Geoengineering schemes attempting to slow Climate Change by taking actions that could result in far

worse consequences for the climate than we now face e.g. spraying sulfur dioxide into the air to block the sun's rays, using high altitude reflectors to cool lower climates, ocean sequestration of large amounts of CO₂, etc. No one has any practical knowledge of the potential of such actions to actually reduce Climate Change or of what side effects such actions might have.

There are two books that I would highly recommend that are written by climate scientists for the layperson: Earth: The Operators Manual by Richard B. Alley, ISBN 979-0-393-08109-1 Published by W. W. Norton & Company; Deep Future: The Next 100,000 Years of Life on Earth by Curt Stager, ISBN 978-0-312-61462-1, Published by Thomas Dunne Books, St. Martin's Press.

Note from the Editor: Please be sure to mark your calendar for November 16. Wes will be our speaker on this important topic at that meeting.

[A Master Naturalist Looks at Nature's Remedies](#)

Contributed by Kathy Cihlar

Alka-Seltzer or Aphrodisiac?

As far back as 5,000 years, this herb/spice was a highly valued article of trade. Botanically known as *Zingiber officinale*, we just call "her" Ginger. Though, gingers' origin is a bit sketchy, as it is not found in the wild, it is likely to have originated in India. Plants were carried on maritime trade routes to the Roman Empire, Indian Ocean, and South China Sea. Immense wealth was associated with growing ginger and the Arabs eventually monopolized the very lucrative trade routes for a thousand years. These routes were guarded with secrecy and intrigue by those involved. The Greeks, Romans, Chinese, and Indians valued more for its medicinal qualities than as a cooking ingredient.

Traditional Chinese Medicine and the Ayurvedic Indian systems both view ginger as a "healing gift from God". It was probably the Alka-Seltzer of the Roman Empire, documented as an aphrodisiac among many including the Arab Empire who also considered ginger healthful and spiritual. Confucius ate ginger with every meal for vigor, health, and digestion.

Most of us are aware of the culinary uses of ginger, but if we have it in our cabinets, why not "let food be our medicine"? Ginger is rich in powerful antioxidants and potent anti-inflammatory agents. It has very



“warming” qualities which make it a good circulatory stimulant. Uses include: rheumatoid arthritis, migraines, sore throats, improved circulation and removal of fatty deposits in arteries,. It can also relieve sinus congestion, fight colds and flu, and act as an aphrodisiac. It is considered one of the best digestive remedies as it cleans the colon, alleviates flatulence, and aids digestion. Ginger helps raise the immunity, increasing the body’s basal metabolic rate for weight loss.

How to benefit from Ginger Root:

Ginger tea—grate root, about a 2 inch slice, pour boiling water over and steep 5 minutes. Strain, add honey. Yum.

Ginger candy, ginger ale, ginger spice are all good sources.

As a Cold Remedy take a Ginger Bath -pour ¼ to 1 ounce ginger powder into bathwater(or you can use large amount of tea). Soak 20 minutes. You will feel your entire body heat up and warmth will soak into your joints. Wrap up in a blanket and sweat out the toxins. ***Drink strong ginger tea or pour into tub while soaking. For stronger tea simmer root for 20 minutes. Ginger is also good for sore joints.

----KC out.

[14th Annual Texas Master Naturalists' Meeting](#)

Contributed by Bill Dudley

The 14th Annual TMN Meeting and Advanced Training at the T Bar M Resort near New Braunfels had a record 455 attending. The rain showers held off until late Sunday morning and the weather was great. We had so many interesting tours off site to choose from. The Bracken Bat Cave, Friday night; Canyon Lake Gorge, and Comal Springs tours were all outstanding. Super tour guides and wonderful folks to enjoy the natural wonders with. Barron Rector gave a two hour Native Plant ID walk around the Resort area. Dozens of choices for Advanced Training and all seemed to be very interesting. Hope to see you next year at the 15th Annual Meeting.



TMN GLC Participants Charlotte von Rosenberg, Bill Dudley, Madeline Johnson, Wes Davenport, and friend, Lauren Lash.

[The Cork Trees of Portugal](#)

contributed by Carol Paulson

As any of you that I have spoken with recently know, I have been on a 2 ½ week jaunt across the country of Portugal, from the island of Madeira off the African Coast to the mainland from Lisbon to Oporto and beyond. As I was thinking what might be of interest to a Master Naturalist in all that I had seen – and there were a lot of things of interest, the cork trees stand out.

Quercus suber or the Cork Oak Tree is an evergreen oak tree that is the primary source of cork for wine bottle stoppers and dozens of other uses. It is native to southwest Europe and northwest Africa. Portugal accounts for around 50% of the world cork harvest. Cork oaks cannot be legally cut down in Portugal, except for forest management felling of old, unproductive trees and in those cases special permission must be obtained from the Minister of Agriculture.

A cork tree must be at least 15 years old before the first cork is harvested. The tree is girdled just below the branches or even higher up and the thick cambium layer of cork bark is removed. This does not kill the tree as it regenerates the bark over the next 6-9 years and is ready for harvesting again. The stripping of the bark leaves a bright red trunk and the tree is marked with a number indicating the next year it can be harvested. Since cork trees can live 150 to 250 years or more, cork is a uniquely sustainable product.

While in Portugal, particularly the Coimbra region, I saw various cork items for sale: cork hats, books, aprons, pictures, wallets, fridge magnets, coasters, shoes, key chains and jewelry. I bought a cork necklace, although now I wish I had a wallet. If you are looking for an eco-friendly, waterproof way to renew your flooring, look for cork. Forests of cork trees on hillsides throughout Portugal are a sight to see – or you may see just one like that pictured that I found on a side street in the city of Coimbra.



[Washington-on-the-Brazos State Park is a Birder's Paradise](#)

Contributed by Judith Deaton

Our Chapter is now working well with the Washington-on-the-Brazos State Park Rangers to bring nature trail interpretation to the historic site. The management has long promoted the Barrington Living History Farm (Anson Jones' home) and the site of the signing of the document for Texas Independence, but the Rangers have wanted to introduce the public to the beauty of the undisturbed natural areas. Several of us have stepped up and are learning how to present the diversity of the flora and fauna and to interpret the wonders of the riparian and hardwood forest ecosystems of the park to its visitors.

Bill Deaton, Judy Deaton, Leann Bennett, Allen Ginnard, Karen Ginnard, Carol Paulson, Dave Redden, Cindy Rodibaugh, Charlotte von Rosenberg and Tom Yates attended our first meeting for a walk around on June 7th. We met the Rangers who accompanied us on our first tour, which took place in the heat of the summer on June 15th. After taking round two groups we determined that, although the people were very happy with the tour, the heat was oppressive and the tour took too long if we included the whole circuit of the park trails, 1 ½ hours! The shorter trail is much better and, with stops for questions, is manageable at about 45 minutes.

Thanks to Bill Deaton for writing up our initial workday in the last newsletter.

After a walk around on a windy, rainy Wednesday, October 16th, our second workday October 19th, was bright and sunny. Volunteering were Charlotte von Rosenberg and the Deatons who arrived at 10am ready to take the public round. It is a new program and, although publicized, the public is still not quite aware that it is available yet. The Rangers assure us this will get better. At about 10:20 am a party of birders arrived and was delighted to find us there ready to lead them on the walk. We learned quite a bit from them about warblers (there was a flock of black-throated green warblers) and imparted our knowledge of the plant and animal life in the park. One interesting discovery is how much we have to adjust our interpretation to the needs of the groups that we take out on the trails. There were two groups between 10am and 1pm. On the second walk, we interpreted for a nice couple that had been displaced from Colorado by the flooding. Their friendly dogs accompanied us and pointed out all the gopher holes. We also met a family with a three-year-old who was interested in throwing rocks and were able to engage him by showing him bois d'arc fruit that he promptly turned into a football. Everyone seems to be taking away a greater awareness of the park's diversity and we are having good fun.

The park changes with the seasons, as must the interpretation, so walk arounds and some research and memorization are necessary. We have all extended our knowledge already "cramming" for the trail walks. Our tours will be on the third Saturday of each month (except in the heat of summer!) and we would *like to encourage other members to join us*. Birders, in particular, will be needed as this park has a wonderful diversity of avian life. Occasionally the workdays conflict with our Chapter meetings, but someone will usually be able to attend.

Thanks to everyone who has worked to make this an active project and we hope to continue for as long as they need us.

Here are a few photos of the mystery items we ran across.



We think this is a sweet tramete or white wood rot.



This one is probably a type of fruiticose lichen or several different types on one branch. Can anyone give a definite i.d.? We often see these lichens on trees, but they are so common that we don't bother to find out what they are.

We also ran across two green 'urchins' on a honey locust that we identified as the larvae of the beautiful Io moth (w.butterfliesandmoths.org/species/Automeris-io). These caterpillars have urticating spines. We are glad we didn't touch them and so sorry that the photo turned out as fuzzy as the caterpillars. Guess this is the monthly find the critter puzzle.



[Fall Prairie and Land Notes](#)

Contributed by Charlotte von Rosenberg

We were not able to schedule our Seed Collection Workshop at Quebe Farm this year. NRCS is a federal agency, so was affected in the government shutdown. No travel has been authorized for them yet. Perhaps we can have a workshop this spring with wildflowers on Quebe Prairie. Meanwhile, please read and study the current material regarding land stewardship and native plants. Start with Jill Nokes' blog http://store3.fmpweb.com/nokeslandscapedesign/nokes_projects.html about her experience. BTW, she wrote the book – literally – on Propagating Native Plants. Also check out South Texas Natives, especially their current newsletter at <http://ckwri.tamuk.edu/research-programs/south-texas-natives/>

Native grass plants, being warm season perennials have mostly all gone to seed by now. I hope those of you interested in prairies have noticed the native grasses growing and blooming along roadways and along fence rows. Due to good rainfall you may have discovered some natives growing on your own property. Hopefully you have started your seed collection on your own. Timing is important in seed collecting. The window of optimum ripeness is not that long. Plants must be watched and monitored looking for that perfect day. The main thing I have learned is that seeds are ripe when they can be stripped off by hand easily – with little resistance. If you have to exert too much effort to strip them – they are not ready to be harvested. Very important tip – collect seed in paper bags – never in plastic because condensation / moisture will spoil your seeds. Label your bag immediately with the plant name, date and location.

Update on Locating Native Prairie Remnants

I have located - with help from Austin County native and Remnant enthusiast Ken Blezinger- four native prairie remnants in Austin County around New Ulm, Industry and Cat Spring. Zubicek Prairie in downtown Cat Spring is a pristine example of a native remnant.

This photo was taken in spring with gayfeather in full bloom.



This photo of the remnant on School Road, near Industry, was taken in October of this year. Maximilian sunflower is showy against the background of Little Bluestem. Every prairie remnant is different – no two are the same.



CALENDAR FOR THE NEXT MONTH OR 2?

Make sure you mark all of these on your calendar. Each opportunity here will increase your knowledge as a Master Naturalist. (The camaraderie is a big bonus too!) These are in date order:

Friday, November 15 – Quebe Farm – Forestry Mulcher Demonstration

Demonstration will take place at 10 AM, 2 PM and 4 PM, 6255 Quebe Road, Brenham, TX 77833. Please RSVP to Charlotte von Rosenberg at 512-924-3068 or e-mail her at Quebefarm@yahoo.com. If you decide that you can make it at the last minute, just show up, We will be working all day. Free of charge.

Saturday, November 16 – GLC-TMN Chapter Meeting

NOTE: These meetings will be at the Winedale Center in Roundtop, TX

8:00AM – 9AM – Executive Board Meeting

9:00AM – 11AM - Business Meeting. Nominations for the 2014 GLC-TMN Board will be accepted.

12N – Advanced Training Program: Climate Change – *Truth or Myth* will be presented by Wes Davenport

Thursday, November 21 – TMN Highway Clean-up Day

8:30AM to 10:30AM. Meet at St. John's Lutheran Church in Ruttersville. Any questions, call Elisa Henderson at 832-660-3854.

Friday, November 22 – Washington County Valuation Workshop

Blinn College Rankin Ag Complex – Wildlife Valuation application and management techniques. Register by calling the Washington County Appraisal District before November 19. 979-277-3740. \$10 fee

Saturday, December 7 – GLC-TMN Christmas Party

6PM – 8 PM First United Methodist Church Fellowship Hall, 1215 N. Von Minden, La Grange, Meat will be provided. Members are asked to provide side dishes and desserts.
N.B.: We will vote for new Board Members at this Meeting.

Some of our Recent Activities

Elissa Henderson's Pocket Prairie



This picture is of Little Bluestem Seeds, courtesy of Charlotte Von Rosenberg. All seeds in this picture are from one handful of Little Bluestem.

