

The Midden

October 2008

Winds of Change and Setting Directions by Sara Snell, President GBAC-TMN

When I first took office my first article was about Winds of Change and the last 3 years continued with Setting Directions using goal setting by committees to stay focused on preservation, restoration and education. Our Advanced Training Committee and our Stewardship Team out performed with outstanding education for our chapter and preservation/restoration efforts from Sheldon Lake to Anahuac and many points in between. Our Community Outreach efforts continue with booth presence, speaker presentations, newspaper articles, a chapter brochure and participation in activities with several of our partners. You can't have all of the above without our Spirit team – those folks who always make sure there is FOOD, FUN, AND FRIENDSHIP.

We started the journey to transition to the State By-Laws and to update our Chapter Operating Handbook. The ad-hoc committee did an outstanding job working with the State Program Coordinator and the Board, and at the August 7 chapter meeting, both documents were approved by a quorum of the membership. The new Board structure will become effective 1/1/09.

Our chapter is now embarking on a more formal approach to our Education Outreach efforts. We will be challenged to expand the Bay Adventures program, Jr. Naturalist program, Treasures of the Bay Teachers' Workshop and Camp Wild. Look for more to come on this committee.

Be thinking of how you can help with the many initiatives our chapter sponsors, whether it is with a committee, the board, with food, putting together materials, being a helping hand – the list is endless - there is always something to do.

So as the year ends there are new beginnings. Thank you all for your support these last three years, I look forward to seeing you in the marsh, on the beach, on the prairie or wherever our activities may take us.

Sara

It is not the force of the gale, but the set of the sail that determines the way we go. (Ron Hutchcraft, The Five Needs Your Child Must Have Met at Home)

Inside This Issue:	Page
AT/ Stewardship/Volunteer Opportunities	2
Prairie Ponderings/ Wetland Wanderings	3
In Memorial to John Thayer.....	4
Naturalist Spotlight of the Month.....	5
A Prairie Burn: New life from death	6
Green Corner	7
Freshwater PONDerings	8-9
Botanical Latin	10-11
Guppies from Julie.....	12

See
Freshwater
PONDerings,
page 8-9



October-November

ADVANCED TRAINING OPPORTUNITIES

by Shirley Foster, AT Chairperson

Prairie Autumn Amble

Thursday, October 9, 2008

Auditorium/Prairie Platform

Armand Bayou Nature Center

9 AM until Noon 3 Hours AT

During the prime time of autumn, participate in a workshop learning the common plants of the most endangered North American Ecosystem, the Coastal Tallgrass Prairies. Classroom specimens will be examined and the Demonstration Prairie Garden and Prairie Education Trail will be used to bring a hands-on experience to the participants. Handouts and booklets will be given demonstrating the common plants, grasses and forbs, in bloom during October. Dick Benoit, Tom Solomon, and Ellen Gerloff will lead this workshop for three hours of advanced training. The workshop will be limited to 40 participants, so come enjoy and reconnect with the prairie.

For more information contact Dick Benoit RBenoitTex@aol.com Register with TXDODD@aol.com

Texas Master Naturalist State Meeting

Oct. 24th – 26th Mo Ranch in Hunt, Texas

TMNS GO BATTY

Saturday November 15, 2008

Armand Bayou Nature Center

9 AM - 1 PM 4 hours AT

Just how much do you know about those flying mammals with hair? Diana Foss of TPWD will educate us about these often maligned nocturnal creatures. She will emphasize our local species and talk about their food, habitats and habits. Buffalo Bayou Partnership will send representatives to tell us about a new volunteer opportunity in Houston and Nathan Veatch will guide us in some very interesting activities.

This will be the last Chapter Advanced Training Opportunity of 2008 and enrollment will be limited to 50 so do register early with Emmeline Dodd at TXDODD@aol.com

For more information contact Project Leader Sara Snell at snellsw@verizon.net

STEWARDSHIP OPPORTUNITIES

by Dick Benoit, Stewardship Chairperson

Fall Projects of the Month

October Project of the Month

Horseshoe Marsh Work Restoration VIII

Tuesday, October 14, 2008 9 AM - Noon

Restore developing wildlife habitat along old railroad right-of-way

Prairie Pandemonium at ABNC

Saturday, Oct. 18th 9 AM – Noon

2nd Annual Restoration of Prairie – Details later.

Contact Dick Benoit RBenoitTEX@aol.com

TCPP Harvest

Oct. 21st 9- Noon

Plant seeds gathered from the preserve and sprouted by Terri O'Connell at Moody Gardens.

November Project of the Month

Prairie Pandemonium at TCPP

Nov 1st 9-Noon

For details contact mbarnold1@aol.com

Prairie Pandemonium at Sheldon State Park

Saturday, Nov. 8th 9 AM – Noon

First Annual Restoration of Prairie – includes planting 2000 well-developed prairie grasses.

Contact Jim Duron wishkad@yahoo.com

Anahauc National Wildlife Refuge Butterfly Garden Maintenance VI

Thursday, November 13, 2008 9 AM - Noon

Put the Gulf Fritillary Butterfly Garden to bed for the winter

Ongoing activities:

Mondays - **Reitan Point**, second and fourth, Contact Liz Gimmler gimmler@consolidated.net

Tuesdays - **Texas City Prairie Preserve**, Contact Marybeth Arnold mbarnold@aol.com

Wednesdays - **Wetland Restoration Team**, Contact Marissa Sipocz m-sipocz@tamu.edu

Fridays – **Sundance Garden**, Contact Trudy Belz trudybelz@aol.com

Prairie Friday, ABNC- Dick Benoit RBenoitTEX@aol.com 9AM – Noon

PRAIRIE by Dick Benoit

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We have a dream: We have a plan.

The Prairie Restoration Team has a dream of restoring in the Galveston Bay Area, as best as they are able, to resemble as close as possible the coastal tall grass prairies as they might have evolved naturally. This entails rescuing native prairie plants, collecting seeds from native plants that have the diversity necessary for successional systems, and growing and replanting these plants in areas that will serve as natural museums.

The plan in effect for the past year has been evolving at Texas City Prairie Preserve, Armand Bayou Nature Center, Sheldon State Park, Reitan Point, and to some extent at Carbide Park. The plan has been implemented by dedicated workers at each site. Moody Gardens, Scenic Galveston, Agrilife Extension, Texas Parks and Wildlife, Armand Bayou Nature Center, and the Nature Conservatory all have also contributed with support to make the plan succeed. This year over 7,000 one-gallon pots have had prairie plants growing in them with about 5,000 placed in prairies. Also almost another 5,000 plants may be placed in prairie this calendar year. A rule of thumb is plants placed at 5-foot centers need about 1,000 plants to cover an acre, this does not have the diversity necessary for a completed prairie planting, but it is a start.

If you have the desire and time this fall, check out one of the prairie plantings going on at one of the sites above and dig it.

WETLAND by Diane Humes

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The Wetland Restoration Team has spent the dog days of summer in the classroom. Beginning on August 6, wetland enthusiasts gathered at the Dickinson Extension office on Wetland Wednesdays for indoctrination into the ways of the Team. After an overview of past, present, and future projects by Marissa Sipocz, the Team dived into Wetland Plant Identification classes conducted either by Marissa or Andy Sipocz.

The Team works to plant a diverse assemblage of species that fill the niche between open water and dry land. Plants are chosen for their hardiness, beauty, habitat tolerances, palatability (or lack thereof), and, sometimes, rarity. Class attendees received a wetland plant identification notebook for further study and a pocket flipbook for quick field ID. After our Wednesdays of “botanizing,” the class will be ready to don boots and find some mud!

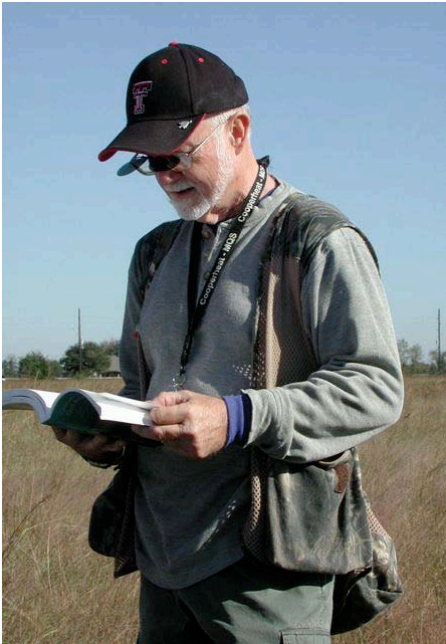
Exciting news for future wetland work – projects in the planning stages include Dickinson Bayou, Buffalo Bayou Nature Park, and two new phases at Sheldon Lake State Park – more than 120 acres of restored wetlands! Stay tuned for further details.



In Memorial to John Thayer

Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree. Martin Luther

It is with great sadness that we announce the death of John Thayer. John, a Master Naturalist from The Cradle of Texas Chapter, passed away this past month due to heart problems.



John had been a volunteer of Armand Bayou Nature Center's Prairie Friday Team for the past six years as well as a member of the Wetland Restoration Team. John traveled the hour and a half to be a part of teams. He was a lively member that enjoyed prairies and transects as well as wading in the wetlands. Thank you John for your dedication and wit. *By Dick Benoit*



A dedicated Wetland Restoration Team member since 2003, John assisted in the creation of the Sheldon Lake State Park wetlands, Sims Nature Center, and Mason Park. He was also an enthusiastic Prairie Friday volunteer – especially transects – and active in preserving habitat in and around Lake Jackson. John loved the Detroit Red Wings, “B’wood” football games, his children Kara and Scott, Kay, and the prairie. We will miss John. *By Diane Humes*



Naturalist Spotlight of the Month

Diane Humes “Star Bright”

by Irene Yodzis and Mary Vogas



Although she was born in California and lived in San Antonio and Germany, most of Diane Humes’ childhood was spent near Lansing, Michigan, an area she fondly remembers.

Active in the Brownies and Girl Scouts, she spent two summers camping. Bike riding and ice skating were part of her childhood activities and much time was spent canoeing most of the rivers in the area and visiting the beaches of Lake Michigan. While she was in high school, she went canoeing in the area and the canoe tipped into the cold October waters. She vividly remembers this incident. She enjoyed reading many nature books and was especially interested in astronomy. When she grew up, she wanted to be President!



She obtained her Bachelor’s degree in Botany and Zoology and her Master’s degree in Biology from the University of Michigan in Ann Arbor. After graduation, she did DNA clinical research. If anyone has a burning desire to know the difference between male and female fruit flies, Diane will be able to help. At the University of Michigan hospital, she worked in the Arthritis lab and did patient related immunology research.

She married a geologist and they moved to Tucson, Arizona. She worked at the University Hospital doing immunology research. After having her first child (she has two sons) she stopped working. They next moved to Boston, Massachusetts where her husband was a university professor. In 1991, her husband took a job with the Johnson Space Center and they moved to the Clear Lake area.



Diane became active in many groups including the PTA, garden clubs and her children’s scout group and swim team. She started the Ed White Elementary school outdoor habitat. Also, she is on her homeowner’s board and in charge of the swimming pool.

Becoming a Master Naturalist was another achievement and she is now a big part of the wetland restoration team. She also does water testing, writes articles for *The Midden* and participates in prairie Friday. She has set up a planetarium in schools in the area and taught astronomy to the students.



Many of her favorite books are nonfiction and about nature. Two of her recent favorites are *The World Without Us* by Alan Weisman and *The Song of the Albatross* by Carl Safina.

Arizona stands out as an enjoyable place that she visited because of its fabulous birds and scenery. While there, she was delighted to see a Gila monster.

Diane wears many hats. Though she participates in many nature activities, she still finds time to make soups and bread - from scratch.

A Prairie Burn: New life from death

photos and article by Steve Alexander

Our human perception of fire is contained in the familiar words of Smokey the Bear, “Only you can prevent forest fires.” Smokey’s words, spoken in ads decades ago, still remind us that fire is harmful to human lives and property.

In the natural world, fire also burns and consumes everything in its path. But in systems like forests and grasslands, this is a process that is essential to maintain ecosystem health. In these systems, fire kills accumulated dead plant material and plant overgrowth and in doing so, enriches the soil with nutrients which support a new generation of plant life.



This role of fire in grasslands was recently observed at Galveston Island State Park where a controlled burn on July 30 and 31 burned over 650 acres of coastal prairie on the north side of FM 3005. These prairie areas had not been burned in many years and had become thickly overgrown by *Baccharis*, an extremely invasive bush. Through overgrowth and shading, *Baccharis* had replaced many of the native prairie grasses (see photo at left).

The fire burned *Baccharis* and all other plants, producing a charred, barren landscape, a picture of blackened death (see photo below right).

The fire killed both the upper and lower (root) portions of *Baccharis*, but killed only the upper portions of grasses.

Since grass roots were unharmed by the fire, within days there were green shoots several inches tall pushing upward through the blackened earth. Three weeks after the fire, prairies were covered with a continuous coating of green grass leaves (see photo below).

In the absence of *Baccharis*, grasses will continue to grow upwards. For many years, the sight of their slender leaves waving in gulf breezes will remind us that this is a coastal prairie.



But *Baccharis* is not gone forever; it will return. Its seeds will be carried here on the wind and will be deposited in the soil. The seeds will germinate and over the years will grow from small to tall bushes. Eventually, *Baccharis* will once again dominate the landscape, overgrowing and shading the grasses. Nothing will stop this natural progression in prairie grasslands, except fire. If these areas are to remain prairie for many years to come, fire will have to return again and again.

Green Corner

by Verva Densmore

An August 4, 2008 *Houston Chronicle* headline read: “Federal and State agencies must find ways to control fertilizer runoff feeding Gulf of Mexico’s dead zone.” Environmentalists have been concerned for years, but somehow the Gulf’s health didn’t catch the attention of most main stream media until recently. The dead zone is finally front page news.

What is our responsibility to the Gulf? How can we make it healthier? Legislation is slow and dependent on political winds. So what can WE do? Reducing runoff pollution is one important effort that we each can perform, at home, in our own yards. Here are some ways that we can do it:

- Use fertilizers sparingly and use organic, slow release when possible. The benefits are to your plants and to the Gulf. A small but steady supply of nitrogen will be available to your plants all season long. Since the amount of nitrogen available at any one time is small, the risk of leaching is also relatively small; less nitrogen will be leached into the ground water and ultimately the Gulf. That makes these fertilizers more environmentally friendly. Of course NO fertilizer would be the most environmentally friendly.
- Control yard pests and weeds naturally whenever possible. There are excellent suggestions for how to do this at:
 - <http://www.dirtdoctor.com/newhome.php> and
 - <http://organiclifestyles.tamu.edu/>
- Use porous compounds like bricks, flagstone, sand, and gravel rather than concrete for your next patio or driveway to reduce runoff that ends up in our waterways.
- Leave grass clippings on the lawn. This will return valuable nutrients to the soil and reduce your need for water and fertilizers.
- Replace lawn areas with planting beds and select non-invasive plants. Native plants thrive in our clay soils, use less water, and reduce runoff while providing food and habitat for birds, butterflies, and other beneficial insects.
- Direct roof run-off from gutters to slow release hoses in the garden or lawn, or collect the water for use during dry weather.
- Don’t forget to check out the plethora of wonderful Water Smart advice at <http://www.watersmart.cc/> that’s been provided by Chris La Chance and her water smart team.



Each of us can make a little difference in making the Gulf healthy again. Together we can make a big difference. And please remember that, as William Johnson said, "Knowledge not shared is knowledge lost."

Freshwater Ponderings

by Diane Olsen, Photos by Mel Measeles

An interesting day was spent at Armand Bayou Nature Center exploring the various freshwater ponds and discovering the plants and animals that inhabit them. After a quick introduction and some instruction on where to go, the class was broken into groups and away they went. Five stations were set up to explore the different aspects of why ponds are unique and exciting ecosystems, each designed to study a certain aspect of pond life in an interactive 45 minute session.



Dick Benoit and Ellen Gerloff taught eager participants all about the plant life that resides in a pond. Dick again shared his love of plants and taught how these plants are part of the foundation of a pond. Whether they live in the water or around the edges, plants form an important basis of the ecosystem. By providing habitat, food, or nutrients, plants are where it's at.



The Pond Probing of May's Pond was facilitated by Nathan Veatch and Vic Madamba. The Master Naturalists spent their 45 minutes on the pond collecting data in a variety of ways: catching fish with a cane pole or dip net, canoeing to measure water depth and clarity, and using a grab sampler to examine the contents of the mud. Not only were certain organisms collected, but the techniques of data collection were also experienced.



The food chain of the pond was revealed by the end of the day by the collection of water plants, crayfish, grass shrimp, a pond mussel, mosquito fish, and the most enjoyed catch, the bluegill sunfish. The highest level of the food chain, the wily large mouth bass, swam by but would not take the bait, delectable wiener chunks. Also viewed and examined closely were the red eared sliders. Although snakes and alligators have been seen in

this pond, none were seen on this day.





However, at the Boardwalk pond, an alligator and turtles were sunning and frogs were calling which was perfect for the station about reptiles and amphibians. Shane Ferguson and Diane Olsen utilized live specimens including a very cooperative young alligator to talk about the importance that alligators, snakes, frogs and turtles play in the pond ecosystem.



The best stations, by virtue of being inside for a very warm day, were those taught by Dr. Steve Alexander and Emmeline Dodd. Emmeline and Steve helped participants view microscopic life and found a plethora for participants to observe under the microscope. Copepods, diatoms, dragonfly nymphs, water fleas and even mosquito larvae were just some of what they found. Everyone was amazed at what they saw.



The setting was hot and humid, but that didn't deter this intrepid group from getting all that they could out of the class. The pond life abounded and the Master Naturalists did their best to see it all. No one who participated will look at ponds the same way again.

BOTANICAL LATIN

by Diane Humes

Latin is a language, at least it used to be –First it killed the Romans, and now it's killing me.

Of course, the Romans are not really dead – today they are Italians and speak Italian. Classical Latin, spoken and written in the times of Julius Caesar, is studied as an ancient language, and is the basis for an international botanical language. Surprisingly many plant names have come to us straight from classical Rome; after all, the Romans were farmers and knew their herbs and flowers. From them we get flower names - *Achillea*, *Cassia*, *Daphne*, *Gladiolus*, *Narcissus*, *Solanum*, *Viola* and tree names - *Alnus*, *Arbutus*, *Buxus*, *Carpinus*, *Cedrus*, *Cissus*, *Cornus*, *Cupressus*, *Crataegus*, *Elaeagnus*, *Fagus*, *Ficus*, *Fraxinus*, *Juniperus*, *Malus*, *Morus*, *Pinus*, *Platanus*, *Prunus*, *Pyrus*, *Ulmus*.

Classical Latin has quite a different structure from English – grammarians say it is highly inflected, meaning that each root word takes a different ending depending on its part of speech within the sentence. English is dependent on word order to convey meaning. “A great wolf ate a purple cow” changes a lot when the subject and direct object change position in the sentence, “A purple cow ate a great wolf.” But Latin reads, “*Lupus magnus vaccam purpuream edivit*,” and “*Lupum magnum vacca purpurea edivit*,” with the verb placed at the end of the sentence.

Also unlike English, Latin nouns have gender (masculine, feminine, neuter) and five cases defining the parts of speech. With five different classes of nouns and exceptions to every rule and adjectives that must agree with their nouns in gender, number, and case, there are LOTS of endings to learn. All of these rules get worked into creating an official name for a plant that may have many or no common names.

The Swedish botanist Carl von Linné (1707-1778), or Carolus Linnaeus, organized the system for classification of plants and animals and developed the binomial nomenclature system whereby each living thing has a unique name, written in Latin,

consisting of the genus and species designation. In Linnaeus' time, Latin was the language of learned men, the *lingua franca* of science and philosophy; educated Europeans, at least, were expected to be able to write and speak Latin to communicate with others, no matter their native language.

Linnaeus set down a list of rules for naming plants. This was essential, because explorers and botanists kept discovering plants from around the world that were new to science and needed names. Linnaeus preferred the genus name to be substantive, meaning a noun or name, and the species epithet to be descriptive. He thought the names should be pleasing aesthetically, easy to pronounce, and short enough for a naturalist to remember. Thankfully, he disallowed *Hypophyllocarpodendron* and shortened *Anapodophyllum* to *Podophyllum*. Linnaeus preferred names from classical Latin or Greek sources; the International Code of Botanical Nomenclature now says that names may come from any source whatsoever or may even be composed arbitrarily.

Genus and species names follow Latin grammar rules, as much as possible, even when the names are non-Latin words. Names ending in *-a* are usually feminine, *-us* or *-is* usually masculine, and *-um* are neuter. A species epithet may be a descriptive adjective such as “blue” and must agree in gender and number with its genus name, as in *Aquilegia caerulea*, *Calochortus caeruleus*, and *Androstephium caeruleum*.

However, many trees are considered feminine, so white oak is *Quercus alba* and red mulberry is *Morus rubra*.

Many times the name honors a botanist or the place of discovery. Species epithets named for people or places are often in possessive form and have endings of *-ae* or *-ii*. The borrowed Greek words add another layer of complexity, but the bottom



line is how to spell and pronounce all those foreign words!

Spelling is an individual art, but pronunciation is learned. In Latin all vowels are pronounced, but it really matters very little how to pronounce Latin names: people tend to pronounce them according to the rules of their own language and how they were taught. Since about 80% of generic names and 30% of species epithets are now derived from languages other than Latin or Greek, the best rule is to pronounce a species name as closely as possible to its original name, but with a Latin ending. *Fine Gardening* magazine has an audio feature to aid in pronunciation of plant species names used in its articles at:

<http://www.taunton.com/finegardening/>.

Many early Texas explorer-botanists are immortalized in plant names, including:

Jean Louis Berlandier –

Berlandiera (greeneyes)

Thomas Drummond –

Phlox drummondii

(Drummond phlox)

Melina Conkling Leavenworth –

Carex leavenworthii

(Leavenworth's caric sedge)

Ferdinand Jakob Lindheimer –

Lindheimera texana

(Lindheimer's daisy)

Ferdinand Roemer –

Phlox roemeriana (gold-eye phlox),

Salvia roemeriana (cedar sage)

Charles Wright –

Datura wrightii (angel trumpet)

Elihu Hall -

Schoenoplectus hallii (Hall's bulrush)

The rules of botanical nomenclature require each species to have a description of its type specimen written in Latin. The terminology was largely invented to create the highest order of precision. Initially Latin words were used, but if a Latin word did not exist, most often a Greek one was borrowed and given Latin endings. This created an international language - Botanical Latin. Fortunately, only specialized taxonomists are required to read the Latin texts, but the

terminology of plant keys is based on the species description, giving us such terms to learn as **apetalous** (flowers without petals) or **xerophytic** (plant adapted to dry locations).

The terms seem difficult, but are not impossible. Since over half of English words derive from Latin roots, a lot of botanical lingo will be decipherable, as will scientific names. Don't give up; sound it out and do your best, because, as Dr. Barron Rector, Texas A & M, is fond of saying, **"If you can't name it, you don't know it."** Of course, Dr. Warren Wagner, University of Michigan, added, **"If you can't kill it, you don't know it!"**

Illegitimi non carborundum!!



Kingdom – *Plantae*

Subkingdom – *Tracheobionta* – Vascular plants

Superdivision – *Spermatophyta* – Seed plants

Division – *Magnoliophyta*

Class – *Magnoliopsida* – dicotyledons

Subclass – *Rosidae*

Order – *Rosales*

Family – *Rosaceae* – rose family

Genus – *Rubus* L. - blackberry
(described by Linnaeus)

Species – *Rubus trivialis* Michx. –
southern dewberry (described by
Andre Michaux, 1746-1802)

Guppies from Julie

by Julie Massey

Where can you roast marshmallows and sing songs around a campfire, enjoy starry nights, learn about our state's resources and make new friends? The State Master Naturalist Conference, of course!



The State Master Naturalist Conference will be held at the Mo Ranch near Hunt, Texas, from October 24-26, 2008. Make plans to join us and meet Master Naturalists from across the state! Watch your emails for registration information!

Plans for the Spring 2009 Class are Underway!

I know it seems like a long time from now, but the Spring 2009 Class will be here before we know it! The class starts in mid-February.

Help spread the word about the new class! Potential class members can contact me at 281-534-3413, Ext. 2, 2 or by email at jmassey@ag.tamu.edu.

The Training Class Steering Committee will be working on new ideas for the class! If you would like to volunteer, please drop me a note or give me a call!

Have a terrific fall! Julie



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Texas AgriLife Extension Service programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Court of Texas cooperating.

The Midden

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