

▶▶▶ FEATURED PLANT

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Common Name: Locoweed

Astragalus is the largest genus of flowering plants in Arizona, with over 70 species plus 2 species of *Oxytropis*, a species that closely resembles locoweed in both appearance and poisonous principle. Species identification is often difficult and requires flowers and seed pods for proper identification. While most Arizona species have not been proved to be injurious it is best to treat all loco's as poisonous to herbivores, especially cattle and horses, unless positive evidence of their harmlessness is available.

Typical loco symptoms usually don't manifest until after plants have been grazed for weeks, but death may occur within a few days after this period of ingestion. The action of a "locoed" animal includes jerky, uncoordinated moves, lowered head and vacant stare. Head shaking and shying from common objects are also common. Abortion is a common symptom to loco poisoning in cows. Horses are especially sensitive and can be irreparably damaged after eating locoweed for one week.

Poisonings are of three types. Some species cause typical loco poisoning from the alkaloid swainsonine.

Others with nitro-toxins cause either acute or chronic poisoning with respiratory problems and rear-limb weakness. Still other loco species may accumulate selenium and cause hair loss, lameness and reproductive problems. At least 6-10 species that occur in Arizona cause the typical loco poisoning and at least 7 other species can be dangerously high in selenium. Locos are toxic in all stages of growth. Some are very toxic and cause a quick death (acute), yet others may require long periods of consumption before any ill effects are detected (chronic). Additionally, consumption of loco may go unnoticed in the dam yet cause birth defects. Plants may be annual, biennial or perennial. Depending on the species, loco plants can be highly site specific, occurring only on certain soils or in certain localities. Limey uplands are typical loco habitat but the species also occur on heavy clay sites. Loco plants tend to be cool season growers so good winter and spring precipitation years are also good loco years.

Preventing loco poisoning is easier said than done. Knowing which plants can be toxic is the first step in preventing poisonings. With loco this can be difficult,



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but in order to know the toxicity you must know which loco you have. Also, understand the plant's growth cycle and whether it has favored growth areas. Managers who recognize loco and can spot problem areas, can plan a strategy to minimize losses. Grazing management is one key in preventing animal loss. Pastures in good condition will reduce the chance that the animals will eat a toxic plant. If they have something else to choose from, they will often leave locoweed alone. The most effective strategy is to deny access to locoweed infested sites during critical periods. Early detection is critical and can be key to minimizing losses.

▶▶▶ FEATURED BIRD

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

Common Name: Gila Woodpecker

Scientific Name: *Melanerpes uropygialis*

Gila Woodpeckers are rather noisy and certainly conspicuous resident birds of the lower deserts of southern Arizona and northern Sonora. In Arizona, their primary occurrence correlates closely with, but is not limited to, the distribution of the giant cactus or saguaro. They also extend into the nearby foothills of the adjacent mountains and riparian areas of cottonwood and sycamore. Their presence is easily noted by the frequency of their nesting holes throughout older saguaro stands of mature cactus.

They appear almost tan except for their black and white barred back and rump. Their undulating flight reveals white wing patches as they move among the paloverde, mesquite and saguaro. As with most woodpeckers, the males have markings with some red on their head, and in the case of the Gila, they show a bright red cap. Their exceedingly long tongue is barbed and sticky which helps reduce extensive excavation when probing. Woodpeckers generally have zygodactyl feet, with two toes forward and two back, and with the aid of stiff tail feathers they are able to climb, move up, down, and around tree trunks with great ease. They

can also rotate their outer rear toe when necessary in some situations. Gila Woodpeckers are a great benefit where they occur by excavating numerous insects from many surrounding plants and by pollinating saguaro flowers. They are also great flycatchers when insects are available.

They begin excavating nesting cavities in saguaros long before they are used so the inner pulp can dry and heal to form a solid casing or "boot" within the cactus. Usually two broods with a clutch of three to five are raised from April to May in these sites. Year round interiors within these chambers enjoy more moderate temperatures. In addition to their use as nesting sites, many other birds benefit by also using saguaros. These are Purple Martins, Ash throated and Brown-crested Flycatchers, American Kestrels, Elf Owls, Western Screech-Owls and Ferruginous Pygmy-Owls. Much larger, but not as common, Gilded Flickers are also generally restricted to the older saguaro forests.

The discovery of the Gila Woodpecker was made by Dr. C.B.R. Kennerly and B. Möllhausen under the command of Lt. A.W. Whipple, an officer whose work



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and name stands out for his many achievements in the Southwest. They were entering a group of saguaros along the Big Sandy River, which is also the northern limit of the species, while surveying a cross country railroad route along the 35th parallel in 1854. The common name for the bird was applied because its range includes most of the Gila River basin. The species name of *uropygialis* refers in Greek to its rump which is banded.