

Featured Plant

Common Name: Desert hackberry
Scientific Name: *Celtis pallida* Torr.



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Desert hackberry, also known as spiny hackberry and granjeno, is common, but not particularly abundant at elevations from 2200-4000 ft. in southwestern Arizona. Adults are often wider (6-10 ft) than tall (4-8 ft), and each plant has a dense group of stems growing out of the soil (< 3 per ft²). These dense stems and spiny branches create "impenetrable thickets" where small mammals and reptiles establish homes. It is often found on sandy to loamy soil, and is conspicuous in and near ephemeral washes. The fruit is eaten by many bird, reptile and mammals species; livestock rarely consume the leaves

or young stems; and the species is well-suited as a hedge to screen visibility in residential settings.

The small (1/16 inch) flowers appear in spring, are small greenish-white in color, and do not have true petals. Typically, male and female flowers appear separately on the same plant (monoecious), but flowers with both sexual organs will occur. Fruits are yellow-orange (1/4 inch), are fleshy but with a large seed, and I think they taste like cantaloupe (see upper insert).

Leaves (1-2 inches long, 0.5-1 inch wide) have three prominent veins small teeth along the margins, and are arranged alternately along branches (see upper insert). The plant is nearly leafless (deciduous) in winter and new leaves appear in spring. Spines appear at branches nodes where leaves emerge (see lower insert). Branches express a gentle zigzag pattern, because the growth changes direction ever so slightly at each node, straying left and then right to the end of the branch (see upper insert).

The name *Celtis* is Greek for tree bearing sweet fruit and was applied by the famous Dutch botanist Carl Linnaeus to the European hackberry in the 18th Century. The name *pallida* was applied to this particular species by the Harvard botanist John Torrey in 1859 probably because the young stems are pale green. Torrey based his determination on specimens collected by the eccentric Charles Wright in 1851 somewhere in west Texas (probably the Trans Pecos country) when he served under Major William Emory during the survey of the new international boundary with Mexico.

Be aware that some have proposed taxonomic changes from the *pallida* to *ehrenbergiana* species name, and from the Ulmaceae to Cannabaceae family. Given this flux, it is best to report the authority along with the genus and species, *Celtis pallida* Torr.; where the use of Torr. tells the world that you are following the designation made by Torrey (the authority for that nomenclature).

Based on repeat photography from the Santa Rita Experimental Range (<http://ag.arizona.edu/SRER/photos.html>); particularly photo stations 332, 333, and 334) suggest that desert hackberry plants can live much longer than 100 years. Those old plants that we see today were the rare shrubs in open grassland, but now they are surrounded by mesquite, acacia, and cactus neighbors. Oh, the stories they could tell about how the neighborhood has changed.

Featured Bird

Common Name: Black-throated Sparrow
Scientific Name: *Amphispiza bilineata*



Dan L. Fischer – Author of *Early Southwest Ornithologists, 1528-1900*, University of Arizona Press

The striking Black-throated Sparrow can be described as mostly achromatic with colors ranging from black through shades of gray to white. The distinctive field marks of this attractive bird are the white facial strips and jet-black throat, and although seldom seen, the white tips of the outer tail feathers. In 1850, at the Academy of Natural Sciences in Philadelphia, John Cassin (1813-1869) noted while officially describing the specimen, that the sparrow was one of the "most remarkable finches yet discovered in America."

Black-throated Sparrows are distributed through most of the Southwest desert regions. In Arizona they are the most widespread nesting sparrow. They represent the extreme in their adaptation to arid desert conditions. Feeding mostly on seeds,

they do not require drinking water, yet are exposed to intense heat with little cover in the often sparse bushy areas they reside. In summer they supplement their diet with insects. Although their moisture intake is limited, they will drink water when it is available.

In winter Black-throated Sparrows assemble in small loose flocks along with other ground dwelling and winter visitant species. By late February they begin their lovely soft tinkling song as they pair for the nesting season. Depending on food availability, they may have as many as three or four broods with the first beginning in March and lasting through mid-August. The nest is usually located in a dense bush very close to the ground. Three or four light bluish-white eggs are laid in a cup composed of small twigs and coarse grasses lined with much softer materials such as finer grass, plant down and fur. Incubation lasts for about twelve days and the young leave the nest in another ten days.

The trials and tribulations leading to the discovery of the handsome Black-throated Sparrow were indeed harrowing. It was accomplished by John Woodhouse Audubon (1812-1862), the youngest son of the celebrated John James Audubon (1785-1851), while on his almost disastrous adventure westward. The younger Audubon, like his father, was an artist interested in natural history and the spirit of adventure. In 1849, he joined with a privately financed New York company seeking speedy wealth and fortune in the mountains of central California. In March they disembarked from a ship near the mouth of the Rio Grande and then sailed on a steamer upstream to a point near Camp Ringgold, opposite Rio Grande City. Almost immediately after their arrival, while preparing for their long land trip into Mexico, most of the men including Audubon came down with the dreaded cholera. Their troubles continued in rapid succession when ten men died, twenty turned back, their leader deserted and the remaining were robbed. After recovering two months later, Audubon was appointed their leader as they began the journey west through northern Mexico, southwestern Arizona and into California. Of the nearly 100 men starting their long journey, only thirty-eight reached the gold fields. Audubon's misfortune continued upon returning to New York when he learned that most of his precious paintings and sketches went down with a following ship after leaving San Francisco.

John Cassin was alluding to the well-defined head stripes when applying the specific Latin name of *bilineata*, "two-lined," to the Black-throated Sparrow.