

Burleson Prairie Plant Adventure 2019

1. Half shrub sundrop. *Calylophus berlandieri*.

The showy, yellow flowers of Berlandier's sundrops are 2 in. across with four, broad, crinkled petals. This is a bushy, 4-20 in. plant that sometimes becomes woody near the base. Its leaves are narrow and spiny-toothed. This is an excellent rock garden plant. Named for French-Swiss physician Jean Louis Berlandier (1805-1851) who collected plants in Texas and northern Mexico.

2. Prairie plantain, Indian plantain. *Arnoglossum plantagineum*.

While the flowers are insignificant, the foliage is striking, with glossy leaves that occur mostly at the plant base. Cherokees used as a poultice for cuts, bruises, tumors and infections.

3. Compass plant. *Silphium laciniatum*.

Compass plant contains a resinous sap that was used by Native Americans as a chewing gum. Some tribes burned the dried roots to ward off lightning during storms. They believed that lightning occurred more frequently where compass plant grew, and they would not camp in those locations.

The name "compass plant" alludes to the tendency for basal leaves of plants to align their edges north and south. Compass plant commonly is found in ungrazed areas; livestock seek it out due to its palatability.

4. Wild Foxglove. *Penstemon cobaea*.

Penstemon cobaea is a flowering plant in the plantain family, commonly known as cobaea beardtongue, prairie beardtongue or foxglove penstemon. The plant is native to the central United States, primarily the Great Plains from Nebraska to Texas, with additional populations in the Ozarks of Missouri and Arkansas.

5. Larkspur. *Delphinium carolinianum*.

Plants of the genus *Delphinium* contain toxins, and no parts of them should ever be eaten. "Larkspur" refers to the resemblance of the flower to the spur on the foot of a lark.

6. Jersey Tea, New Jersey Tea. *Ceanothus herbaceus* / *americanus*.

Native Americans used the leaves to make a tea-like beverage and took infusions of the roots for constipation, pulmonary troubles, colds, and stomach troubles. Great Plains tribes used the woody roots as fuel when on buffalo hunts when there was a scarcity of timber. The leaves were used as a tea substitute during the Revolutionary War. Attracts pollinators.

7. Scurf-Pea, Breadroot Scurf-Pea. *Pediomelum esculentum*.

Breadroot scurf-pea probably was the most important wild food gathered by Native Americans of the Great Plains. The tuberous root can be eaten raw, cooked, or dried. By mid-summer, the leaves and stem break off and blow away. Plains tribes dug the tubers before the tops were gone and often dried them for winter use.

8. Gilgai.

The term gilgai is an Australian aboriginal term meaning small water hole. Gilgai microrelief occurs when the clay soil layers shrink and swell during alternate drying and wetting cycles. This gradually forces 'blocks' of subsoil material upwards to form mounds. Gilgai commonly form on black and grey vertosols and, to a much lesser extent, brown and red vertosols.

9. Cone flower, Echinacea, Black Sampson. *Echinacea angustifolia*

The generic name is derived from the Greek word *ἐχῖνος* (*ekhinós*), meaning "hedgehog", due to the spiny central disk.

Native Americans used Echinacea to treat snakebites, burns, toothaches, colds, sore throat, headache, gonorrhoea, mumps, tonsillitis, and smallpox (when mixed with puffball spores and skunk oil). Early settlers used it for almost every ailment. The juice from the plant can prevent burns. Root (chewed or in tea) used for snake bites, spider bites, cancers, toothaches, burns, hard-to-heal sores, and wounds, flu and colds. Universal application for the bites and stings of all bugs; also snakebites, toothache, mumps; washed hands in decoction of plant in order for them to withstand heat; decoction of roots for snakebite and hydrophobia. Macerated root used for snakebite, stings and venomous bites, including hydrophobia. Ate root and green fruit when thirsty or perspiring and as painkiller for toothache, tonsillitis, stomachache and pain in bowels. Macerated root used as local anesthetic. Root used as cough medicine. Colds and sore throat treated by chewing piece of root and letting juice run down the throat. Tea made of leaves and root as a remedy for sore mouth and gums. Tea used for rheumatism, arthritis, mumps and measles.

10. Rattlesnake Master, *Yucca leaf eryngo*. *Eryngium yuccifolium*.

An herbaceous perennial plant of the parsley family native to the tallgrass prairies of central and eastern North America, from Minnesota east to Ohio and south to Texas and Florida, including a few spots in Connecticut, New Jersey, Maryland, and Delaware. Native Americans and pioneers used this plant medicinally. An infusion was held in the mouth for toothaches and taken for kidney disorders and neuralgia and a decoction used to prevent whooping cough. An infusion of the root was used as a snakebite remedy and the stem and leaves were chewed for nose-bleeds. After the flowerbuds open, the pollen matures and is released two to three days before the stigmas become receptive. This encourages cross-pollination by making it unlikely that a given flower's pollen will fertilize the stigma of the same flower. Rattlesnake master has unusually high seed set (close to 90%). *E. yuccifolium* is fairly intolerant of anthropogenic disturbance, but readily re-establishes in prairie restorations. The flowers attract many insects, including short and long-tongued bees, flies, beetles, and butterflies, but most numerous of all are wasps.

11. Wild Hyacinth. *Camassia scilloides*

Grass-like leaves in a tight, basal clump surround a 1-2 ft. blossom stalk topped by lavender flowers in 5-7 in. spikes. A leafless stem with lavender to blue flowers in an elongated, loose-flowered cluster rising from an underground bulb. The sweet-scented flowers have six, petal-like segments and protruding, yellow stamens.

The bulbs of this plant were used by Native Americans and early explorers for food. The flower somewhat resembles the cultivated Easter Hyacinth, in the genus *Hyacinthus*.

12. Barbara's button, Puffball. *Marshallia caespitosa*.

The genus name was given by the botanist Schreber (in *Genera Plantarum*, 1791) to honor the Marshall family, uncle Humphry and nephew Moses, of Pennsylvania. They were botanists of the American colonial period, and cousins of the famous botanists and explorers John and William Bartram.

The origin of the common name "Barbara's buttons" is unknown. The flower heads do resemble buttons, but botanical references giving this name do not quote the Barbara which the name honors (Rickett 1975). The reference is possibly to Saint Barbara, though the association is obscure. Saint Barbara had long hair and is also associated with lightning—perhaps the individual flowers resemble lightning bolts,

or the whole head of flowers resembles Saint Barbara's long locks. This common name was not, at any rate, widespread in the 19th century. The botanist B.W. Wells, in *Natural Gardens of North Carolina* (1932), called the plants "loudspeakers", referring to the megaphone shape of the individual flowers. The first printed use of the name "Barbara's buttons" is in Small's *Manual of the Southeastern Flora* (1933).

13. Prairie celestial, celestial. *Nemastylis geminiflora*.

The sky-blue flowers open in late morning and curl up before 3 in the afternoon, even on overcast days. Each flower only lasts one day. Once the seed has ripened, the bulb is renewed, and the plant disappears until following spring. The bulbs colonize over time.

14. White prairie clover. *Dalea candida*.

A species of flowering plant in the legume family known by the common name white prairie clover. It is native to North America, where it can be found throughout central Canada, the central United States, and northern Mexico. It grows in many types of habitat, including several types of prairie, foothills, woods, forests, and disturbed areas.

Native Americans steeped dried leaves in water to make a tea, used the leaves to create medicine applied to wounds, and chewed the sweet-tasting roots.

15. Standing cypress. *Ipomopsis rubra*.

Ipomopsis rubra has very short, filament leaves attached to long stems, upwards of five feet long in some cases. *Ipomopsis rubra* flowers are about an inch long with a number of small stamens inside. The tubular flowers grow in spears and all point upwards. The flowers have small yellow dots inside, and have five lobed petals. *Ipomopsis rubra* also has a very long taproot to survive droughts.

16. Prairie parsley, wild dill. *Polytaenia nuttallii*.

Wild dill has stiff, stout stems, usually 2 feet high, which become dry and brown and remain standing through the winter months.

17. Eastern gamagrass. *Tripsacum dactyloides*.

Eastern gamagrass has several short, fibrous, thick rhizomes. Eastern gamagrass can survive droughts and floods for a long time because of its rigid and thick rhizomatous roots which firmly holding the plant upright. The deep and hollow roots of the plant branch out from lower nodes. As the plant is a distant relative of corn, it shares common subtribes with the *Zea mays* corn species.

Eastern gamagrass was widely considered a high class feedcrop among the early settlers of the United States. However, it started to disappear because of grain crops and cattle grazing. Around the late 1980s and early 1990s, people started to pay attention again to eastern gamagrass as a good productive forage in summer, since it is productive, palatable and easily digestible by almost all cattle. For these reasons, gamagrass is ideally suitable for feed crops, including hay and pasture forage for which rotation of grazing seasons is controlled. It is used as forage because the growing season of the grass is earlier compared to other warm-season grasses and later compared to cool-season grass and legumes. Eastern gamagrass requires a moderate amount of carbohydrates stored in the leaf bases for regrowth. If the plant is grazed before carbohydrate accumulates in the leaf bases the plant will die from overgrazing.

Gamagrass is also suitable as a wildlife habitat. Hollow space in the middle of dispersed bundles and the tented canopy created by the leaves growing from the rhizomes and dropping into the middle make the plant an attractive location for wildlife. For example, the empty space in the middle of bundles is large enough for wild animals like quails and prairie chickens to build nests. Moreover, the grass provides good cover during the winter for grassland sparrows.

18. Liatris, gayfeather. *Liatris punctata*.

In the early growth stage, the herbage is nutritious and palatable for livestock, being especially preferred by sheep. Native Americans utilized the roots as a food source and to make a tea used to treat stomachaches. Called crow-foot by some Native American tribes, because crows were often observed eating the roots in the fall. Dotted gayfeather produces a taproot that can reach a depth of 15 feet, making it quite drought-resistant. The plant reproduces sexually by seed and vegetatively by sprouting from its rhizome. This species is slow-growing and long-lived, with specimens estimated to be over 35 years old.

19. White rosinweed. *Silphium albiflorum*.

This slow growing but extremely long-lived plant develops a tremendous taproot that can be as deep as 15 feet. It is native to the United States, where it is endemic to the state of Texas. Its natural habitat is in open, calcareous prairies.

It is a tall perennial with rigid, deeply divided leaves. It produces heads of white flowers in late spring through mid-summer.

Due to its narrow habitat requirements and low population recruitment, it is considered to be a highly conservative species. It fares poorly in areas of suburban development, and faces significant threats in parts of its range.

20. Sensitive briar, Catclaw sensitive briar. *Mimosa microphylla*.

The leaflets are sensitive to the touch if one brushes against them or touches them, they immediately fold up against each other, suggesting the name sensitive briar. They also close at night and in cloudy weather. The fragrant flowers look like small pink balls and grow along the stem at varying intervals.