Buffalo Gourd

(Family Cucurbitaceae, *Cucurbita foetidissima*)

By Gerald R Noonan PhD May 2013

Buffalo Gourds are a common sight along the trails near the San Pedro House and in many other parts of SPRNCA. They grow as a prostate vine that spreads along the ground and may grow up to 20 feet long. The leaves are relatively large, up to approximately a foot in length, grayish green above and whitish beneath. The triangular shaped leaves have fine teeth along the margins and are born on relatively long stalks. During approximately May to August, yellow flowers appear. They are funnel shaped, five-lobed, about 4 inches long, and have the basic ribbed and with veins. The flowers open very early in the day and are pollinated by bees. Pollinated flowers each produce a gourd that is approximately 4 inches long, round, and predominantly dark green but with light stripes. The gourds eventually mature to an even yellow color and with continued exposure to the sun become whitish in appearance. Buffalo Gourds are perennial, die back in the winter, and then grow back from the large root when weather becomes warmer.

The triangular shaped leaves distinguish this plant from the other two gourd producing species of vines that occur in SPRNCA. Finger-leaved Gourds differ by having central silvery white markings on the tops of the five narrow fingerlike segments of each leaf. Melon Loco plants differ by having leaves that are roundish or kidney shaped, approximately 2-6 inches wide, and with irregular jagged edges or pleats.

Buffalo Gourds occur in roadsides and in dry or sandy areas. The geographical range of Buffalo Gourds extends southwestward from the north-central United States into much of the southwestern United States and southward into central Mexico. These perennial plants have large taproots and foul-smelling leaves. The foul-smelling foliage helps drive potential plant eaters away. A single plant may cover an area of up to approximately 800 ft.^{2} Buffalo Gourds are native to the southwestern United States and northern Mexico. People have applied a variety of common names to them including, Missouri gourd, Buffalo Gourd, Calabazilla, Wild Gourd, and Wild Pumpkin.

Squash bees are the major pollinators of Buffalo Gourds. These bees forage early in the day before most other bees are active. Early daytime is when the flowers produce the most nectar. The squash bees spend long periods grooming and mating in the flowers and inadvertently spread pollen around. These bees are an exact fit for the flowers in shape and size and they only visit Buffalo Gourds and other gourd producing plants. Honeybees provide some pollination but are not as adept at removing pollen and are less strong fliers.

Warning. Contrary to the uses cited below, The Lady Bird Johnson Wildflower Center Native Plant Database advises, “The foul-tasting mature fruit is poisonous to humans if eaten. Sensitivity to a toxin varies with a person’s age, weight, physical condition, and individual susceptibility. Children are most vulnerable because of their curiosity and small size. Toxicity can vary in a plant according to season, the plant’s different parts, and its stage of growth; and plants can absorb toxic substances, such as herbicides, pesticides, and pollutants from the water, air, and soil**.” Do not eat or use this plant for medicinal purposes.**

A Google search of the scientific name *Cucurbita foetidissima* will result in extensive lists of scientific papers discussing the potential commercial cultivation of these plants. Buffalo Gourds are fast growing, are well adapted to arid conditions and will even grow and slightly saline conditions. Native Americans extensively used these plants for medicinal and other purposes. Medicinal uses included: the

Buffalo Gourd plant.

Female Buffalo Gourd flower.

Male Buffalo Gourd flower.

Ripening gourd.

application of a poultice of crushed roots to boils or other sores; soaking the mashed stems, leaves, and roots in hot water to make a poultice for application to sores on horses' backs; putting a poultice of crushed root and sugar on horses' saddle sores; putting macerated roots on ulcers; using a decoction of dried roots as an emetic; taking a decoction of dried roots as a physic; using a decoction of roots for chest pains; mixing pulverized root with water and using it as an analgesic for pains; using the roots to treat protracted labor; using a decoction of root as a physic for venereal disease; taking a decoction of root as an emetic for venereal disease; sprinkling pulverized seeds on venereal sores; applying a decoction of the roots to kill maggots in wounds; giving an infusion of the plant to horses for bloat or worms; taking an infusion of the pulverized root as a laxative; and applying a poultice of powdered seeds, flowers and saliva to swellings. Other reported uses included: using the dried gourds to make ladles, syringes for feminine hygiene, and rattles; eating parts of the plant as an appetizer; grinding the seeds into a flour used to make mush; using the gourds for food; roasting and then eating the seeds; using the yellow flowers as a dye; grinding up the green leaves to make a "green paint" for use in sand paintings; using the root and gourds as soap and bleach; forming the roots into a wooden ball and using it for playing the "four hills" game; rubbing the dried fruit onto stains on hides and clothing before washing; and using the roots for soap bars for washing clothes.

References

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