Featured Plant

Steve Smith

Common Name: Arizona cottontop Scientific Name: Digitaria californica



Steven E. Smith, Ph.D., Associate Professor, and Kandres Halbrook, Graduate Research Associate, School of Natural Resources and the Environment, University of Arizona

Arizona cottontop (sometimes known as "Arizona cottongrass") is a distinctive native perennial bunchgrass that is most common on well-drained soils at elevations between 2,500 and 4,000 feet in southeastern Arizona. It often occurs

on steep, rocky slopes, rarely forms pure stands, and is frequently intermixed with shrubs and trees. This grass has dark green leaves, but it is most conspicuous and easiest to identify in late summer when the finger-like branches ("digits") of flowering shoots appear. Grains are produced from flowers on these shoots (tillers) and are covered by silver or whitish hairs that present a cotton-like appearance. In years of at least normal summer rainfall, single mature plants may produce more than 20 of these shoots and reach three feet in height. Grains typically drop by late fall leaving three to six brownish "digits" on the flowering structure. By fall, tillers will be straw-colored with grayish cured leaves.

Unlike many grasses, Arizona cottontop can produce new growth at almost any time of year and individual tillers of Arizona cottontop may live for up to three years. Older tillers are often stiff and wand-like and may be purplish during the cool season. These perennial tillers have the ability to produce new growth at many points along their length, which allows new leaves and tiller branches to develop relatively quickly following rainfall. The ability to rapidly produce growth after winter rains means that Arizona cottontop often furnishes forage much earlier than many of the other grass species associated with it. Its year-round succulent tillers and post-rainfall rapid growth has often resulted in Arizona cottontop being overgrazed. Rest from grazing during the summer has shown to be very important for maintaining or even increasing Arizona cottontop populations.

Even though the word "californica" appears in its scientific name, Arizona cottontop does not commonly occur in the State of California. This name was applied by the first European botanist who described the species based on a collection made in 1841 near Magdalena in what is now the Mexican State of Baja California Sur. In addition to Mexico and Central American nations, Arizona cottontop is also native to Bolivia and Argentina.

Common Name: Northern Mockingbird Scientific Name: Mimus polyglottos



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

Perhaps the most significant impression gained with the acquaintance of the Northern Mockingbird is its singing abilities. Their incredible ranges of variations display numerous eloquent vocalizations. Applying "mocker" to the bird is certainly appropriate as it imitates the songs of many bird species. Referring to the bird's varied mimicry; its scientific name Mimus polyglottos implies it is a "mimic" of "many tongues." Although many birds mimic, the Northern Mockingbird is the champion and best known in North America for its ability to add the songs and calls of other birds. Sometimes they even borrow manmade or synthetic noises. While few birds have this expansive

learning ability, and why many others do not, remains one of the obscure unknowns of birdsong.

Although individuals vary greatly, the male Northern Mockingbird may deliver upwards of 20 songs per minute which are selected from an astonishing repertoire of over 150 different songs. Their songs are a varied, prolonged series of notes and phrases that are often repeated or abruptly diverted to another passage in rapid succession. In spring, unmated males may sing most of the day and continue late into the night and early morning. On a clear windless day their sharp, distinct, melodic creations can extend to a radius of a quarter of a mile. Singing slows during the incubation and nesting cycle and resumes if there is a second cycle. They generally perform from a high prominent perch where at times the bird may suddenly in midsong fly upwards with a few wing flaps only to drop back with open wings and spread tail displaying contrasting wing-patches.

Clad in a nearly all gray plumage, the Northern Mockingbird is a perky, trim and very alert bird with a long tail. With head erect and tail held high, it forages mainly on the ground where it dashes for short distances, pauses, and then probes for insects. While doing this they perform a behavior which has been the subject of much discussion. It is thought that in an effort to scare insects into movement the bird often raises and lowers its wings over its back in a slow, jerking motion showing its white markings. This activity is also considered to be a territorial display.

Northern Mocking birds are fiercely territorial when they begin nesting in a wide variety of situations during March and April. They usually have two clutches of 3-5 eggs which are greenish to bluish white with blotches of brown. The eggs are incubated by the female for 12-13 days. After hatching, the young are fed by both parents and fledge in a similar time span.

The range of the Northern Mockingbird includes much of the lower elevations in the southern regions of the United States and south into Mexico. It was first discovered in the vicinity of Charleston, South Carolina by visiting English artist/naturalist Mark Catesby (1683-1749). His depiction of the bird appeared in his book *Natural History of Carolina* (1731-1743) which, incidently, was the first published account on the flora and fauna of North America. Catesby called it the "Mock-Bird of Carolina" and it was from this and his accompanying detailed notes that Swedish naturalist Carolus Linnaeus (1707-1778) was able to accurately apply the scientific name and describe the bird in 1758.

-eatured Bird