



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 ...

DALEA REVERCHONII (FABACEAE)

By Robert J. O'Kennon
Botanical Research Institute of Texas

Dalea reverchonii, Comanche Peak prairie clover, was first collected by Julien Reverchon on Comanche Peak in Hood County, Texas, in June 1882, and was originally described as *Petalostemon Reverchoni* (with a capital R and one i) by Sereno Watson of the Gray Herbarium at Harvard University in 1886.

In 1970, in the *Manual of the Vascular Plants of Texas*, Donovan Correll and Marshall Johnston noted that the plant was known only from the limestone summit of Comanche Peak, Hood County, Texas, where it was collected around June 1880. Jack Stanford noted that it was known from Hood County from a single collection in 1880. *Turner's Legumes of Texas*, noted that the species has not been collected since its initial discovery in 1880.

In 1984, W.F. (Bill) Mahler, a professor of botany at Southern Methodist University in Dallas, went to Parker County to search for the plants. He found several locations, mostly along FM 51, from three to seven miles south of Springtown. We went back together several times that year and found only a few small colonies, none more than about 20 plants at each site. Later that year, two more sites were discovered near Aurora in Wise County. Today, the majority of known *Dalea reverchonii* sites are located in Parker County, and mostly within a few miles of Weatherford.

In 2003, Caren McLemore, a doctoral student at the University of North Texas in Denton, Texas, and I were given the task of upgrading Mahler's 1984 status report. We did the entire search in August that year. The plants were barely recognizable in the hot summer, but we soon recognized the plants quickly - even those with no leaves. After finishing the bulk of the research, we decided to search on top of Comanche Peak. Many prominent botanists through the years

have searched the top of Comanche Peak, but had no success in locating the plants. Given permission by the new owner, we went to the top and within five minutes, stumbled upon the plants. There were only eleven plants, and all within an area of about 30 by 20 feet in Walnut Clay limestone. This was the first time it had been found at this type location in approximately 121 years. We searched the entire summit of about 105 acres and found no more plants. The majority of the mesa top is Comanche Peak limestone.

The plant is extremely site specific having only been observed in the Walnut Clay limestone of North Central Texas. For more information, please contact Robert O'Kennon at Botanical Research Institute of Texas, 500 East 4th Street, Fort Worth, Texas 76102, or at okennon@brit.org.



An original 1882 mounted specimen of *Dalea Reverchonii* from Comanche Peak in Hood County, Texas, still exists with the detailed label (bottom left) written by French botanist Julien Reverchon.

See You Down the Road

By Ricky Linex
NRCS Wildlife Biologist

As the second issue of the Reverchon Naturalist is released this month, those who enjoy plants are in for a rare treat this year. The bountiful rainfall and snows this winter have set the stage for a spring full of beautiful wildflowers or forbs, whichever term you prefer depending upon what you are managing. The wildflower enthusiast sees beautiful wildflowers on the horizon, but the wildlife habitat manager sees the promise of many varieties of nutritious, highly palatable forbs available for wildlife. Let's not forget the rancher, who sees a bounty of grass growth while hoping the weeds don't take over the grasses. Everyone sees the land a little differently, but as long as we manage for sustained and proper use, the land is happy.

These bountiful years are special for folks who like to get out and botanize on the land. So, take the time to get out of the office, and walk around in the flowers, forbs and grasses. Renew your commitment to assist those who own and manage the land to understand the interconnections of soil, water, plants, air and humans. We will see many new plants this year that will take time to properly identify so dust off those plant identification books and learn some new plants. Take plenty of pictures and submit a story about a plant you enjoy. We are still learning but we can learn faster as a united group and have a great time doing it.

Reverchon Readings in North Central Texas

"In the archives of the Gray Herbarium at Cambridge are to be found letters written by Julien Reverchon to Asa Gray, Sereno Watson, and the Reverend Thomas Morong, who were all botanists actively working on the flora of the Southwest. The first letter of Reverchon to Gray that has been preserved is dated October 28, 1877; and there are simple, cordial, earnest, even zealous letters on personal and botanical subjects up to the time of Gray's death in 1888. In these letters we see how the old flame of interest and the desire to work again in botanical fields was consuming Reverchon.

But, he was, perforce, first horticulturist and dairyman, and then botanist, so that extended trips for botanical collecting were hardly possible for him. Nevertheless, Reverchon seized some opportunities. In 1877, he discovered about a dozen new species of plants in Dallas County alone; and during the first two weeks in August of that year, stimulated by a visit from Gray, he made a flying trip to Brown County, collecting on the way in some eleven counties south and west of Dallas. In 1879, Reverchon collected most of the spring and summer near Dallas, and in Sep-

tember and October of that year he and Jacob Boll accompanied a group of land-locators and agents into Baylor County and other parts of Northwest Texas, Boll collecting fossils and Reverchon seeking for plants. It was here, in September, "on a sand island of the Brazos River near Seymour, Baylor County," that Reverchon found the plant (one of the Spurge family) from which Asa Gray named the genus *Reverchonia*, thus immortalizing the collector. Gray wrote: "With great satisfaction I dedicate [this genus] to M. Jules Reverchon of Dallas, Texas . . . a valuable correspondent, an acute and sedulous botanist." Gray also honored Reverchon with a *Campanula*." Source: *Naturalists of the Frontier* by Samuel Wood Geiser.



Dalea reverchonii as it is today on Comanche Peak

Update on North Central Texas Plant Book

The final stage of a new book about plant identification and wildlife values is progressing on schedule. The title of this nearly four-year project is *Plants of North-Central Texas - A Landuser's Guide to their Identification, Value and Management*. Overall, there are 310 species covered in the book, including some well known and others less familiar to curious plant geeks, which will include 155 forbs, 105 woody and 50 grasses that are commonly found in North Central Texas.

The book will include identification tips, along with food and cover values for livestock, white-tailed deer, pronghorn, quail, turkey, dove and pollinator species. These will be discussed as will information related to management of the plants. The book will have value outside of North Central Texas, for many of the plants overlap into other regions of Texas and Oklahoma. The book is being produced and published by the USDA Natural Resources Conservation Service with sponsorships, including the Greater Houston Chapter of Quail Coalition, Cross Timbers Chapter of Quail Coalition, Texas Quail Coalition Board of Directors, and the Texas Wildlife Association Foundation. The book should be available in late-August. For more information, please contact Ricky Linex NRCS wildlife biologist, Weatherford, Texas, at 817-596-2865, Ext. 105.

Raindrop seed dispersal in Wright's Skullcap (*Scutellaria wrightii*; Lamiaceae)

By Allan D. Nelson, Ph.D. and Jim R. Goetze, Ph.D.

Wright's skullcap (*Scutellaria wrightii* A. Gray) is a common Texas mint (Figure 1A) that uses raindrops to disperse seeds following rains. The force of the raindrop hitting a dish-like structure that reminded botanists of the bone commonly called the skullcap that aids in seed dispersal, and gives the plant its common name. The genus name, *Scutellaria* (Latin for dish- or shield-shaped), refers to the dish-shaped upper portion of the flower (Figure 1B). When struck by a raindrop, the dish-shaped portion catapults off the plant, and the resulting mechanical energy causes the seeds to be thrown from the plant. The seeds are then carried by water currents some distance from the plant, depending on the amount of runoff occurring during the precipitation event. This spreads the skullcap to new locations where the seeds can germinate and grow the beautiful blue flowers that are common in the spring. By spreading the seeds into new locations, the newly germinated skullcaps are less likely to mate with close relatives, for this increases genetic diversity within the populations.

In garden investigations, we have observed the ripe fruits being dispersed by raindrops in potted plants that were set out during rainstorms. In an upcoming field investigation, we plan to mark hundreds of skullcap before a rain storm, and then count the number of ripe fruits on each. After the rainstorm, we can count the numbers that have been dispersed. If there are significant differences between the two groups, this will provide the first quantitative evidence of this type of seed dispersal in skullcaps. This article was contributed by Allan D. Nelson, Ph.D., associate professor at Tarleton State University in Stephenville, Texas, and Jim R. Goetze, Ph.D., professor of Biology at Laredo Community College in Laredo, Texas.



Figure 1A



Figure 1B



Mule Deer Buck Skull

Botanical Glossary Six Pack

Introducing a few descriptive words needed to understand plant talk in The Reverchon Naturalist

Flower: An axis bearing stamen(s), pistil(s), or both, and often floral envelopes(=calyx and corolla); the reproductive structure of an angiosperm.

Calyx: Collective term for the sepals; outer series of floral leaves, often enclosing the other flower parts in the bud. The calyx is typically green but can be corolla-like and showy.

Sepals: A single unit of the calyx; one of the outermost whorl of parts in a complete flower. Sepals typically cover the other flower parts during the bud stage; they are collectively referred to as the calyx.

Corolla: Collective term for the petals; the inner series of floral "leaves". Corollas are typically but not always colorful and showy.

Petals: One of the next-to-outermost whorl of parts in a complete flower; a segment of the corolla; the inner series of floral "leaves." The petals are collectively referred to as the corolla.

Angiosperm: (= flowering plant) Literally, "vessel seed"; a plant having its seeds enclosed in an ovary (=the proximal part of the carpel or "vessel")

Source: *Shinners and Mahler's Flora of North Central Texas* Web site: <http://www.brit.org>

Ever Seen a Vampire Deer?

Story by Ricky Linex, NRCS Wildlife Biologist

In 2005, the Texas Wildlife Association Annual Big Game Awards Program was held in Childress, and Texas Parks and Wildlife Dept. Biologist Dana Wright showed the skull (above photos) of a mule deer buck harvested in the Texas Panhandle during the 2004 season. That buck as shown in the photos above developed an unusual extra pair of teeth.

The dental formula for deer on one side of the jaw includes incisors 0/3, canines 0/1, premolars 3/3, and molars 3/3 for a total of 32 teeth on both sides. This formula reads top first then bottom teeth, so this reveals that deer do not have incisors or canines on the top but three incisors on the bottom jaw, one canine on the bottom jaw and three premolars with three molars on both the top and bottom. I asked Dana Wright and Dr. Bob Dittmar, DVM, of Harper, Texas, their opinion of this tooth and whether it was canine or 1st premolar. Both experts said it looked like a canine tooth.

Dr. Dittmar also noticed that this tooth erupts from the same bone of the maxilla as the premolars. So, it appears the odd tooth in the photo is a vestigial upper canine that happens every now and then among the millions of deer born each year.

DEER TRIVIA: *Deer have six teeth on each side of the rear jaw, including three premolars and three molars. Did you know that the three premolars are actually identified as premolar 2, premolar 3 and premolar 4? Premolar 1, on the top and bottom jaw, has through evolution actually moved forward and has been absorbed into the jaw.*



What Do You Think?

Test your knowledge utilizing the above photograph and the following questions—answers are on page 7

1. Identify the plant which produced the seed in this photo and identify the animal that produced the pellets.
2. How does brush management by either chemical, mechanical, or hand treatment methods affect wildlife habitat?
3. Is the effect only an increase in grass production?
4. Are there other factors to consider when planning brush management?

Early Spring Wildflowers in North Central Texas

Ten-petal Anemone (*Anemone berlandieri*) is also known as windflower, and one of the earliest flowers to bloom at the end of winter and before the well-known spring flowers. This native, perennial, cool-season forb is blooming wildily at this time.

The photo (right) was taken in early 2008, which was a dryer winter than what we are experiencing this year causing the plant to quickly flower and produce seed. Normally, the flower location of this plant will be 5-8 inches above the ground with one to several 3-forked leafstalks, each with three leaflets at the end of each fork. The plant is named for pioneer French Botanist Jean Louis Berlandier. (Continued on page 8)



Ten-petal Anemone (*Anemone berlandieri*)

North Texas Plant Conservation Alliance

In September 2009, during the Texas Plant Conservation Conference (TPCC) held in the Lady Bird Johnson Wildflower Center (LBJWC) at the University of Texas in Austin, the Texas Plant Conservation Alliance (TPCA) met to discuss the possibility of dividing into geographic units and team up with other regional plant conservation groups to improve plant conservation in Texas. The TPCA formed alliances in north, south, east, and west Texas. The North Texas Plant Conservation Alliance (NTPCA) that resulted from this discussion is led by Allan D. Nelson, Ph.D., who is the curator of the Herbarium at Tarleton State University (TSU).

To date, regional partners include the North Central Chapter of the Native Plant Society of Texas (NCCNPSOT) and the Fort Worth Nature Center and Refuge (FWNCR). The NCCNPSOT is led by Dawn Hancock, president of NCCNPSOT, and has been active in native landscaping and prairie restoration in Arlington, Texas. The FWNCR is managed by plant ecologist Suzanne Tuttle, and located just inside the city limits of Fort Worth, Texas. The 3600-acre refuge is a wilderness comprised of forests, prairies, and wetlands reminiscent of how the Fort Worth/Dallas area once looked before extensive urbanization occurred.

Many volunteers from the TSU Herbarium, NCCNPSOT, and FWNCR will work to achieve NTPCA goals related to what they call the 3R's of conservation in plants. The volunteers will be involved in projects related to rare plants, restoration with native plants, and recording distributions of introduced plants in North Texas, which in some cases displace native plants.

This upcoming spring, the NTPCA's first project involves a rare endemic in Texas called the *Dalea reverchonii*. Reverchon dalea was first discovered by Julien Reverchon (1837-1905), a Texas botanist throughout the late-1800s, on Comanche Peak in Hood County, along with other populations historically known from Parker and Wise counties. That original population on Comanche Peak was thought to have been extirpated, so the U.S. Fish and Wildlife Service became concerned with declines in populations due to loss of habitat in North Texas. In response to these concerns, Bob O'Kennon, research botanist at the Botanical Research Institute of Texas located in Fort Worth, Texas, has worked over the past 25 years to document existing populations of Reverchon dalea. In some cases he will re-establish them in protected natural areas. In the course of his work, O'Kennon rediscovered the Comanche Peak population, and has documented numerous populations in Parker County.

Reverchon dalea is often found associated with Walnut Clay geologic strata, so NTPCA volunteers will use geologic maps to search areas that include Walnut Clay strata west and south of the localities documented in Parker County. If the NTPCA volunteers discover new populations, they will use geographic positioning systems to record localities, digital cameras for photographs, and record information on numbers of individuals in new populations as well as a variety of other natural history data associated with the sites. The NTPCA will make a research presentation of the results of this work at the TPCC at the LBJWC in October 2010.

So, if this sounds like a great way to spend a Saturday in April or May, when Reverchon dalea is in bloom, join up with the NTPCA by contacting Allan D. Nelson, Ph.D. at TSU by e-mail at nelson@tarleton.edu or by phone at (254) 968-9158.



Dalea reverchonii close-up in Hood County, Texas

10th Annual Texas Plant Conservation Conference

September 15, 16, and 17, 2010
at the
Lady Bird Johnson Wildflower
Center at
The University of Texas at Austin

For more information, please call
(512) 232-0100

What Do You Think? (Answers from page 5)

1. The seeds in this photo are those of mesquite eaten by a white-tailed deer. Cattle, sheep, goats, white-tailed and mule deer, antelope, and exotics all consume mesquite beans, for the beans are available from early-June until November. The peak period of consumption is June-August when the beans have ripened and just fallen upon the ground.
2. Mesquite is used as a food source for the bean pods as well as young tender leaves. Excessive brush management reduces cover and the food value that the beans provide during dry summer months when forbs may be in short supply. Brush management should be applied with consideration to retain adequate cover for the species of wildlife for which you are managing.
3. Brush management applied with the technique of "Brush Sculpting" will ensure adequate woody cover will remain as well as improve the grass and forb cover.
4. Landowners should consider both livestock and wildlife needs when planning brush management. All shrubs should be protected for use as turkey nesting cover, loafing cover for quail, browse and seed production for all wildlife species, and thermal cover during weather extremes. The take home message is to measure twice and cut once.



Goldenrod Crab Spider



Death In The Pretty Flowers

Using the analogy of Peter Hathaway Capstick's *Death in the Long Grass*, the role of predator and prey occurs at all sizes and scales in nature. These examples of Goldenrod Crab Spiders (photos, left) were taken in late-September 2009 using common sunflowers as their hunting grounds on the Rolling Plains Quail Research Ranch, which is located west of Roby, Texas.

With the camouflage of their bodies, these spiders blend in with the maturing sunflower heads to patiently wait for a meal. Goldenrod crab spiders can change their body color from yellow to solid white. The spiders change color by secreting a liquid yellow pigment into the outer cell layer of the body. On a white base, this pigment is transported into the spider's lower layers so the inner glands, which are filled with white guanine become visible.

If the spider dwells longer on a white plant, the yellow pigment is often excreted. It will then take the spider much longer to change to yellow, because it will have to produce the yellow pigment first. The color change is induced by visual feedback; spiders with painted eyes were found to have lost this ability. The color change from white to yellow takes between 10 and 25 days, the reverse about six days.

Source: Wikipedia http://en.wikipedia.org/wiki/Misumena_yatia



Texas Filaree
(*Erodium texanum*)

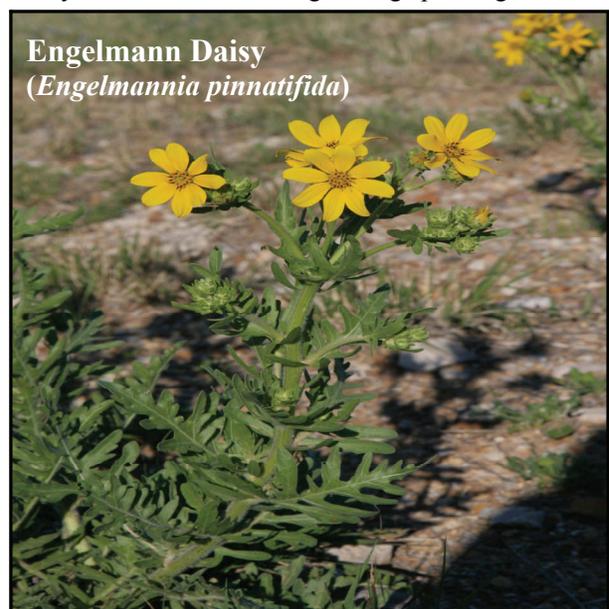
California Filaree
(*Erodium cicutarium*)

Early Spring Wildflowers in North Central Texas

Texas Filaree (*Erodium texanum*) is one of the fair weather forbs that will show up and make a grand presence only if the moisture during the fall and winter is above average. The plants germinate during the fall and stay in a small rosette during the winter waiting on warm weather to rapidly produce growth, flowers and seeds. This year the native, annual cool-season forb is really showing off. Some of the plants are as big as a saucer, and will be blooming such as these within a few weeks. Grazed by all classes of livestock and used by wildlife as green forage during the winter, the seeds are eaten by quail and turkey after breaking off the long spear-like shaft attached to the seed head.

A relative of Texas filaree is **California Filaree** (*Erodium cicutarium*), which is an introduced, annual cool-season forb. The leaves of California filaree are highly dissected and produce smaller flowers of a pinkish color. Both filarees produce a five-parted seed pod that resembles a stork's bill. This pod separates and the five spear-shafted seeds begin to twist and corkscrew into the ground with the moisture from morning dews and humidity. As the day heats up the shafts begin to dry out reversing the corkscrew effect. (Continued from page 5)

One of the first yellow flowers in early-spring is **Engelmann Daisy** (*Engelmannia pinnatifida*), which is also known as cutleaf daisy due to its deeply dissected leaves. The plant is an outstanding native, perennial, cool-season forb that has desirable forage qualities for all classes of livestock and wildlife. In many soil types it has been eliminated due to severe overgrazing over the past 130 years. Seed is commercially available for including in range planting mixes.

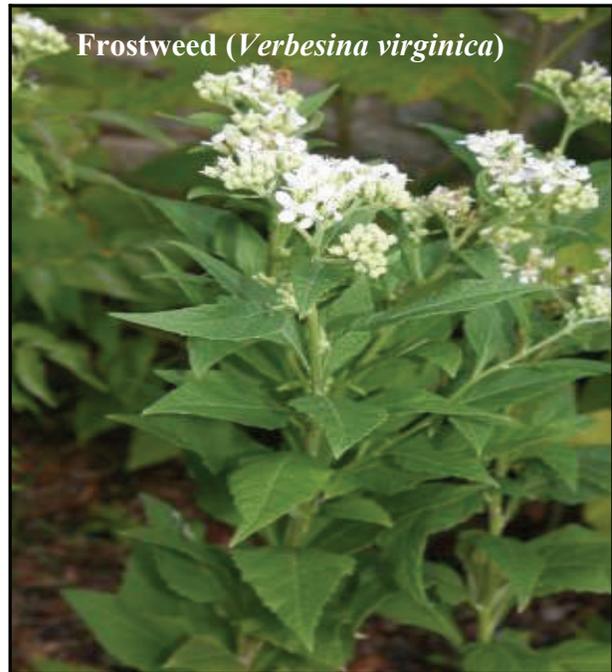


Engelmann Daisy
(*Engelmannia pinnatifida*)

Plants of North Central Texas

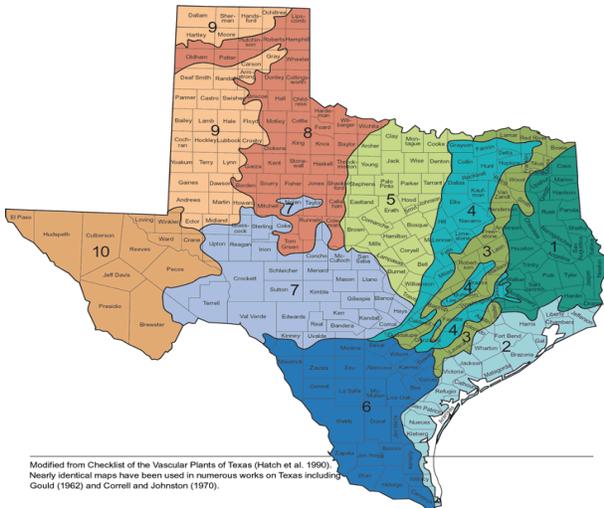
Frostweed (*Verbesina virginica*) (Asteraceae) is a native herb that is found in Texas, ranging from east and southeast Texas as well as west to the West Cross Timbers and Edwards Plateau (Vegetational Areas 1-5 and 7). Frostweed is typically associated with damp, disturbed wooded areas; often in limestone soils along streams and rivers. It is most notable by its winged stems, alternate leaves, white petals (corolla), and a height of up to 2 meters. When exposed to freezing temperatures, especially early in the fall, the sap that is still located in the stem will slowly begin to freeze, so the stem will swell from the resulting pressure. Eventually the stem will split, often along the base of the plant allowing the sap to exude from the stem and freezing into fascinating ice formations.

Plus, Frostweed is also known as “Indian Tobacco”, and was often smoked by Native Americans. They probably used it for asthma or bronchitis, for the roots of the plant were also used to relieve cramps, chills, and fevers. Frostweed is a good pollinator species, but is not much to speak of as far as livestock or other wildlife is concerned. The source for this information was Shinnery and Mahler’s Flora of North Central Texas and The Lady Bird Johnson Wildflower Center – University of Texas at Austin. *Story and photos by Jeff Brister, NRCS soil conservationist in Waco, Texas. (Cont. on page 10)*



Frostweed (*Verbesina virginica*)

VEGETATIONAL AREAS OF TEXAS



Modified from Checklist of the Vascular Plants of Texas (Hatch et al. 1990). Nearly identical maps have been used in numerous works on Texas including Gould (1962) and Correll and Johnston (1970).

- 1 PINEYWOODS
- 2 GULF PRAIRIES AND MARSHES
- 3 POST OAK SAVANNAH
- 4 BLACKLAND PRAIRIES
- 5 CROSS TIMBERS AND PRAIRIES
- 6 SOUTH TEXAS PLAINS
- 7 EDWARDS PLATEAU
- 8 ROLLING PLAINS
- 9 HIGH PLAINS
- 10 TRANS-PECOS, MOUNTAINS AND BASINS



Plants of North Central Texas

Poosumhaw (*Ilex decidua* Walter) (Aquifoliaceae-Holly Family) is a shrub or small tree measuring 15-30 feet in height and found in Texas, ranging from east and south-east Texas west to the West Cross Timbers and Edwards Plateau (Vegetational Areas 1-5 and 7). Also known as Deciduous Yaupon or Winterberry, Poosumhaw is commonly associated with rock outcrops, ravines, and disturbed areas. The fruit is reddish/orange berries and are very conspicuous during winter months, and are an important food source for native birds and small mammals. White-tailed deer and cattle have been known to browse on the leaves and fruit; however, the nutritional value of this species is not well documented. Northern Mockingbirds (*Mimus polyglottos*) (inset photo) are especially fond of the fruit. The fruit is considered toxic to humans due to the presence of saponins, and can induce vomiting and diarrhea.

Plus, saponins can also destroy red blood cells by breaking down the cell membrane. In fact, small children are fond of the berries, so keep an eye on them while in the field this year. The sources for this information are Shinnery and Mahler's Flora of North Central Texas, Texas Parks and Wildlife Native Plant Database, and University of Texas Lady Bird Johnson Wildflower Center. *Story and photos by Jeff Brister, NRCS soil conservationist in Waco, Texas. (Continued from page 9)*



**Poosumhaw
(*Ilex decidua* Walter) with
Northern Mockingbird (Inset photo)**

New Cost Share Practices Offered by NRCS

Landowners may be interested in these new practices available throughout Texas offered by NRCS (Practice code 382 Deer Exclusion Fence is not available in North Central Texas for 2010). Landowners can apply for cost share through the EQIP or WHIP programs by visiting the NRCS office in the county the land is located. Funding for 2010 applications is in progress now, so contact your local NRCS office as soon as possible if interested.

Conversion of Exotic Introduced Grasses to Native Grasses and Forbs

Practice Code 550

The 2008 prices for fertilizer and fuel opened many eyes toward energy costs to produce high input exotic grasses that could outstrip the income and/or value from haying or grazing. In addition, we have many landowners who have bought land and it is not their goal or in their management plan to manage exotic grasses, and would welcome technical assistance and cost share to convert these exotic monocultures to native grasses and forbs.

Texas Parks and Wildlife Department and the Texas AgriLife Extension Service have already worked on the research and field trials for this conversion. Bulletin L-5456 *Restoring Native Grasslands* shows the results of trials on Bermuda grass for three soil types in central Texas. The cost share and technical assistance will provide two applications of Glyphosate (commonly known as Roundup) during the growing season when the grasses are actively growing. This will kill the existing grasses making it possible to seed native grasses and forbs into the dead grasses during the following winter. A third and lighter application of Glyphosate will be made prior to seeding to burn down winter weeds. One cost-shared application of shredding will be made although more could be necessary to aid in establishment of the natives. In the first growing season, the natives must be deferred for establishment since natives are slow to establish a second-year deferment. This will be required but an incentive payment for the second year deferment will be paid. Conversion of Bermuda grass will be the main intent of this practice in North Central Texas, but also applies to Old World Bluestems such as King Ranch Bluestem, Bahia grass, Buffel grass, and other exotic introduced grasses which tend to form dense monocultures.

Cowbird Trapping

Practice Code 645

(Adapted from NRCS Cowbird Trapping Fact Sheet)

Nest parasitism by the brown-headed cowbird is one of the reasons for the decline in songbird numbers across North America. The trapping of cowbirds has proven to be effective toward increasing successful reproduction of many songbird species, including the black-capped vireo. Participants in EQIP or WHIP may receive payment for trapping cowbirds according to the guidelines developed by Texas Parks and Wildlife Department. http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_1148.pdf

The payment will be made annually for three consecutive years at the rate of \$6.00 per acre for a 100-acre trap unit, or the equivalent of \$600 per year for three years. If a participant enrolls less than 100 acres, the payment is \$6.00 per acre. The payment is intended to provide an incentive for the construction of the trap as well as maintenance and operation of the trap. This payment is intended to cover about 50% to 60% of the total cost of trapping during the three year period. Participants should also be familiar with other cowbird trapping information found on the TPWD website: http://www.tpwd.state.tx.us/huntwild/wild/nuisance/cowbirds/trapping_program/index.phtml

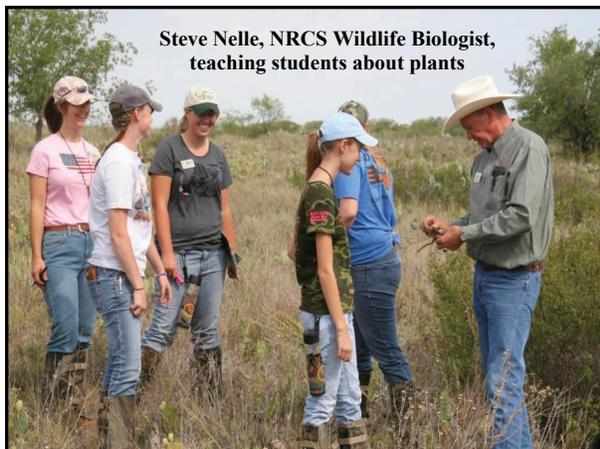
(Continued on page 12)

Deer Exclosure
Practice Code 382 Fence
(Adapted from NRCS Deer Exclosure Fact Sheet)

Excessive populations of white-tailed deer and exotic species have had a serious detrimental effect on native plant diversity in some parts of Texas. Many species of native shrubs, trees, vines, and forbs are being heavily browsed to the point of causing poor plant vigor, premature death, and poor reproduction. As the old plants are dying, there are inadequate numbers of new plants to replace them. As a result, there are localized extirpations of many native plant species occurring.

Deer exclosures are high-fenced areas where deer and exotics are removed. This will allow for the natural regeneration of many desired plant species. The intent of this practice is for long-term exclusion of deer and exotics to promote the restoration of native plant diversity. This practice is applicable to any location where excessive numbers of deer or exotics are causing severe over-browsing.

Areas selected for deer exclosures should still have some of the desired plants to serve as a seed source. Deer exclosures will be of greater value where they include two or more soil types or ecological sites, which provides the potential for greater plant diversity. Deer exclosures shall not be placed in areas where large water gaps are needed or where other fence maintenance problems are anticipated. An 8-foot high, net-wire fence will be constructed according to NRCS specifications. Fences that do not meet these specifications will not be certified nor funded. *(Continued from page 11)*



**2010 Texas Brigades
Season Applications**

Due Date: April 1, 2010
Eligible: 14 through 17 Years of Age

For More Information,
Please Contact Kassi Scheffer at
kscheffer@texas-wildlife.org or
Register Online at texasbrigades.org

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