

Engelmann's Daisy
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Here in the middle of a dry winter we can use a floral taste of what is to come in the spring. Engelmann's daisy is a native, perennial, cool-season forb that will begin to flower very late in the winter in South Texas and very early in spring in North Texas. At this moment the rosettes of Engelmann's daisy are slowly growing while lying flat upon the ground. Also at this time of the year you can readily see how it gets another common name of cut-leaf daisy owing to the deeply dissected leaves.

Engelmann's daisy, *Engelmannia peristenia*, begins growth as a low growing winter rosette but by early summer can reach up to 3 feet in height and diameter. Several erect to spreading stems with branches near the tops, which are covered in stiff hairs, give way to a rounded growth habit at maturity. This native forb grows from a very large, stout woody taproot making it drought hardy even in a dry winter when cool-season annuals are no-shows. The leaves lie alternately up the stems and are pinnately lobed with stiff hairs, 6 to 10 inches in length in lower leaves and smaller toward the tops of the branches. The yellow flowers have 8 petals, 1¼ to 1½ inches across, forming on the ends of the branches. The flowers close during the evenings and reopen the following morning.

Engelmann's daisy is a high quality, palatable perennial forb that has been grazed out of many pastures over the years. Readily chosen by all classes of livestock, it also produces excellent quality forage for deer and antelope. Many pollinators visit the flowers, and the seeds are eaten by quail, dove, other game birds and several species of songbirds, especially sparrows. Crude protein in early spring ranges from 9 to 20 percent. Energy values are high in February and moderate in July.

Engelmann's daisy is one of the "Big Four" of native perennial forbs in Texas that also includes Maximilian sunflower, bush sunflower and Illinois bundleflower. Proper grazing use will protect the tender rosettes during the winter from overuse. Seed is commercially available and can be added to range planting mixes to re-establish this great native forb into your pastures. A relatively high seeding rate of 15 pounds of Pure Live Seed (PLS) per acre coupled with the current cost of seed averaging \$28 dollars per pound will limit its use in most mixes, just 5% Engelmann's daisy in a mix will cost \$21 dollars per acre just for this part of the mix. Even at this price it is worth having in the landscape because of the palatability it provides during winter and through summer. Areas having a very high number of deer or exotic animals should take into consideration whether this forb can become established without a reduction in grazing pressure.

This forb is adapted to most areas of Texas especially the western two-thirds of the state. It does well in sandy loams to clay loams but does not seem to persist in deep sands, heavy clay soils or soils with high salinity levels. Knowing the plants that grow upon your property is key to knowing how to manage those plants for long-term permanence. An old anonymous quote states, "The best fertilizer for a piece of land is the footprints of the owner". This would be a good time of the year to take a long walk across the pastures and see what is growing now, what is being grazed or browsed upon and begin your journey in learning the plants that grow upon your property.

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Photo Captions:

1. Mid-winter rosette growth stage of Engelmann's daisy, or cut-leaf daisy.



2. Initial growth from the rosette during spring also showing the cut-leaves.



3. Late April growth showing new flowers on branches at end of the stems.



4. Growth stage during late May showing plant in full growth and full flower.



5. Mature Engelmann's daisy growing on the roadside near a cattle guard, this plant is grazed upon only by the bravest of white-tailed deer.



6. Many types of pollinators, such as this specie of bee fly, visit the flowers throughout the summer months.



7. During the extreme heat of the day the leaf tips curl downward to reduce exposure of the petals to the sun.

