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Natural Resources Conservation Service

Helping People Help The Land

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The Reverchon Naturalist

Recognizing the work of French botanist Julien Reverchon, who began collecting throughout the North-Central Texas area in 1876, and all the botanists/naturalists who have followed ...

Tribute to Randy Henry; Friend, Editor, American

Story by Ricky Linex
NRCS Wildlife Biologist
Weatherford, Texas

For those of you outside of the NRCS family, it is with the greatest sadness that I report the passing of Randall Henry, NRCS Zone 5 Public Affairs Specialist in Weatherford, Texas. Randy passed away unexpectedly on May 22, 2013. Randy was born in Chicago, Il., on April 30, 1956. He served in the U.S. Army and the Air Force Reserves. Randy was a good friend, co-worker, and served as co-editor of the Reverchon Naturalist in addition to his other duties as zone public affairs specialist. Randy labored behind the scenes on the Reverchon Naturalist and did not desire any attention be directed his way over the quality or popularity of this newsletter. I must say that credit for the quality of the layout for each of the first twenty issues was due totally to Randy's efforts. My initial idea of an online newsletter was to insert photos of plants and other interesting flora and fauna into a Microsoft Word document and share it with people. After discussing this idea with Randy he said we could do so much better and he proved it could be so much more than I ever envisioned. Randy completed the layout for each issue, always prodding for good content. He had a feeling for what would work and we ran several issues with Botanical Glossary Six Packs to explain the parts and pieces of flowers, roots and leaves. Randy was patient with me while I experimented with camera settings to get the best photo of the Wooden Nickel Quizzes that ran in several issues. He had approached me earlier this year that with three years of newsletters behind us we needed to update it a bit, sadly we never got around to finishing that conversation but any future updates or tweaks to the Reverchon will have a thought directed toward Randy and his vision.

Another example of Randy's dedication to conservation education and friendship involves a yet to be printed plant book. Since 2007 I have been taking photos of plants in north central Texas to be included in "Range Plants of North Central Texas." In December of 2011, I completed the text for the 324 plants and had thought assistance in doing the layout for the book was available from our state office. However, circumstances had changed and I was left without anyone to begin the layout of text and three to five photographs per plant. Randy immediately

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See You Down the Road

By Ricky Linex
NRCS Wildlife Biologist
Weatherford, Texas

Pastures Still Looking Rough

Depending upon where you are in north central Texas your pastures may be as green and lush as those along the Red River, or at least those from Montague County eastward to Fannin County. I spent a week along the Red River in late May and the plants were so green it would almost make you squint a bit against the dark color of forage waiting to be consumed. Contrast that to the late June photo shown top left in the area between Abilene and Vernon and some pastures are still dealing with drought and lack of foliage due to heavy grazing. It does not make economic nor ecological sense to be feeding hay to livestock in the middle of the summer yet many still put out the round bales every day or two.

Dale Rollins, Extension Wildlife Specialist, often touts the invention of the Vermeer round hay baler in 1971 as a paradigm shift in agriculture. This invention of the One-Man Hay System truly revolutionized how hay was baled and stored. Now with the hydraulic spear mounted on the back of a pickup or tractor one man can literally feed hundreds of head of livestock with out the manual labor involved in loading, hauling and distributing the smaller square bales. Perhaps this paradigm shift has caused a change in mindset of those who want to hold onto those animals "until it rains." Land that has lost it growing plants and litter cover cannot intercept the raindrops, slow them down and allow more of the precious liquid to soak into the soil ensuring future growth. Runoff increases as well as increase in loss of topsoil. Daytime temperatures on these barren soils can exceed 135º F. Grazing in itself is not the problem since grasses are adapted to having some growth removed. Stocking rate and how the land is managed determines what the land will look like. Though separated by perhaps 80 miles as the crow flies these two photos paint a clear picture of what man's influence on the land has become. I have often thought that if the landowner from 1880 could come back and see the same land today they would not recognize it. Their first words would likely be "Where are the grasses that used to be stirrup high to my horse and where did all of this brush come from?" Every generation of rancher may sees a slightly lower quality of native grasses present on the land. Repeated droughts, long-term overgrazing, cessation of wild or prescribed fires have all combined to lower the quality of forage available today. However, good stewards of the land still have those tall grasses today. I wish we all did.

12th Annual Area 5 WRM CDE at Cook Canyon Ranch

Story by Randall Henry
NRCS Public Affairs Specialist
Weatherford, Texas

The 12th Annual Area 5 Wildlife and Recreation Management Career Development Event and USDA-Natural Resources Conservation Service (NRCS) teamed up with Texas Parks and Wildlife Dept. (TPWD), Texas AgriLife Extension Service, and the Texas State Soil and Water Conservation Board to support conservation education at Cook Canyon Ranch in Eastland County, Texas.

The regional contest was sponsored in conjunction with the Texas Wildlife Alliance for Youth (WAY). The WAY program's overall goal is to support and promote proper management and conservation of wildlife and natural resources.

Cook Canyon Ranch has more than 25,000 acres and promotes conserving natural resources and young people interested in the management of those resources.

"I have been here at Cook Canyon Ranch for six years, and considering we are only eight years old, I have had the privilege to see it grow and prosper," said Wildlife and Resources Manager Tom Peebles.

Peeples noted he likes to work with conservation professionals and students who want to see and experience natural resources management of a ranch like Cook Canyon.

"It is always an honor for me to be surrounded by students, conservation professionals and environmental enthusiasts," Peeples said.

The FFA had 63 teams with 252 students entered, along with 4-H having 6 teams with 24 students competing against each other. In 2012, the record-breaking attendance was 62 teams with 222 students, so this year that statistic got erased by the new record.

Photo Credit: Randall Henry, USDA-NRCS

"The contest was a great one, and Cook Canyon Ranch was fantastic," said Carolann Corado, manager for the Upper Elm-Red local Soil and Water Conservation District (SWCD) in Bowie, Texas. "We had 69 teams compete, which is the largest group of students ever competing in this regional contest at the ranch."

The students tested their knowledge in areas used for both regional and state contests, including plant preferences, plant identification, habitat evaluation and management, biological facts, fish and game laws, safety, and techniques.

Overall, the top FFA team winner was Stephenville (377 points) and the top individual winner was Tyler Mitchell (Stephenville). The best overall 4-H team winner was McLennan Co. (267 points) with Katelynn Butler (Erath

SOME THINGS THAT DON'T BOTHER A CEDAR FENCE POST

But they bother me a bit

by Dr. Jake Landers, Ph.D.
Retired Range Specialist
Texas A&M AgriLife Extension Service
San Angelo, Texas

1. When you have a flyswatter and the fly never lights except on the Bar B Q plate.
2. A cold cup of coffee when you want it hot.
3. A warm glass of tea when you want it cold.
4. A mosquito that you can hear but you can't see.
5. Two left-handed gloves.
6. A tiny Pricklypear sticker between your fingers that you feel but can't see.
7. The alarming sting of a dozen fireants simultaneously on both ankles.
8. The throat tickling command to cough at a wedding ceremony.
9. Gnats visiting your ears and the strong odor of gnat spray in your nose.
10. Speargrass in your socks and gravel in your shoes.
11. Feral hogs in your water troughs.
12. House sparrows in your bird feeders.
13. Falling rain that never hits the ground.
14. Careless weeds in your garden healthier than the tomatoes.
15. Sixteen cats underfoot and no mice to entertain them
16. A baby calf that can't find its momma, nor her, him.
17. A dog too lazy to bite at flies.
18. Swollen ticks the size of buckshot on your dog's ears.
19. A package of pecans that turned rancid before you got them in the freezer.
20. A horn-hung goat in the fence with a pill pile showing several days of misery.

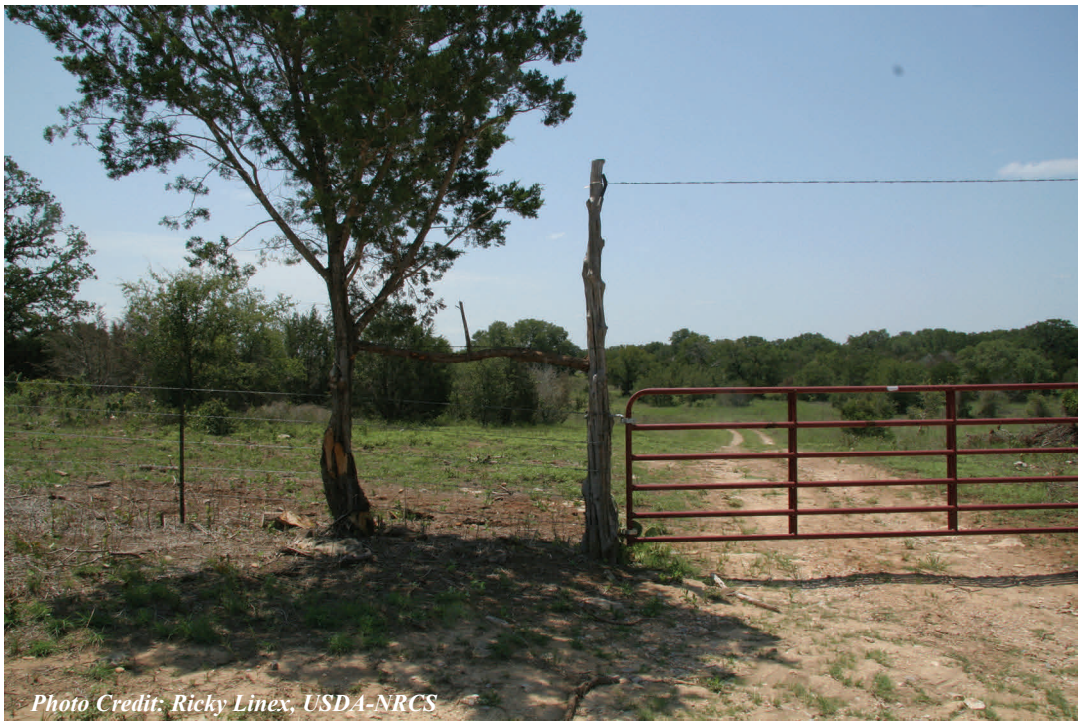

Photo Credit: Ricky Linex, USDA-NRCS

Galls: Strange Growths on Trees and Other Plants

Story by Jim Stanley
Texas Master Naturalist
Kerrville, Texas

Unlike lichens, ball moss, fungus, mistletoe and other things that grow on trees, galls don't fit in that category because they are not things that grow ON trees, but rather abnormal growths that are part OF the tree.

The most commonly seen on oaks are small round brown balls on oak tree twigs, but there are many different forms and colors of galls and they are not limited to oaks or even to trees—galls can be found on flowers, shrubs and even vegetables.

Galls are not like tumors that are caused by an abnormality in the cells of the plant such as caused by a cell mutation. Galls are caused by external agents. Most often galls are caused by insects, although fungi and bacteria can also cause some galls.

Most commonly, galls are caused by a tiny (1-8 millimeters) gall wasp or gall fly of the genus *Cynipidae*. When the wasp pierces a part of the tree in order to lay its egg, something in this process apparently induces the tree hormones in the locality of the sting to cause abnormal growth, and it is this abnormal growth that results in the gall. The insect is really looking for a host on which to lay its egg, and the egg becomes encased in the gall.

Galls are generally composed of resins, tannins and cellulose, and it is this material that becomes the food for the growing larva. The larva will eventually emerge from the gall as a gall wasp and the life cycle will repeat itself. When fresh, galls are solid and fairly hard. Once the larva emerges what is usually left is a light, hollow shell.

The gall wasps usually find fast-growing tissue such as new spring growth to lay their eggs. This may be because the new growth is softer, but it is also the part of the plant that is growing the fastest and thus has the most growth hormones. There are an estimated 800 species of gall wasps in North America. Most of them only form galls on specific tree species and only on specific parts of that tree. And it appears that the size, shape and color of the gall is unique to a particular species of wasp laying eggs on a

Photo Credit: Ricky Linex, USDA-NRCS

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The following story is quoted from Ann Nyren, a Montana native who gives her vison of grass establishment and its relationship to life. The story originally appeared in the early 1980's in a Society for Range Management publication. The message is still relevant today.

Grass Reveries

Story by Anne Nyren, North Dakota State University

There is an enormous amount of patience needed to grow grass. The new seedlings must receive sufficient moisture and protection to flourish. Later, the young plant must be able to compete vigorously with weeds to establish itself as the primary species in the pasture. This may take several years to accomplish. Once established, the grass must be grazed or utilized sufficiently but, overuse could be detrimental. Take half and leave half is the golden rule of grazing. The grass is a reminder that beginnings are hard. Growth rarely possesses the grase and beauty of perfect symmetry. Instead, growth is usually uneven and "spotty." The vigorous, competitive weeds may appear in grand profusion, but the needs of the delicate new grass seedling often precludes the use of herbicides. But the weeds are not entirely villainous. Frequently, they offer the young grass precious, protective cover from the hot sun and winds. In time the grass becomes deeply rooted in the pasture. This deep-rootedness enables the grass to tap reserves of stored soil moisture in times of drought. The roots also stabilize the grasses by anchoring them firmly in the soil which has the same added benefit of preventing soil erosion. At the same time, the leaves use the sun and the carbon dioxide in the air to produce nourishment for itself and meat for mankind. The variability of soil types and range sites (ecological sites) within a pasture affects the overall productivity of any grass. Therefore, grass life involves a combination of relationships which may enhance or limit its capabilities. Finally, grasses are life-giving in that they produce oxygen, that element of our planet which permits human existence. Grasses are like people. We, too, need nurturing. We must slowly and vigorously grow to actualize ourselves in life. This we achieve only in "the fullness of time." Loving care must be given to oneself, others and personal resources if peak performance is to continue. Our roots, too, provide stability and security as we endeavor to produce or create our daily bread. Range sites are a reminder of limitations which may need to be acknowledged and accepted as we seek to enhance the quality of our lives. Patience, compassion, the importance of roots, growth, and the sacred rituals of action followed by rest are what grass teaches. Grassland researchers are often teased that they "watch the grass grow." They not only watch it grow, they feel it grow. In doing so, they become intimate with the mysteries, complexities and intricacies of life itself.

(Continued from page 1— Tribute to Randy Henry)

volunteered to layout the book and over the next eleven months he completed each and every page. Upon seeing the completed pages for the first time I was thrilled but also had numerous edits, photo changes and tweaks to improve each page. Randy proceeded to improve the draft copy and the book is nearing final edits. Although Randy was not the first person chosen to complete this layout, nevertheless, he did not hesitate in offering to help. Randy undertook this work in addition to his regular duties providing assistance to 51 counties in north central Texas. I often joked with Randy that I only needed him to put in a half day on the book, either midnight to noon or noon to midnight and he could choose which half of the day to devote to the book. He gave as much time and work on the book as he could and that is all a person can ask for. Life and work goes on and even though we will miss Randall Henry, his efforts will never be forgotten in Texas.

"If I leave here tomorrow,
Would you still remember me?
For I must be travelling on now,
'Cause there are too many places
I've got to be"

Free Bird
by Lynyrd Skynyrd

Do You Know This Plant?

Photo Credit: Kelli McClelland, USDA-NRCS

These impressive roots belong to a native, perennial forb that can be found in all regions of Texas. This is Texas bullnettle, *Cnidoscolus Texanus.* The largest root in the photo is just over 48 inches and was still drilling deep into the soil, extracting water and minerals for growth. The seeds are also very large and can be up to an inch in length and are eaten by game birds, small mammals and rodents. Dig deep to see all of a plants qualities.

ROUGH-LEAF DOGWOOD

Story by Juliet Carter, NRCS Soil Conservationist
Weatherford, Texas

White flowers in the spring. White berries in the fall. What can that tree be? It is the rough-leaf dogwood, one of the few trees in Texas that has both white flowers and berries. It is also known as Drummond dogwood after the Scottish botanist Thomas Drummond who came to North America in the 1830's to study different plant species. Its Latin name is *Cornus drummondii,* cornus meaning horn after its white hard wood and drummondii after Thomas Drummond. It is related to the flowering dogwood of East Texas differing mainly in that the flowering dogwood has scarlet red berries and is more tree-like while the rough-leaf has white berries and is more shrub-like and found in North Central Texas.

Rough-leaf dogwood flowering in spring

Rough-leaf dogwood revealing white fruit in October

Rough-leaf is a perennial shrub or a small tree. It grows in full sun to part shade. It will grow as a single tree or in thickets with heights up to 20 feet and spreads from 10 to 15 feet. It is commonly found along margins of woods, along stream beds and fence rows and enjoys clayey and rocky soils but is quite adaptable to all types of soils including coarser sandier soils. Its flowers are flat-topped terminal clusters (buds at the top on end of stem) approximately 3 inches in diameter. Each individual flower has four petals and is about ¼ of an inch wide. They are creamy white to light yellow and bloom from April to June. The leaves are rough to the touch because of the coarse short hairs on the upper surface and wooly hairs on the lower surface. They are simple, opposite, ovate (egg-shaped) and smooth margined. The 4 inch long green leaves have a net veining system that bends toward the tip and turn burgundy in fall. The fruit of the rough-leaf begins with a greenish color around August and ripens to a beautiful whitish color in fall. Each fruit is drupe (fleshy meat covered by a thin skin with a stone at the center) and globular (round). The branches are slender, reddish-brown flexible shoots when they are young and turn to a reddish gray with age. The bark is grayish-brown, thin, scaly, flat bark. The wood beneath the bark is hard and white.

The rough-leaf dogwood has unmistakable wildlife value. The berries provide food for many birds and small animals such as foxes, skunks and rabbits as well as wild turkey, bob-white quail, deer and insects.

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Memories of Snake Hunting in Texas

By John Bird

Ronald Clay was an older cowboy who lived outside of Flomot, Texas, which accounts for about 180 of the 1,000 people who live in Motley County. I came to know Mr. Clay when I worked for the USDA office in Matador, Texas, 90 miles northeast of Lubbock.

I knew that the Clay boys had been wild in their younger days; I even heard that Ronald used to pop the heads off live rattlesnakes by cracking them like a whip. J. Frank Dobie's book, Rattlesnakes, talks about cowboys pulling this stunt, but I thought it was part of the folklore in the book.

One day when Mr. Clay came into the office, I asked him about it. "Oh, yeah, I guess I've popped a snake or two," he said. "That would be something to see," I said. "Well, I'll call you this spring when the snakes come out of their dens," he promised.

That April, I showed up at his house with my jeans tucked into my tall-top boots. We took off in his pickup with two five gallon buckets rigged with wooden lids and two snake grabbers that really didn't seem long enough considering what they grabbed. We walked along the sides of draws and cliffs in an area that John Wayne movies could have been filmed in. "Watch your step," Mr. Clay unnecessarily warned.

The first den had three snakes coiled just outside. Mr. Clay grabbed one with the grabber as calmly as if he were picking up the morning paper, setting off a wild buzzing from the captive and his two friends, who both started retreating. "Grab one," he said. Not wanting to show my fear, I grabbed the snake right at its middle. It took both hands on the grabber to hold him up. After we got both snakes in the bucket, and after I made sure that the lid was securely latched, we headed to the next den.

After a few catches, I started to feel brave. But when Mr. Clay decided that we needed a certain snake that was coiled in some brush, which a person would have to crawl to get to, I drew the line. Mr. Clay didn't hesitate. He dropped to his belly and crawled under the brush almost until the snake was over-head, reached up and grabbed it, and crawled back out like it was nothing.

When the hunt was over, I wasn't sure whether to mention the snake popping or not. I didn't want to cause a seventy-something year old man to get rattlesnake bit. But Mr. Clay hadn't forgotten. He pulled the biggest snake we had caught out of the bucket—it may have been three and a half or four feet long—and dropped it on the ground. "You've got to get them kinda stretched out," he explained as he prodded the snake with the grabber, as if I were going to try it next. "And once you grab his tail, you need to keep him twirling." And twirling he was, around and around like a Ferris wheel. "That way he can't strike." And then, whether you believe it or not, my old cowboy friend cracked that snake like a whip. On the first try, the head didn't come off. "I guess I'm getting old," Mr. Clay said while he still twirled. But the second crack was successful, the head came off, I saw it, lived to tell about it, and darn sure didn't try it.

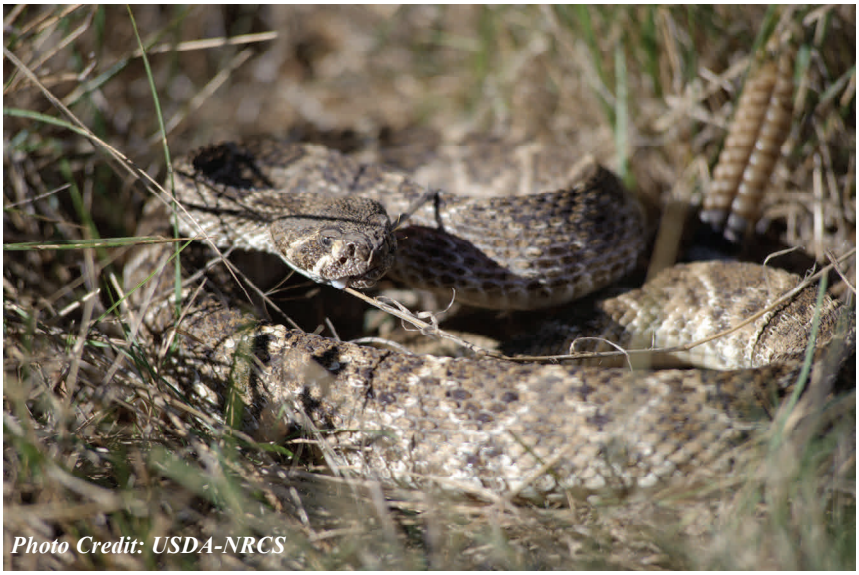


Photo Credit: USDA-NRCS

I'll never forget that day, and when I read of some stunt that a Texas cowboy supposedly pulled back in the day, I don't doubt it.

Tributes to Randall Henry

"Randy always made sure promotional information was always delivered to the field office in a timely manner for outreach events. When doing an interview with a producer or government official, Randy always made sure they were aware of the importance of what they had accomplished."

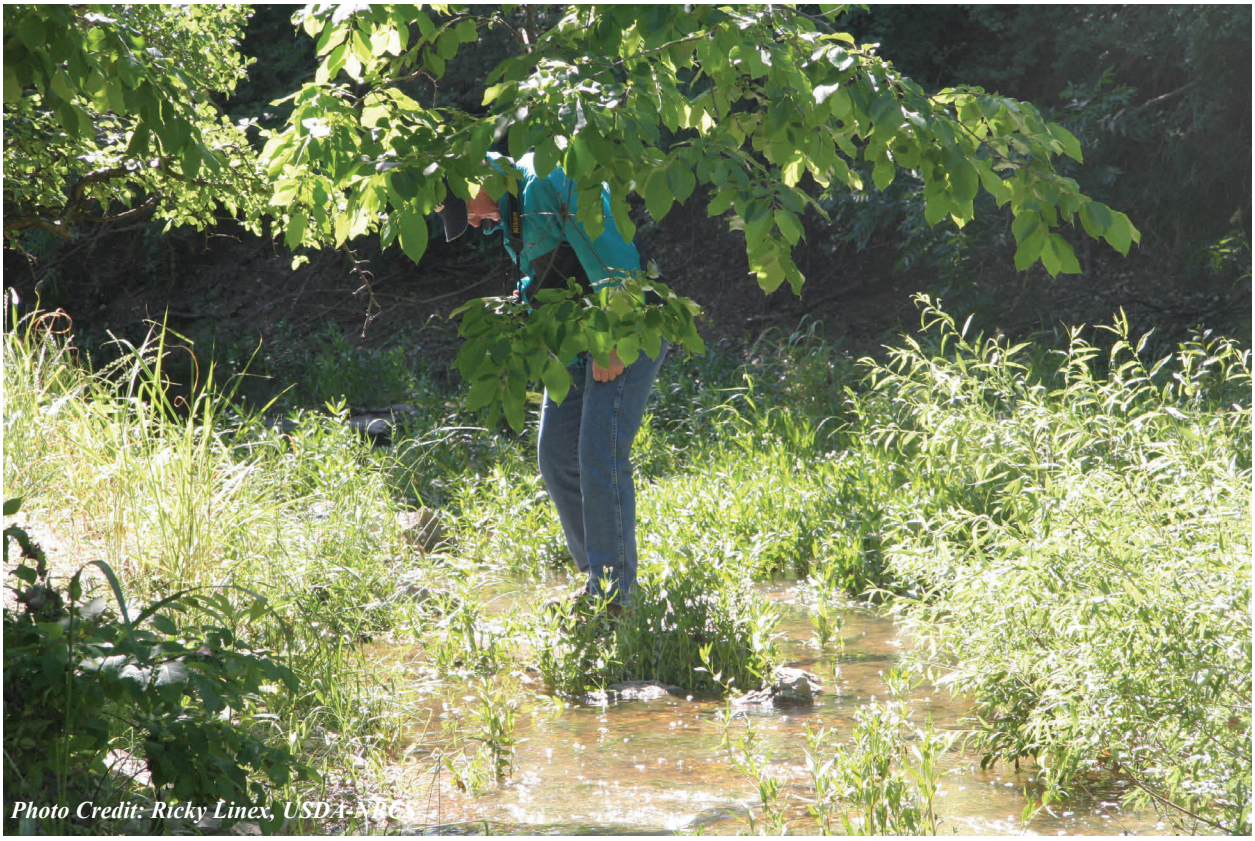
Clyde Hogue - NRCS, McKinney, TX

"Randy was always ready to help get our story out for the region 5 wildlife contests. All I had to do was give him a call or short email and he took care of taking pictures and writing up a great story of the event. He will be missed."

Carolann Corado - NRCS, Bowie, TX

"Randy ended all his emails, 'Have a great NRCS day!' and he meant it. He woke up every day glad to be serving the NRCS as a public affairs specialist. He believed in the good work the landowners are doing across the state of Texas and was very proud of the excellent NRCS staff that assisted them with their conservation efforts. His passion for his job and the mission of our agency will be greatly missed."

Dee Ann Littlefield,
NRCS State Public Affairs Specialist



Randy Henry photographing riparian plants on Wheat Creek in Cooke County, Texas May 13, 2011.

Co.) being awarded the top 4-H individual award. FFA Texas areas four, five and eight team winners were Stephenville (377 points), Plano (281 points) and Cleburne (323 points) respectively. The top FFA Texas individual winners included Tyler Mitchell (Area 4/Stephenville), Hannah Shaw (Area 5/Plano), and Ashley Tucker (Area 8/Cleburne).

Many sponsors pooled their resources to support the regional contest, including NRCS, Texas State Soil and Water Conservation Board, TPWD, Texas AgriLife Extension Service, and personnel from local SWCDs. ***(This was the final article written by Randall Henry, and was found in the May-June folder of the Reverchon Naturalist awaiting layout)***

(Continued from page 8— Rough-Leaf Dogwood)

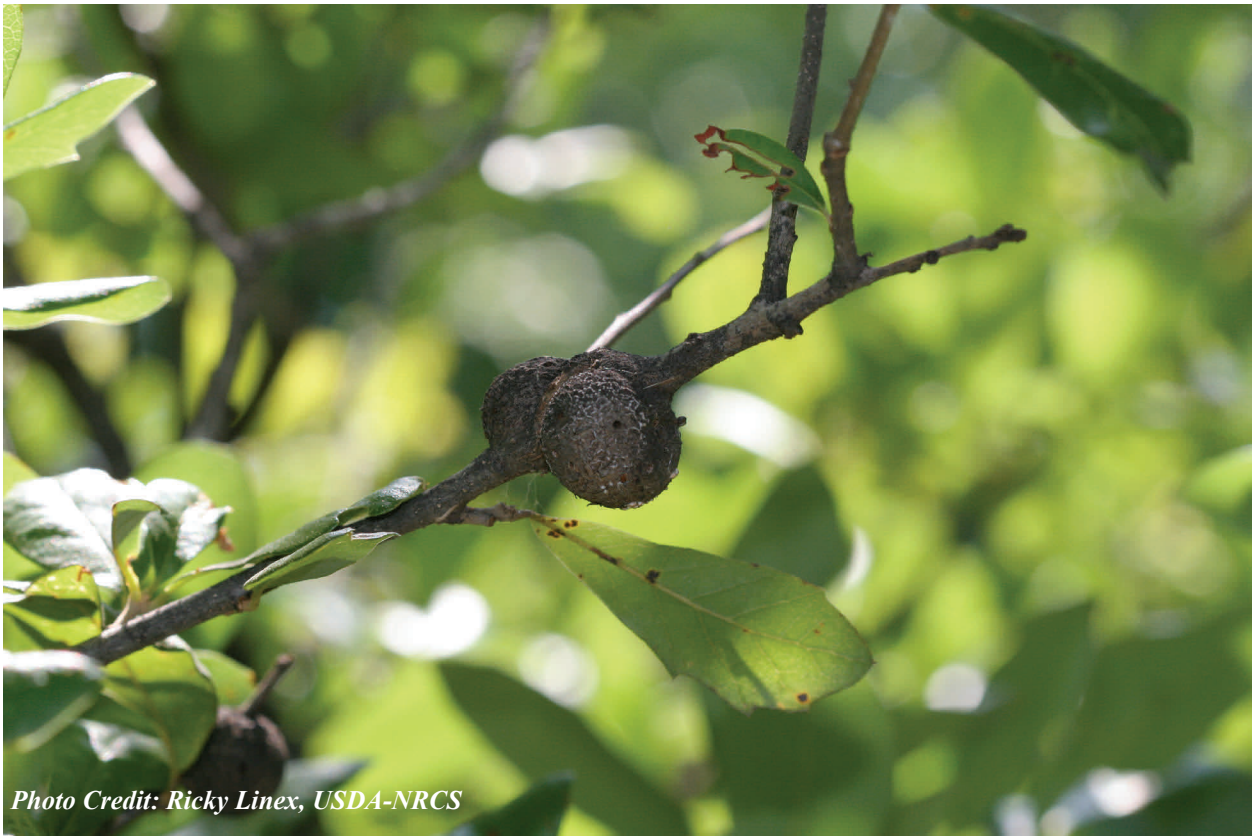
The flowers provide much needed nectar for pollinators like bees butterflies, and other insects. The branches provide nesting for birds and cover for other wildlife. Deer and rabbits browse on the tenders shoots and new leaves. This tree has been used in the past for shelterbelt planting or for windbreaks on the prairies and plains. Because rough-leaf dogwood spreads rapidly from root suckers and shoots they should be maintained by mowing or manually pulling up excess shoots. Chemical foliar sprays can also be used if the plant becomes invasive.

The dogwood has extremely hard wood and was used by Native American for arrow shafts, tee pee pegs and pipes. Parts of the dogwood were believed to have antibiotic properties. The wood has also been used to make chew sticks to help prevent tooth decay. Because of the hardness of the wood it is still used today to make spools, pulleys, mallet heads and jeweler's blocks. Rough-leaf dogwood offers beauty for the landscape with its white flowers and white berries as well as much needed cover and nesting and food for wildlife. So if you happen to pass one of these trees along the roadside stop and take a long look at what nature has packed in to one of these little trees.

Rough-leaf Dogwood in late summer /early fall

(Continued from page 5—Galls:)

particular part of a particular species of tree.
Interestingly, last year for the first time in 12 years, I have a large number of the large light tan galls growing on blackjack oaks. They are large enough and light enough in color to be conspicuous. Many were falling off by mid-summer. They are all growing on the cup of the much smaller (next year's) acorns—not on twigs or on the acorns, just on the cups.
There are tiny parasitic wasps that find galls and deposit their own eggs in the gall. The new larva then consumes the original larva and the rest of the gall as well.
While most of the galls I have seen in this area were on oak trees, and oaks are apparently more likely to have galls than other trees, it would be misleading the leave the impression that all galls are on trees.
The next most common place to find galls is not on twigs (or acorns) but on the underside of leaves. This type of gall can be found on just about any kind of vegetation and usually looks like a collection of bumps or warts or balls stuck to the underside of the leaf. They can often be mistaken for a bunch of insect eggs, but if you try to scrape them off you will find the are indeed not something attached to the leaf, but are part of the leaf—galls.
While it may appear that these growths are detrimental to the plants, most galls, and certainly those on trees, represent such a tiny fraction of the biomass of the tree that their effect is insignificant. Some galls, formed by fungi, especially on crops, are indeed destructive.
Until next time…



Gall on Live Oak
(Quercus fusiformis)