Nature Committee Newsletter
SPRING/SUMMER 2018

INTRODUCTION: The Nature Committee (Lynne Aldrich, Lynne Brown, Sherri Davis, Terry Davis, Peter Gottschling, Wolf Patrick & Colleen Stegall) missed an issue but it is NOT because there has been no activity within our community on the nature front! The fall hummers were here with the Black-chinned migrating first, then replaced nearly entirely by the Ruby-throated until their migration. Some of our habitat has again been changing and along with it the types of birds we have had. The eruption of the Dickcissel was much less than it was last year when we had hundreds throughout our community. As the grasses grew – which they did with the rains we had - they searched further afield for the habitat that they prefer. The hawks were in migration with numbers of them being seen in our skies. Now, we approach the Spring and Summer season once again and we bring you our Newsletter with a mixture of interesting and important articles that include suggestions and information on being prepared for the upcoming 'fire season'. As suggested, be certain to visit the Firewise page noted in Sherri & Terry's article and review our own (The Hills Above Possum Kingdom) ACC guidelines on creating wildfire defensible spaces that help in mitigating wildfires. On the Firewise home page if you expand the Firewise USA link you will see the Ember Threat and Home Ignition zone outline. We've also updated a newly revised checklist of the birds that have been seen in The Hills over the years. (posted on the webpage) You can download this checklist and use it to keep track of those birds you see. We now have documented 165 birds. So, read and enjoy and if you have any questions, suggestions or ideas for us let us know and when you see a bird that is not on this list let us know!!.

VULTURES (Lynne Aldrich) - The two Vultures we have year round – the Turkey Vulture and the Black Vulture continue to patrol for the carrion that is their primary source of food. The Turkey Vulture is usually more common than the Black and can be told from its longer tail with wings fading into very light, nearly white in the trailing edge of the primaries. Their flight shows a slightly dihedral (a shallow V) and flight in a dihedral and as they swoop down you may be able to pick out their red head. But be careful, the immature Turkey Vulture will have a dark head just as the Black Vulture does!!. The Black vulture can be told first by it's much shorter tail and the primary wings which show the white only in the outer wingtips and as mentioned above it ALWAYS has a black head. The Black Vulture has a flatter flight pattern (i.e. no dihedral). The wingspan of the Black Vulture is much shorter (by about one foot) than the Turkey Vulture and they have a more varied diet – feeding not only on carrion but other scraps of food (garbage for instance). So, compare these two pictures then go outside and begin to pick out two different species we have flying about.

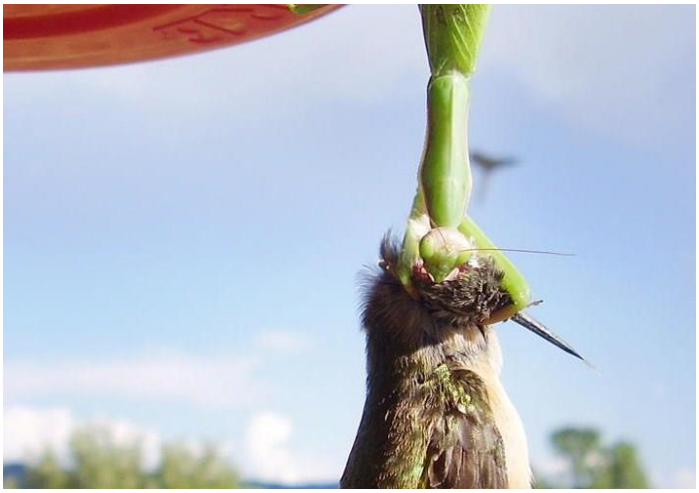
BlackVulture

Turkey Vulture

THE PRAYING MANTIS (Colleen Stegall)

Let's explore the aggressive Praying Mantis to determine if this predator is friend or foe. If you've ever been brave enough to closely watch one, you know that it is not afraid of you and will even be aggressive toward its bigger explorer.

The Mantis is of the invertebrate type, grows up to 6 inches long and can swivel its head 180 degrees. With the scientific name *Mantis religiosa*, it was named for the odd praying position of its front legs. They use their four back legs to grasp a twig or stem. They are programmed to eat. It's just what they do. It lives up to one year but in that span of time can wreak havoc in the insect world and even small birds!! They have 5 eyes that swivel with the head as they do their camouflaged hunting technique. They blend into their surroundings and are very still, making it difficult for the unwary victim. These they grab with spiked front legs with such quickness it is not easily seen by the naked eye. The spikes assist in holding their victims in place as they suck the life out of them eating them alive. Their favorite foods are moths, crickets, flies and most insects. They will even go for honey bees and wasps. No insect is beyond their diet, even their own kind. It has even been observed that the large female will eat her mate even during the mating encounter severing the head which can actually stimulate the male's copulation. Of course, the wary male will hit and run!



But not all of the victims are of the 'insect' variety. Sometimes they go for our favorite birds. Have you ever observed a Mantis on a hummingbird feeder? Sure, they may be there for a bee or a wasp, but they are just as likely to be after that beautiful unsuspecting hummingbird. Even though the bird is larger, the ferocious insect will never pass up a meal even though success is rare. Since the Mantis likes many insects that are drawn to the sweet bird feed, they may react to the victim before realizing the size of the outcome. They do not eat all of the bird, but it can become part of their diet. If there are plenty of insects, the mantis may not resort to the sizeable prey.

Even though the hummingbird is a rare delicacy, you can assist in their protection. Don't place a feeder too close to shrubbery or trees giving the Mantis easy access. You can place a wide cover above the feeder, however the *flying* Mantis can still access. Perhaps the easiest remedy is what I typically do. I have always just removed the Mantis from the feeder and put him in a less aggressive environment like a tree or bush. (Of course, I do this with a stick and quickly run so it doesn't attack me!)

Though this is hard for bird lovers to stomach, we don't want to remove these insects entirely from our yards. They are beneficial for our gardens and flower beds. Their benefit far outweighs the occasional brutality toward our yard favorites. After all, they themselves are a favorite of many of the bird species.

Getting Prepared for Wildfire Season (Sherri & Terry Davis) - As members of the Nature committee for our neighborhood, Terry and I volunteered to write an article on wildfires for the newsletter. Lynne Aldrich shared several handouts that she downloaded from the website, www.firewise.org. There is SO much information from that resource that Terry and I strongly suggest everyone read it for themselves. We simply couldn't determine what to share and what to leave behind – each family has different needs and circumstances and we didn't want to omit something important. So, what we decided to do is to share some of our personal experiences from that 9 day adventure which began on Sunday, April 17, 2011. We learned so many valuable lessons and thought we would pass that on to the residents of The Hills Above PK. We strongly suggest you take photos of EVERYTHING in your home asap for insurance and replacement purposes.

The sheriff came to our door about 1 pm that Sunday afternoon and told us we had 15 minutes to get out of our home because the fires were so close and threatening our welfare and safety. It's probably easier to just list what we did, with suggestions of what we SHOULD have done in some cases:

1. If you have 2 cars, take both of them. We left in only 1 car, went to the clubhouse area to watch proceedings, and then decided we should get our other car. We raced back in and got the other car (not smart – by the time we got back to the gate, the fire was almost to the entrance)
2. Pack for several days – we only took clothes for 2-3 days because we had no idea at the time how severe the situation was.
3. We spent 2 nights at the Best Western in Mineral Wells because they let us bring our dogs. After that we went to Dallas to stay with our daughter, which was a huge luxury because most of the residents here didn't have family close so they stayed the duration at the hotel.
4. Keep the following items organized in a large bag in a drawer so all you have to do is grab it:
   Passports, copies of social security cards and driver's licenses,
   wills, cash, medication and anything else you can think of.

5. Keep the following list of pet supplies in the above bag so all you have to do is go down the list. You have so little time and we just couldn't think straight. Pet Supplies: leashes, medications, food and food bowls, plastic bowl for water, poop sacks, dog beds or old blankets, etc. etc.!
6. Take any firearms and ammunition with you to prevent explosions.
7. Just remember you have no idea how long you might be out of your home or what you will come home to. We were allowed to come into the subdivision 6 days after the fires to evaluate our personal situation. At that time we cleaned out all the expired food from the refrigerator and freezer and gathered up a few more clothes. We were allowed back in permanently after about 8 days.

   We have attached a checklist that is a very valuable tool. It helps you determine if your property is as safe as it can be and gives you suggestions for improving that situation if necessary. This particular fire began on the far northwest side of PK, traveled down that side of the lake, jumped Hwy 16 and came roaring in our subdivision. Communication between neighbors is so very important, as is helping one another in this situation. Thanks for your time and good luck getting yourself and your home "Firewise"!

FIREWISE CHECKLIST

Use this checklist to determine if your home and property are Firewise.

- ❑ Adequate defensible space is available. A minimum of 30 feet around the home and each structure is needed.
- ❑ The grass is mowed regularly, and leaves and pine needles are cleared within the defensible space area.
- ❑ The firewood is stacked or stored at least 30 feet from the house.
- ❑ A hose that reaches all the way around the house is readily available (a 100-foot hose is recommended).

- ❑ The propane (LPG) tank is located at least 10 feet from the house, and weeds, tall grasses, and vines have been cleared.
- ❑ Tree branches overhanging the roof have been pruned within 15-20 feet of the chimney.
- ❑ The deck is enclosed to keep leaves and other woody debris from accumulating.
- ❑ A mobile home should have underpinning/skirting materials all the way around the structure to prevent the accumulation of flammable debris.
- ❑ The driveway can accommodate local fire department vehicles (12-feet wide or larger).
- ❑ The house number (at least 4 inches tall) is highly visible on the home and at the entrance of the driveway.
- ❑ The gutters are free of dead leaves, moss, pine needles, and twigs.

- ❑ A ladder, fire extinguisher, and hand tools such as rakes, shovels, and axes are readily available.
- ❑ A spark arrester has been installed on the chimney (a 1/2-inch mesh screen is recommended).
- ❑ Fire-resistant plants, shrubs, and trees are used in landscaping.
- ❑ An escape plan has been developed and discussed with family members.
- ❑ My homeowner's insurance policy has adequate coverage for the costs of rebuilding and repairs needed in the case of a catastrophic wildfire.

KENTUCKY FIREWISE

KENTUCKY DIVISION OF FORESTRY

http://forestry.ky.gov/wildlandfiremanagement/Pages/KentuckyFirewiseProgram.aspx

A Brief Natural History of the Cross Timbers of Texas (Lynne Brown) - The Hills above Possum Kingdom Lake is located within the Western Cross Timbers region of Texas. The entire Cross Timbers extends as far north as Kansas. In Texas, this region is divided between the Eastern section (lower elevation and flatter land) and the Western section (higher elevation and hillier, rockier land).

Before the settlement of our region in the mid-1800's, the Cross Timbers was surrounded on east and west by vast prairie grasslands. Explorers and early settlers traveling across those prairies saw in the distance a distinct line of deeply forested woods. Upon arriving they found thick forests of post oak and blackjack oak, along with many other varieties of trees. Thick vines and scrub brush formed such an entanglement, that crossing it was impossible in many places. Maps from the early 1800's note "Cross Timbers" as a landmark and warning to travelers. Most likely the name of the region resulted from that difficulty. Many pioneers believed that the Cross Timbers was the dividing line between civilized Indians in the east, and savage Indians in the west.

As explorers continued to travel across Texas, they learned that our region was more complicated than originally believed. Vast geologic differences resulted in a variety of soil types, plants and wildlife within the region. Pockets of prairie could be found within the deep forests. Trees included a large variety of oak, hickory, elm, hackberry, eastern red cedar and juniper. Some species of red cedar have been found to be hundreds of years old.

The tangle of vines included persimmon, sassafras, wild grape, Virginia creeper and cat brier. Because of the region's transitional location within the state between semi-arid and humid climates, lichens can be found on trees, rocks and forest floor.

One interesting note reported by numerous travelers was the abundance of insects encountered. None was mentioned more often than the chigger. One writer warned those passing though to be aware of the "chigger district." Also recorded in 1852 was a list of wildlife found in the Cross Timbers: "black bear, raccoon, Texas skunk, otter, civit cat, wild cat, panther, fox squirrel, striped squirrel, flying squirrel, beaver, rabbit, jackass rabbit, small prairie rabbit, prairie dog, opossum, deer, elk, antelope and buffalo."

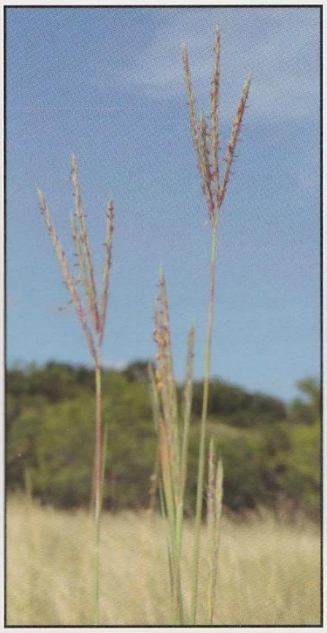
The grasses found in open prairies surrounding and within the Cross Timbers were predominated by the "big four" – big bluestem, little bluestem, switchgrass and Indian grass. Also found in more shallow soils were shorter grasses – side oats grama, buffalo grass and silver bluestem. Also within sunny prairies prickly pear cactus and yucca were common. All of these species can still be found (and planted) today.

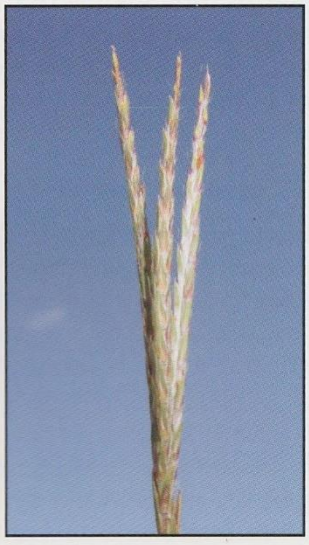
In 1854, the first permanent settler in Palo Pinto County built his log home four miles north of present day Graford. Early pioneers to the area quickly learned that Comanche Indians would cause them significant problems…more to come in subsequent newsletters about the history of settlement in the areas surrounding The Hills.

Big bluestem

turkeyfoot

Species: *Andropogon gerardii*
Family: POACEAE
Grass Family
Orig/Long/SoG: NPW
Bloom Period: July to November
Distribution: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10





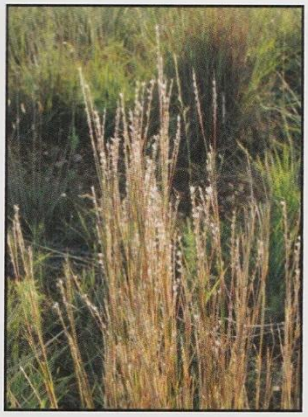
Identification: Big bluestem is a robust, upright perennial that can grow 3 to 6 feet in height. Plants are strongly rhizomatous with colonies up to 10 feet across. Each plant has several stems, mostly glabrous with a waxy covering over the entire plant. Leaf blades are flat, usually up to ⅜ inch wide and 6 to 10 inches long, feeling rough to the touch due to short hairs on the margins. Stems are bluish-green in color, and leaves with seedheads are reddish mixed with bluish-green. Seedheads resemble a turkey's foot normally with a three part branching of the seedhead. At maturity the lower leaves will begin to curl, and the plant changes to a reddish color after frost. Big Bluestem is one of the highly desirable "big four" tall grasses, along with switchgrass, little bluestem and Indiangrass.

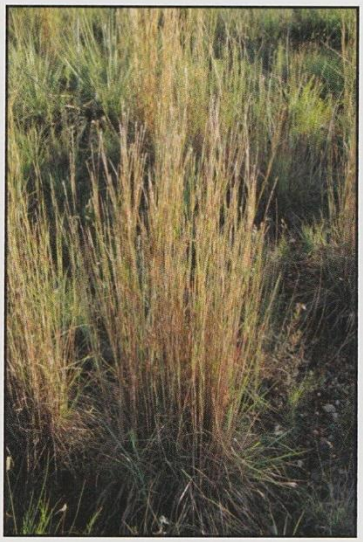
Value: Big bluestem is one of the most coveted native tall forage grasses in the nation. It delivers good to excellent grazing value for livestock and poor grazing for deer and antelope. The grass makes excellent fawning cover, and clumps of several close-growing plants may be used as nesting cover for bobwhites. Standing straight and tall, big bluestem has few grasses that can compare to the quality and quantity of forage it produces. Dense stands of big bluestem can easily produce 4,000 to 5,000 pounds of high quality forage per acre.

Management: Big bluestem flourished on many of the early rangeland ecological sites but has been overgrazed to extinction in many pastures. The plants should not be grazed shorter than 6 to 8 inches to maintain the vitality of the plants, and it must have periodic rest from grazing during the growing season. During winter the stems of big bluestem will often weaken and fall making grazing by livestock more difficult, but showing the high palatability and low lignin levels in the plants. Big bluestem responds especially well to dormant season burning, especially if conducted when the new culms have about an inch of green growth (late February to March in north-central Texas).

Little bluestem

Species: *Schizachyrium scoparium*
Family: POACEAE
Grass Family
Orig/Long/SoG: NPW
Bloom Period: August to December
Distribution: 2, 3, 4, 5, 6, 7, 8, 9, 10





Identification: This native perennial tufted bunchgrass grows on culms 2 to 4 feet tall, occasionally to 6 feet. The color changes throughout the year with striking blue-green leaves and stems during early summer, gradually turning reddish-brown by late fall and through the winter. Leaf blades are flat and erect, 6 to 10 inches long and ⅛ to ¼ inch wide. Sheaths are mostly basal, strongly keeled or flattened, and may be hairy or smooth. Ligule is a short membrane. All stems are flattened and may show purplish color when young. The slender spike-like seedheads are found in the upper half of the culm. Little bluestem reproduces by seeds, but fertile seeds of little bluestem are not produced yearly. Considered one of the highly desirable "big four" tall grasses along with switchgrass, Indiangrass and big bluestem. Little bluestem can produce from 1,500 to 4,000 pounds of dry forage per acre.

Value: Grazing value for livestock is of medium value with highest protein levels of 8 to 9 percent occurring in June, with values decreasing throughout the growing season and dropping to a mid-winter protein level of 2.5 to 3 percent. The most productive grazing value occurs from March to July when plants are actively growing. Winter grazing can be productive if protein and mineral supplements are provided. Historically, little bluestem often made up 30 to 40 percent of the grass composition in climax range condition, now some pastures may approach a monoculture of little bluestem. This change in composition is due to grazing pressure and stocking rate over the past 150 years. Little bluestem is of little forage value for wildlife, but provides excellent nesting cover for ground-nesting birds and is ideal fawning cover for deer.

Management: Rotational grazing and proper stocking rate will assist in getting proper grazing use of this grass. Little bluestem is weakened by continuous grazing when more than half of the total production is removed. This desirable grass can be found on most soil types if the site is well-drained. It grows in open prairies, rocky outcrops and can remain a minor component of the plant composition even in heavy juniper dominated pastures. Little bluestem responds very favorably to prescribed burning.

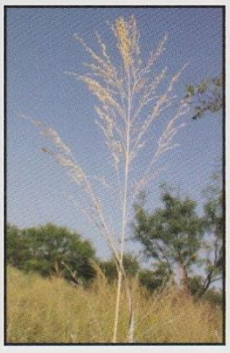
Switchgrass

Species: *Panicum virgatum*
Family: POACEAE
Grass Family
Orig/Long/SoG: NPW
Bloom Period: August to November
Distribution: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Identification: This robust rhizomatous perennial grass reaches heights of 3 to 6 feet, occasionally up to 8 feet and appears as a single plant or in large or small clumps. The stems are hollow, glabrous and unbranched above the base. The root system is very well developed with rough, scaly rhizomes helping to increase the size of the clumps. The overall color is a distinct bluish to bluish-green during the growing season and curing to reddish-orange in the winter. Leaf blades are flat, usually glabrous, up to ½ inch wide and 6 to 24 inches long, occasionally reaching 30 inches. Sheaths are rounded, glabrous and usually shorter than the internodes. Ligule is a dense ring of hairs ⅛ inch long. Seedhead is an open panicle, oval to pyramidal in shape and grows 5 to 20 inches in length and is often one-third to one-half as broad as it is long. Seeds are clustered on ends of branchlets with lower branchlets in whorls.

Value: Switchgrass provides nutritious and palatable early grazing for all classes of livestock; it has a good forage rating as well. Switchgrass can be managed in pure stands where baling may produce 2 to 4 tons of forage per acre. The forage value for deer is poor as they use only the new tender growth. The seeds of switchgrass are eaten by game and songbirds. Switchgrass has value far above its importance as livestock forage; deep, strong roots add stability to riparian areas and help stabilize creek banks and floodplains. Plants are used for nesting by ground nesting birds and as fawning cover by deer.

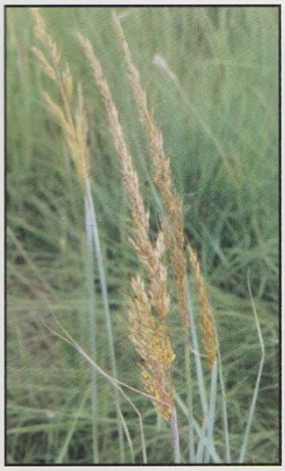
Management: Considered one of the highly desirable "big four" tall grasses, along with little bluestem, Indiangrass and big bluestem. Switchgrass is a decreaser in pastures receiving long-term heavy grazing. Switchgrass responds to proper grazing use, rotational grazing and regular deferments. There are two distinct cultivars of switchgrass, an upland strain and a lowland strain. Commercially available varieties include Alamo, a strong bunchgrass that favors bottomland sites, and Blackwell, a smaller plant that does better in dryer parts of Texas and forms colonies through rhizomatous growth.

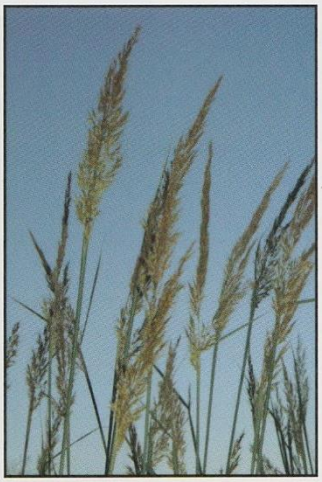


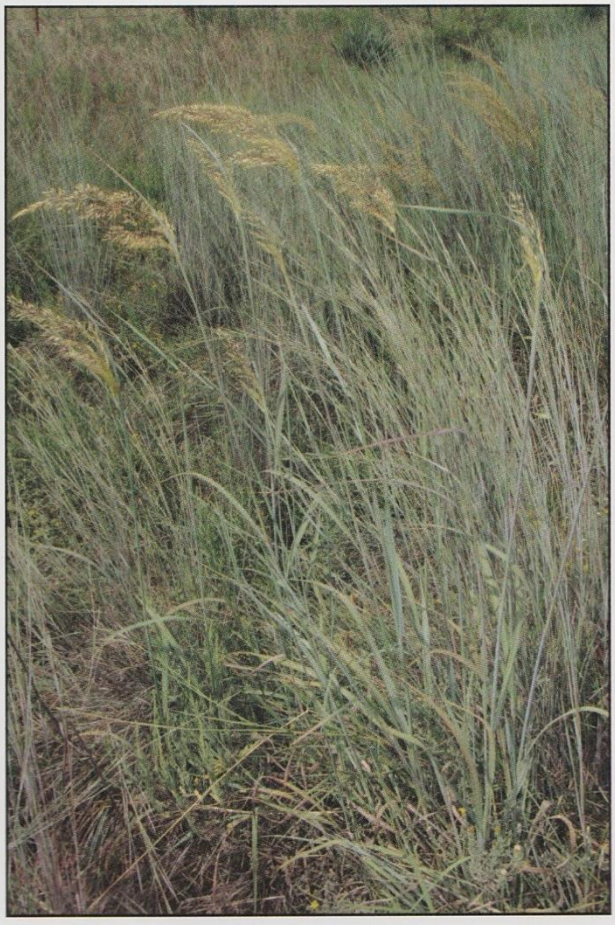
Indiangrass

yellow Indiangrass, Indian reed

Species: *Sorghastrum nutans*
Family: POACEAE
Grass Family
Orig/Long/SoG: NPW
Bloom Period: September to November
Distribution: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10







Identification: The culms of Indiangrass grow stiffly erect and reach a height of 3 to 8 feet. The plant reproduces both from seeds and short, scaly rhizomes. The nodes are rough with stiff hairs. During the growing season the plants are bluish-green then curing to a golden tan. The leaf blades are flat, 10 to 24 inches long and ⅜ to ⅝ inch wide which narrow near the base. At the base of the leaf is the ligule that is split and said to resemble rabbit ears. The leaves spread at a 45 degree angle from the stems. Inflorescence is a dense and narrow panicle, 6 to 12 inches in length and turning a rich golden color upon maturity. The ½ inch long awns are tightly twisted in the lower portion, bend roughly at mid-length and show loose spirals after the bend. Indiangrass is considered one of the highly desirable "big four" tall grasses along with switchgrass, little bluestem and big bluestem.

Value: Indiangrass is very nutritious and readily eaten by all classes of livestock and has excellent grazing value. However, the grazing value for deer is poor and limited to fresh new growth. The seeds may be stripped off of the plants by turkey. This large bunchgrass provides good nesting cover for quail and turkey and provides fawning cover for deer. Seed is commercially available for use in range seeding. The plant is best adapted on deep, moist soils but can be found growing on a wide variety of soils. Solid stands of Indiangrass are often cut once per year and baled for high quality prairie hay. Recreational mowing of Indiangrass and other tall native grasses is not recommended.

Management: Indiangrass will decrease on rangelands receiving heavy continuous grazing. Proper stocking rate and rotational grazing will ensure this plant remains high in vigor and a component of the grassland community. A regular deferment will allow Indiangrass to produce a seed crop and grow healthy roots. This grass responds very well to prescribed burning conducted during late winter.

What to See in the Sky this Spring and Summer **(Peter Gottschling)**

Spring and summer meteor showers for the fairly dark skies of The Hills are the April 22 Lyrids, May 5 Eta Aquariids, July 22-23 Delta Aquariids and the big (hopefully) August 12 Perseids. The bad news about watching most meteor showers is that their peaks usually occur after midnight and probably are best at 2 or 3 AM. You don't have to know where the actual radiant (where the meteors appear to originate) is for seeing meteors. The best thing is to concentrate on the darkest part of the sky for your watching. Take out a lounge and relax for a few hours.

The good news this year is that for the date range of the Lyrids from April 16-25 there is no moon in the sky after midnight so seeing 10-15 meteors and hour is possible. The Lyrids really go big some years but this cannot be predicted.

The May 4-6 Eta Aquariids will be blotted out by the bright moon shine but if you really want to try, the peak is around 4 AM. The July Delta Aquariids will also be blanked out by an almost full moon.

One of the biggest annual meteor showers is the Perseid shower peaking August 11-13 in the late evening to dawn and it will occur during a new moon so the sky will be as dark as it gets in The Hills. If you want to have a meteor watching party then the night of August 12 would be ideal night to schedule it. It is recommended to try near dawn on the 11th and late in the evening of the 13th also to increase your chances of seeing meteors.