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WHOOPING CRANE FESTIVAL

- Marilyn Whitworth

Richard McCarthy and Marilyn Whitworth attended the Whooping Crane Festival in Port Aransas, TX February 22-24, 2013. They attended two seminars February 22. The first seminar was titled Saving Whooping Cranes presented by Dr. Liz Smith. She is affiliated with the International Crane Foundation. There are 15 species of cranes.



Adult Whooping Crane with juvenile from www.whoopingcranefestival.org.

Calendar at a Glance

- April 1, 9 am, Workday at Salado Sculpture Garden
- April 3, 7:30 pm, Wildflower Center Lecture on Native Plant Conservancy
- April 6, 9 am, New Class Begins
- April 9, 8 am, Hike and Bike Cleanup
- April 11, 6:00 pm, General Meeting
- April 18, 9 am, Mother Neff Work Day

The Whooping Crane is the largest species. In the spring they migrate to Canada and Wisconsin from the Aransas National Wildlife Refuge, lay their eggs in May, hatch the eggs in June and in the fall migrate back to the Aransas National Wildlife Refuge. They cover about 2500 miles and land every night until the migration is completed. One family of Whooping Cranes (a male, a female, and a chick) defends 300 acres to live on. There are between 250-300 Whooping Cranes that make this yearly migration. The salinity of the Aransas Bay is causing a decline in the amount of food available for the Whooping Cranes. Florida and Louisiana have some non-migratory Whooping Cranes.

Continued on page 4...

Chapter Motto

Earth Day,
Every Day



From the President's Pen

Scooter Speed

The first vehicle that I bought when I got my driver's license was a sky blue Honda scooter. I loved that thing. We went everywhere together, me and my "Blue Flame".

My favorite time of the year has always been spring and on my scooter, I enjoyed the sights and sounds of the seasons to the fullest. With the throttle full open, I would reach the lightening speed of 22 mph, 25 if going downhill. Clicking along at that rate, I observed the trees, grass, wildflowers, grasshoppers, rocks and the birds as they passed me by.



Why the trip down memory lane you ask? Well, I realized a few days ago that I now travel at 60 to 70 mph down the roads and even in town the speeds are 30-45 mph. The trees that I love to see come into leaves during the spring are just green blurs, the wildflowers are barely seen before passed by and the birds fly in fright at the sight of vehicles.

Have we all gotten too busy for our own good? At the breakneck speed that we seem to be stuck in, we miss so much in nature. The redbuds are only in bloom for a little while, don't miss it. Touch the blooms on a red oak tree.



Photos by Lynn Fleming

Sidney Vanloh

- Mary Ann Everett

I first met Sidney at a Master Gardener class. He was interested in learning more about plants for this area. He and Marlene live in north Temple, and his property borders on city property and he had occasion to often take care of that also. He was always telling me what he was doing 'over there'. He would try his hand at starting a plant, which didn't always work, but he tried. Then he would tell me his find at one of the stores that carried plants. He didn't care if it didn't grow here, he was going to give it a try. And sometimes, he had success.

When I needed help on projects, he was more than willing to help, if he weren't busy with his own grandchildren or if he and Marlene were traveling. One of those projects was the JMG gardens at St. Mary's School, where we worked at getting a plan together with the teachers and then putting in lots of sweat equity, hauling in soil and bricks to make the raised beds. The fun came with the children coming to plant the next day; clay makes it interesting to plant anything in it, but we finally got the butterfly gardens and herb garden completed.

Sidney took the Entomology and Tree Stewardship Specialist Courses. He helped at several elementary schools giving presentations on insects using the internet with the older students. He enjoyed working and sharing with the children. The other specialist course led him, along with three other Master Gardeners-Gary Slanga, Annette Ensing, and Mary Ann Everett-to put together a ten week course on Woodlands and Grassland Management for the Bell County Master Gardeners, sharing what we had learned during that course. He not only helped with that, but also gave talks on the topic to other organizations as well.

He was also one of the founders of the Central Texas Master Naturalist chapter in 2010. He was on the steering committee as well as being a student during the first course. Sidney was one who was always very giving. He tried to help where he could. He worked with Leah at Mother Neff, and tried to get work days started to help clear the park of downed trees. Can you picture Sidney with his work gear on, helping the park ranger get the job done?

He kept his illness pretty much quiet, not letting it get him down. He had a positive outlook on life and I always enjoyed visiting with him and Marlene, where he

would share some of his work with me, and he was always patient when I couldn't figure out something on the computer.

Sadly, he lost his fight to cancer, but he will always remain with us. As long as we recall his funny way of laughing, his funny remarks, his mannerisms, we will remember him, a wonderful man, a fellow gardener, a naturalist, a photographer. Sidney, we will miss you, but it is your turn to rest. May you rest in peace.





Whooping Crane Festival...continued from page one

The second seminar was titled Underwater Flowering Plants Offer Food Shelter and Essential Habitat presented by Kelly Darnell. She is a doctoral student with the University of Texas Marine Science Institute. This talk was mainly about seagrasses. Seagrasses are not seaweed. They can transport Oxygen produced by photosynthesis, anchor to a substrate, transfer pollen which aids in their reproduction and can withstand submersion in a saline environment. They enhance the diversity of other species of fish and plants to thrive in. The seagrasses help with sediment stabilization and reduction of erosion. Waterfowl eat all types of seagrasses. There are five types of seagrasses along the Texas Coast. Over the past 20 years there has been an 18% decline in seagrass cover. The main causes are natural disturbances (floods, droughts, storms) and human impact (dredging, V boat propeller scarring). Texas established a statewide monitoring program in 2011. There are 567 sites being monitored but much more needs to be done.

On February 23 Marilyn and Richard attended two more seminars. The first seminar was titled Rice, Crawfish and Marshes-Louisiana Whooping Cranes Hit the Cajun Trifecta by Sammy L. King. Louisiana is trying to recover Whooping Cranes. The main objective is to establish a minimum of 25 productive pairs in a self-sustaining mode. The site in Louisiana is at White Lake which is in Southwest Louisiana. In the 1880's more whooping cranes wintered in Louisiana than anywhere else in North America. The last sighting of a whooping crane in LA was in 1918. The last whooping crane captured (MAC) was in 1950 at White Lake. The White Lake Wetlands Conservation Area consists of 500,000 ac of Fresh Marsh and 300,000 ac of AgriLand. There's about 350,000 ac in LA for

rice farmers and rice farmers have about 1000,000 ac in crawfish farming. The USGS Patuxent Wildlife Research Center in Maryland had some whooping crane chicks and flew them to White Lake, La in February 2011. There were about 8 of them and they were called a cohort. Only one of them survived. In December 2012, White Lake had 14 birds released (6 males and 8 females). 90% of the birds stay within 5 miles of each other. The birds are juveniles and are not yet ready to mate.

The second seminar was titled Hummingbirds and Humans presented by Dr. Juan Bahamon. Hummingbirds have been around almost 30 million years and humans have only been around about 100,000 years. Hummingbirds have universal attraction. Mayans, Aztecs and Incans all worshipped hummingbirds. The hummingbirds pollinate flowers and they like red and yellow flowers the best. The male humming bird is very colorful. The female chooses the male based on the male's colorfulness. They eat constantly and visit about 1000 flowers a day so they have to move fast. The Bee Hummingbird from Cuba is the smallest hummingbird. It weighs only two grams. Many of the hummingbirds live in rainforests and about 31 million acres of rainforest disappear annually. Many species of hummingbirds are disappearing. Dr. Bahamon has established a 100 acre preserve in Guatemala to save hummingbirds. He had many beautiful slides of some rare hummingbirds.

Marilyn and Richard also took a van tour and a boat tour of the Port Aransas area to view a wide variety of birds. It was a very enjoyable Festival.

Photo of Whooping Crane family taken from www.whoopingcranefestival.org

Honey Bees Sleeping?

- Steve Gardipee

Editors Note: Bell County Master Gardener and Bee Keeper, Steve Gardipee graciously approved reprinting his Bee story that he wrote for the March issue of The Blooming Bell.

I was asked recently if honey bees hibernate. The answer is no. To hibernate means to be in a dormant state resembling sleep over the winter while living off reserves of body fat, with a decrease in body temperature and pulse rate and slower metabolism. Animals that hibernate include bears, bats, many amphibians and a few insects.

Honey bees do not hibernate but the bumble bee, which is closely related, does hibernate. It is interesting to note that although closely related their winter behavior is very different. A colony of honey bees will live throughout the entire winter, actively keeping the nest warm.

Bumble bees do not maintain colonies throughout the winter. When the end of summer draws near the last brood will contain a number of queens. Each of these queens will mate and find a nest in which she will hibernate, alone until spring. Just like the animals that hibernate, such as the bear or bat. When the bumble bee queen hibernates she is neither eating nor working. Her depressed rate of metabolism allows her to live for long periods while burning very little fuel.

Honey bees maintain their colony throughout the entire winter. The winter colony will be much smaller than the summer colony; it will nevertheless contain thousands of individuals. Unlike the bumble bee or any of the other insects that actually hibernate such as Lady Bird beetles, "Lady bugs" to some of us, or house flies and blow flies, honey bees eat and work all winter long.

In the winter, honey bees require protection from the cold temperature and wind. To provide this protection they work all summer to seal all cracks with a sticky

substance they gather called propolis. When the outside temperature drops below 57 degrees F. (14 degrees C), the bees congregate to the center of the hive, in the brood nest area. They crawl into some of the empty cells; they form a well defined ball or cluster and fill the space between the combs.

This is called the winter cluster. The outside layer of the ball is composed of bees tightly packed together and acting as an insulating layer. They will line up with their heads facing toward the center of the mass. The winter cluster expands and contracts as the outside temperatures rise and fall. Bees in the cluster will be active, moving about, feeding), rearing brood and generating heat. The temperature required to raise brood is about 95 degrees F. (35 degrees C), so the bees in the cluster vibrate their wing muscles to generate heat. This activity requires a large supply of stored honey and pollen, if they did not or could not store this food supply, they would not survive the winter. At the very edge of the cluster the temperature drops from 95 degrees F. (35 degrees C), to 45 degrees F. (7 degrees C). Obviously the bees on the very

outside of the cluster cannot sustain themselves for long at that temperature, so they gradually move towards the center, and the warm, well-fed bees from the inside move toward the outside to replace them.

Because the honey bees remain clustered, inside the hive during the cold weather they rarely leave the hive. This is why some think the bees are hibernating. If the temperature rises over 57 degrees F. (14 degrees C), the bees are able to break their confinement to take cleansing flights (to defecate). In the spring, when the temperatures rise, the population expands rapidly as the early food sources become plentiful and available. As the weather becomes favorable for foraging, you will be able to see honey bees coming and going, to and from the hive. When you watch the bees flying from flower to flower you now know they are not coming out of hibernation. The temperature is above 57 degrees F. and the honey bees are leaving their winter cluster. They are resuming their normal spring behavior. They are pollinating flowers, gathering nectar and pollen and making the nutritious and delicious honey that we love to eat.



Photo by Linda Mahaffey

Spotlight on Natives



Armadillos

- Richard McCarthy

DID YOU KNOW

The Nine-Banded Armadillo is the only one of its kind in the U.S?

It is a good digger, it can flee danger by burrowing, or it will curl up for protection.



It can walk across the bottom of a stream or creek holding its breath for up to six minutes, or it can gulp air into its digestive track for buoyancy and swim.

The nine-banded armadillo is the official small mammal of Texas.

During the summer it is nocturnal; during the winter diurnal.

It makes a wheezing grunt while foraging for food with its nose and claws.

SOURCE: "Critters of Texas Pocket Guide".

Golden Groundsel

- Darla Menking

Golden Groundsel, or Round-leaf Ragwort (*Packera obovata*) is one of my favorite Texas native specimens here in the Edwards plateau. I rarely see it and the only reason I have it is Temple College's Reid Lewis dug me up a plant to have.

A little about this native... besides being really cute:

- It only gets from 1-1 ½ feet tall
- It prefers part shade
- It blooms yellow flowers in the spring
- It spreads slowly and is easily controlled
- Its blooms attract butterflies

If you can find it, Golden Groundsel is a perky addition to any landscape and can fill in empty spots each

Spring with a cluster of soft yellow flowers at the end of a thin, wavy stalk! Good luck!



Photo from KLRU.org/CTM

The last "R"

- Ursula Nanna

R-6 = **RECYCLING** - Ahhhhh this is where we have been dooped into feeling good about ourselves, patting ourselves on the back as we line up those blue, green, red, yellow PLASTIC recycle bins at the curb when actually this is the most natural resource draining and expensive process of all. I was floored at what I learned about this process.

Recycling is called "the story of stuff" and truly reflects a system in crisis. Since you have to know all the codes on items to recycle and the rules and regulations and what is wide-mouth verses small mouth, what is white verses what is opaque, recycling is not a piece of cake.

Janetsplanet.com asks if we remember 'Don't, don't, don't be a litter bug' from back in the 1960's? We have really come a long way in population explosions at staggering rates and bigger cities creating infrastructure demands since then. Our garbage has also proportionately exploded.

NYTimesTV.com has a documentary of the actual pathways of products ending in recycling. They disclose the immense cost in oil, water, and natural resources to return a product to a different but usable form. Items go from originator to manufacturer to re-structurers to processors to store shelves to homes to trash at curb-sites back to sorting, clearing, to new manufacturers, to products to store shelves to the consumer AGAIN...do you think all this trucking and re-processing is cheap? 200 million gallons of water a year is needed to recycle our waste as well as enough oil and natural resources to heat/cool and fuel 500,000 homes and 1,000,000 vehicles a year.

It costs millions of dollars to recycle goods, pick up, sort, and properly allocate. Pick up and transport costs \$200-\$400/ton. Factor in the costs of the containers, crews, and trucks and the expenses continue

to rise. Recycling actually wastes more resources than it recovers or saves, leaving less for future generations.

Governments recap some of the costs by selling off recyclables for reuse or for harvesting the valuable metals in them like gold or silver from our digital wastes.

We sell to other countries and barge our waste to them. Daniel Benjamin, in his book *Recyclable Myths*,



says that "even though pushed and shoved on TV, in the news and schools, recycling makes no more environmental or economic sense now than it did 30 years ago. It renders negligible environmental benefits while generating enormous economic costs." He asks why we are sacrificing so much to achieve so little and that proponents of 'mandatory' recycling need to address this."

Many feel that recycling is better than being buried in waste. We are a modern consumer society where we buy goods without thought of their production or packaging, or end-point. Our excessive, self-indulgent, more-is-better society is now reaping from that lifestyle in the form of its waste, damaging our planet and threatening our existence.

Continued on next page...

Last R...continued

We need to be educated, not in recycling, but in seeing the benefits and sheer necessity of being less wasteful with earth's resources. We need to push our creative and technological limits to develop ways to deal with the by-products of our society at the start, not at the finish. Isn't that called 'sustainable living'?

From here, we MUST include the newest of our recyclables and the challenges that are innate to these..... OUR ELECTRONIC GARBAGE.....It is the fastest growing component of waste. Digital/electronic waste contains plastics, metal alloys, cadmium, polyvinyl chloride, bromine, gold, silver, platinum, and mercury, among many others, oozing out of their pores. Cathode ray tubes contain several pounds of lead alone.

The path of these societal contaminants is overseas...from our digital and electronic collection stations, where we are made to think we are doing something environmentally savvy, to the western ports of Victoria Harbor, from Denver to Washington State to Hong Cong. It is not being processed in state-of-the-art facilities as we are led to believe. Our toxic waste is dumped on poorer countries whose peasants are happy to break down the components in a fuming and acid-aired environment for \$8.00 a day. They live in the acid ash and lead contaminated air and water and food generated from burning off the coatings to free up the small amounts of valuable materials found within....This is RECYCLE's dirty little secret.

These peasants from India, Asia, and Africa live in camps so toxic they rival Cher noble. Guiya-Ou, one camp in China, is a smoldering molten town of electronic waste due to consumers crazed that newer is better and driven every other year to up-date and keep current. We are just crazed masses stampeding to our own oblivion.



We are followed by our mountains of waste without any regard as to where it all will stop.

We dump over 130,000 computers a day, 100M cell phones each year... these peasants live among ashen rivers as they continually vacillate between poverty or poison, as their children become lead poisoned playing among the fumes and ash generated to free up the 'precious' metals imbedded in our waste. Yep,



we've come a loooooong way, Baby !!!!! Maybe the 6th R should be...EXPORT....Don't you think we've feverously danced into our future and now THE JIGG IS UP ?

The caveat in all of this is not the negativity, BUT to see the down side. Realize that recycling begins when the choice is made, when the article is pulled off the shelf or chosen for use. Example ...an old appliance is better recycled than using all the energy old appliances use....well-made articles last longer than the cheap. Use those reusable mugs for water and coffee drinking; use less wasteful products at every choice. RECYCLING should be the very last choice of well-made decisions at point-of-purchase. If that electronic device will serve you for another year or two, stick with it. By then, you could go through three new, updated, now obsolete devices anyway. Live like what you do matters to everyone around you cause, guess what, it does.

What Are CTMN's Up To?

Work Day at Mother Neff

Texas Waterway Cleanup

- Richard McCarthy

In support of the Annual Texas Waterway Cleanup on March 2. Killeen hosted a trash pickup along two miles of Lowe's Boulevard Creek between HEB and Academy Sports.

A total of 221 volunteers filled 113 bags of trash and garbage, about 2000 pounds.

This stream empties into South Nolan Creek which in turn empties into the Leon, which continues to the Brazos then the Gulf. Thus nearly a ton of material will not find its way down stream.

Central Texas Chapter was represented among the many volunteer organizations that participated.

Angler Ed Hours

- Ursula Nanna

We compiled our 2012 CTMN service for Angler Education and the totals are:

20 Events 89 Volunteer totals

58 Activities 540 Hours

2,610 Direct Contacts

MG Spring Plant Sale

-Gail Christian

A booth was set up at the Master Gardener's Spring Plant Sale on March 23rd.



- Yvonne Eele

March 21, Mary Ann, Richard, Marilyn, and Yvonne went out to the Mother Neff State Park work-



day. They found that there are a lot of changes. Some like the new playground at the top of the park are mostly finished although still needing some ongoing work, and other changes, like moving the campground are still works in progress. Anyone who has seen the Superintendents quarters would be surprised at the change.



For the workday we hauled and raked mulch in the playground area. Spreading it out under benches and along a path.

After working up a good sweat we walked down the trail towards some of the old CCC buildings, which is the area that the new campground is going. We saw several Harvester ant colonies.

There is always something needing to be done at Mother Neff State Park. They recently added several acres to the park and still need to do some work before it is opened for public access and as always there is maintenance to be done. Mother Neff State Park is a place that nearly everyone has a memory of, so lets get a good group out for the next workday on April 18 to help this special place.

A Busy First Quarter for Angler Instructors and Volunteers

- Ursula Nanna

Angler Instructors had 5 events from January to February 2013. In March we were invited to teach again at Saegert Elementary's 3rd grade SMART Day. This was an all day event with 15 rotations and we were kept busy and on task.

Kathy Cantu and Ray Machovsky **baited** these youngsters and **lured** them in with fish fins and identification, letting anyone who wanted to, hold a live worm....there were eeeeeeks and squeals from the kids at Kathy and Ray's corner all day. Kathy let



these 3rd graders feel fish teeth and answered all the questions on fins and gills.

As if that weren't enough, Liz Pool and Richard Mc Carthy had all the low-down on life jackets and what to do if someone is drowning, and all the safety gear and why. Richard whistled and the whole room stopped to look as he brought home what a whistle for help can do. Liz skillfully intertwined fishing regulations as she told the kids to NEVER jump in to save someone drowning and gave many other actions that can bring aid.

And over in the corner of the room were Laurie Fitzgerald and Marilyn Whitworth talking 'trash' to these 3rd graders!!!! What debris is and what it does to the environment and what we can do to clean up, even set the awareness threshold high letting the class tell how long "garbage" takes to completely disappear.



It was a very fun day with the school giving us lunch and the Saegert Cloggers dancing while we ate.



Our next event is in Rockdale on Saturday, April 13 from 9 am to 3-is pm. We meet at the Agrilife Bldg. and carpool and catch lunch or a snack on the way home. This event supports our neighboring El Camino Real MN Chapter Nature Festival. It's a fun day and hopefully the wind will behave this year.

June will be the Ft. Hood 4 H in Austin as busses of youth arrive to tie a knot, run a line, and catch a fish. Information to follow.....

Just looking waaaaayyyy ahead, we are invited, again, to Bastrop State Park on July 13 from 8 am to noon-ish. This is a real gem of an experience for Angler Instructors. Billy is asking for our tally of volunteers as soon as possible. Soooo check your calendar and let Ursula know if you'll help.

Other events will be posted as they come up. Please step up and volunteer. It's always a fun time and you DO NOT need to be TPWD certified to volunteer.

Photos by Gail Christian

CTMN's Attend Mittleider Gardening Workshop

- Lyna Pitts and Janis Holmes

Master Naturalists and Master Gardeners and other community people were treated to the Mittleider Gardening course offered at The Vine Church, on 31th Street in Temple, March 5, 2013. It was a great 5 hours for beginning the spring with a very successful way of creating a garden, which could feed a family of four year round. It uses a limited space and limited resources very responsibly. It has also been used in many varied locations around the world and has proven its ability to feed people worldwide.

Our presenters were Mr. Jim Kennard, who has been a part of the organization and method for many decades and David Gillmore, a new person from Houston who has gardened with this method for several months. We were treated to great pictures and information which acquainted us with the method and techniques used to achieve these amazing results. The course was entirely free of charge to the participants. The lecture portion was about 2 hours. We were treated to snacks and a period for asking questions and purchasing supplies and materials before we went outside to a demonstration garden being constructed on the grounds of the church as a public demonstration garden. The exact prescribed methods were then well presented with time to ask questions and get answers. The evening became extremely cool and breezy before sunset. The timing was great for a primer to get going on a garden for the Central Texas area. We were rewarded with web sites which are available to carry us along on the continuum of producing. Food For Everyone Foundation, 1-888-548-4449, or www.growfood.com or David Gillmore, Cell:281-898-8989 and LDSPrepper@gmail.com and [YouTube.com/LDSPrepper](https://www.youtube.com/LDSPrepper). I have personally checked these internet sites and they are filled with constructive information. We all have various need for good information which will help with our own particular environment. I will be applying many of these ideas to my garden and will enjoy sharing with any and all of you. There seems to be no doubt that Jim Kennard conveyed the truth



that Mittleider Gardening Method consistently produces greater yields of vegetables. The truth was in examples shown of gardens around the world. One of the most appealing aspects was the efficient use of water, especially interesting in our hot, dry climate. For those of us with existing partially planted and growing gardens it seemed prudent to just adapt as much of the methods as we can. The choice I made was to reconfigure my existing beds for each row to have two outside ridges as demonstrated and to use the recommended fertilizers.

Grow boxes and the irrigation system are worthy goals for the future.

From Mona Weathers at
www.healthyhomesteading.com

What is the Mittleider Method of Gardening?

I urge you to go to directly to the [Food For Everyone](#)



Continued on next page...

Mittleider Method...continued

website to read about Dr. Mittleider himself. Dr. Mittleider was passionate about teaching people how to grow their own food and had many accomplishments while he was still alive. The Mittleider Method of gardening is different in several ways from conventional gardening but I want to share the top 5 differences that sparked my interest. I actually did not use the Mittleider method last year and I'm really sorry I didn't. The garden harvest from 2011 when I used it was so much better than last year, when the melons were smaller, the tomatoes were not as flavorful and I had a lot less winter squash. I will be going back to the Mittleider method this year.



5 Mittleider Method Techniques That Changed The Way I Garden

1. **Feeding Plants-** Dr. Mittleider found for plants to thrive they need 16 essential plant nutrients. By providing plants with the 16 nutrients plants are healthier and full of nutrients we can consume. The 16 nutrients include 3 airborne elements -Carbon, Hydrogen and Oxygen. The other 13 include nitrogen, phosphorus, potassium (NPK). The other ten include calcium, magnesium, sulfur and 7 trace elements. This plant formula is fed in small amounts to the plants on a weekly basis over a period of the growth of the plants.
2. **The Soil** -The condition of the soil is not as vital when using the Mittleider Method. It is important to have well draining amended soil but you can still plant successfully in many different soil types. According to Dr. Mittleider and his method, plants can grow in virtually any soil as long as the plants are given the essential nutrients. It is however important to create soil beds or grow boxes that have the soil evenly distributed for proper water

3. **Plant Spacing** – With the Mittleider Method seeds and seedlings can be spaced a lot closer together than traditional methods recommend.



4. **Watering** – One of the mistakes I have been making with my garden over the past few years is the methods I use for watering. I usually use drip systems and/or an oscillating sprinkler. Dr. Mittleider did not recommend these type of watering because it is wasteful and not as affective. Watering with a PVC pipe with small holes drilled into them and placed down the center of wide isles is the

best way to water, according to Dr. Mittleider.



5. **Pruning** - Apparently there are many vegetable plants that can be pruned. I was familiar with pruning tomatoes but didn't realize cucumber, squash and melon plants can be pruned as well. Pruning these plants can be done because of the vertical growing method. Pruning is important because it allows the growth of large fruit instead of

many small fruits. And because plant spacing is closer you can still get the same size harvest but with larger fruit.

Photos by Linda Mahaffey

INTRODUCTION TO WATER

- Richard McCarthy

Richard McCarthy and Marilyn Whitworth presented a Power Point presentation at the Gateway Middle School in Killeen on March 20.

The presentation provided the 6th and 7th grade students with a description of water, distribution of the earth's water, the water cycle watersheds and aquifers.

Pollution was discussed in detail with forms and observable signs of pollution, point and nonpoint pollution highly illustrated.

Details of how fresh water and waste water are handled in an urban setting. The processes that each went through before returning to the water cycle.

Information on how the students can help conserve water and reduce pollution was provided. The students actively participated with questions and answered questions throughout the presentation.

Handouts for the water cycle and water conservation were provided by the "Clearwater Underground Water Preservation District".



Trout Drop in Nolan Creek

- Ursula Nanna

CTMN Angler Instructors Don Wyatt, Ursula Nanna, Liz Pool, Laurie Fitzgerald and CTMN volunteer Shirley Watts shared Angler information with both youth and adults at the Nolan Creek Trout Drop on 2-15-13. Although public attendance was sparse, the kids enjoyed seeing the trout Don collects in an ice chest for the kids to see. They squeal and laugh and try to touch the fish.

Laurie's inaugural introduction was as she became Freddie the Fish asking kids if they 'want to feel my teeth?'. One of the most asked questions is 'do fish

have teeth?' so we provide that answer with Freddie and his very special dentures!!!

Shirley is getting very familiar with several docks as she explains the trout to the youth and shows off the fine harvest of worms.

We shared the joy of little Rutha catching Moby Dick and Don showed Lilly how to cast.



Photos by Gail Christian

Announcing CTMN Awards and Certifications

- Zoe Rascoe



Clockwise from above: Zoe Rascoe receives her Golden 1000 Hour Milestone Dragonfly and a bouquet of flowers! Linda Young receives her Golden 1000 Hour Milestone Dragonfly Pin and a bouquet of flowers!; Linda Mahaffey receives her Bronze 250 Hour Milestone Pin; Jerry Lewis receives his Bronze 250 Hour Milestone Pin; Rehanon Pampell (and Seda) receives her 2012 Certification; Shirley Watts receives her 2012 Certification; Sandy Summers completes her Certification; Ray Hughes completes his Certification.



Big Crowd for 2013 CTMN Class Orientation!



Photos by Zoe Rascoe

Announcements

CTMN Chapter Needs Mentors

- **Mary Ann Everett**

Primary Responsibilities of Mentors:

Provide encouragement

Help new member discover areas of interest and how their talents and skills can be used.

Mentors are to enable and encourage student to want to become more involved.

Duties:

Get to know student's or students interests and background.

Do they have any questions before class starts?

Make sure phone numbers of students are correct, and that the students can reach you as well.

Encourage them to call you about any questions they may have about classes, trips, etc.

Come to orientation and as many classes as possible.

Contact student during training to see how things are going.

Help guide students to volunteer opportunities and advanced training that match their interests or to develop an area of interest.

Encourage student to attend the Chapter meetings.

After class ends, follow up with student, until they are either certified, there is no further interest in the Chapter or a year after they complete training. **V**

Advanced Stream Team Training

- **Richard McCarthy**

SAVE THE DATE: **August 31,2013.**

Advanced Stream Team Training will be conducted at the Waco Wetlands, 1752, Eichelberger Crossing,

Waco TX. Time and agenda will be provided at a later date.

All Volunteer Water Monitors that are CURRENTLY reporting results are invited to attend.

Please pre-register by E-Mailing the Training Coordinator listed below.

Additional information will be provided as it develops.

Looking forward to an exciting class.

Thanks.

Richard G. McCarthy

Training Coordinator

rgm3372010@live.com

(254)554-9979 **AT**

Waco Wetlands Needs Volunteers

- **Zoe Rascoe**

Hello Master Naturalists!

If you enjoy working at the Waco Wetlands, like teaching kids, enjoy the delicate balance of aquatic ecosystems, or just need volunteer hours - here's something to consider!

Waco Wetlands has lots of school kiddos come through in the spring and can always use help of any kind. Note that Temple, Killeen and Westphalia are among those heading north.

If you are interested, please just call or email Nora Schell at the Wetlands. These events are already approved for Volunteer Service Hours. Please consider helping our partners. **V**

V Approved for Volunteer Hours
AT Approved for Advanced Training
MA Must Apply for approval of hours

Announcements

Work at Salado Sculpture Garden

- **Becky Denton**

Regular gardening time is here again for the Salado Sculpture Garden every 1st Monday. On **April 1st and May 6th** we'll begin at **9am**.

Please come if you would enjoy digging and fellowship while earning volunteer hours. Any questions contact Becky at 718-5374 or bekydenton@embarqmail.com. **V**

Hike and Bike Clean Up

- **Lynn Fleming**

Reminder- **April 8, 0800 hrs** is trail clean up day for the Andy K Wells Hike and Bike Trail.

This is part of Killeen's annual cleanup effort. So let's have a good turnout in support.

Meet at the Community Park parking lot between W.S. Young Bridge and the Ball Fields.

Trash bags will be provided. Richard McCarthy is the spearhead for this event.

Hope that you all have a safe and happy Easter! **V**

April General Meeting

- **Zoe Rascoe**

April 9, 6 pm at Belton Church of Christ, we have Jeff Goodwin, State Plant Materials Specialist from the USDA – Natural Resource Conservation Service speaking on NRCS Plant Materials Program. **AT**

This and That

For weekly new class information, go to:<http://txmn.org/centraltexas/weekly-class-info-2/>

MN, Linda Mahaffey says to check out the April Texas Parks and Wildlife article on Master Naturalists, "Nurturing Nature" at www.tpwmagazine.com

Wildflower Center Lecture

Native Plant Conservation, Habitat Restoration and Pollinator Recovery

Gary Nabhan

Wednesday, April 3, 7:30 to 8:30 p.m.

Gary Nabhan, a MacArthur genius award winner, nature writer and food movement pioneer, will speak on native plant conservation, habitat restoration and pollinator recovery at the Wildflower Center auditorium. Nabhan will discuss how native plant conservation and habitat restoration aid the pollinators necessary for plant survival. This is the first of two lectures sponsored by the Jean Andrews Visiting Professorship in Tropical and Economic Botany. Nabhan's talk will be preceded by a 6:30 p.m. reception in the Visitors Gallery. The public is invited and it is free of charge. **MA**

Mother Neff Work Day

- **Yvonne Eele**

April 18, 9:00 am at Mother Neff:

The Mother Neff State Park work day will be the third Thursday of each month. So for April mark your calendars for April 18. March 21 we spent the morning raking mulch on the playground area at the top of the park. It doesn't matter if you are only available for the morning, afternoon, a few hours or all day we would like a large turnout. There are many things they need done from lopping branches on trails to much heavier work. If you come on out we will find a job within your abilities and interests. The Work day will start at 9:00 am. Bring gloves, water, hat, sunscreen and appropriate dress. If you know ahead of time that you will be coming out please let me know at yeele@ymail.com.

Thank You **V**

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Newsletter Mission Statement

"Our mission is to inform and educate Master Naturalist members and the general public about our local environment and resources, and what we, as caretakers, can do to protect them."

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Please send any news of events, articles or photos of what you're doing or what's going on in your yard or area to:

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