

Native Succulents of the Hill Country

A few months ago I discussed a number of common Hill Country Cacti. All cacti are succulents (store water in juicy tissues), but not all succulents are cacti. With very few exceptions, cacti do not have leaves, but have fleshy green stems and spines (aka thorns). Succulents do not have spines, although some species have leaves with sharp points and/or sharp hook-like structures along the edge of the leaf.

Most experts place all of the succulents in the Hill Country in the Century-Plant family, (Agavaceae).

The most common succulent in the Hill Country is probably the Twist-leaf yucca (*Yucca rupicola*). This yucca is endemic to the Hill Country, meaning it grows natively nowhere else. It has stiff leaves that are 1-2 feet long and 1 to 2 inches wide. The leaves are usually slightly twisted. The flower stalk would be about 5 feet tall with large white bell-shaped flowers in the spring—that is if the deer didn't eat it first, which they usually do.

Buckley yucca (*Yucca constricta*) has 1 to 2 feet long, narrow leaves usually in a spherical cluster. The edges of the stiff leaves usually have white threads hanging from them and the points of the leaves are very sharp. The flower stalk can be 5 to 6 feet tall and it produces clusters of large bell-shaped white flowers in the spring.

The Red yucca (*Hesperaloe parviflora*) is native only to the western part of the Edwards Plateau, but it is commonly grown as an ornamental throughout the Hill Country. It has 3 foot long olive-green leaves that are frequently inrolled and have white threads hanging from them. The 5 foot pink flower stalk has small red or coral flowers that attract hummingbirds.

Texas Sotol (*Dasyliirion texanum*) has 3 feet or longer light green narrow leaves which have hook-like structures on the edges of the leaf that are curved toward the tip. This is very effective protection from browsing animals. Sotol produces 8 foot tall flower stalks with small yellow flowers closely packed along the top of the stalk.

There are two similar species of *Nolina* in the Hill Country, Devil's shoestring (*Nolina lindheimeriana*) and Texas beargrass or Sacahuista (*Nolina texana*). They are both characterized as having very long (2 to 4 feet) very narrow (1/4 inch) flexible leaves which arch up from the base about 2 feet and then hang down to the ground. They resemble a very large clump of grass. But they are not grasses.

Nolina lindheimeriana has flat leaves that are very finely toothed. Its flower stalk is usually about 3 feet tall with tiny cream colored flowers arranged on loose open branches in April to May.

Nolina texana has leaves that feel round with a flat side with no toothed margins. The off-white flowers are borne on a short flower stalk that does not grow up above the leaf vegetation. It blooms from March through June.

One more member of the Agavaceae family, the Spanish dagger (*Yucca treculeana*) is native only to the extreme southwest part of the Hill Country. It has very long, wide and stiff dagger-like leaves with very sharp, pointed tips. It produces a very large, heavy flower cluster with cream-colored blooms tinged with pink.

There are, of course, many more species of agaves and yuccas that are native to the Trans-Pecos region of Texas but are often seen in people's cactus gardens throughout the Hill Country.

Many species in the Agavaceae family are pollinated by a large yucca moth which is uniquely adapted to the large blooms of most species, and this symbiotic relationship is important to the survival of both the moth and the agaves.

Native Americans utilized many species of agaves and yuccas. For example, they would strip the edges with the prickles off the sotol leaves and use the soft leaves to weave baskets and mats. They dug up the large tubers or roots at the base of several species and baked them in hot rock ovens, or ground them into a flour for various uses.

Deer usually avoid the leaves of all of our native succulents, although when desperate enough, nothing may escape their browsing. The flower stalks, on the other hand, tend to be great favorites of deer, so many folks never get to see their yuccas bloom.

Just a reminder, previous columns can be found on my website, www.hillcountrynaturalist.org, or www.hillcountrynaturalist.org/columns.

Until next time...

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