

Native American Heritage Month

What is Ethnobotany?



Ethnobotany is the study of how people use native plants. For thousands of years, hundreds of small groups of native peoples depended on plants like the prickly pear cactus, pecans trees, and the acorns of live oaks. They also used fibers from plants such as the sotol to weave mats and baskets. Discover 15 important plants found across San Antonio that were used for food, medicine, shelter, and more!



Photo: Alan Cressler

Huisache | *Acacia farnesiana*

Pronounced “wee-satch,” and translated from Nahuatl, meaning “many thorns.” This important tree had many uses. The seedpods were used to make inks and dyes, the gummy substance obtained from the pods were used to mend pottery, and the bark was used to dye hides. Today, cassie oil is a sweet smelling essential oil extracted from the flowers and used in perfumes, particularly in France.



Photo: Louis Nugent

Mountain Laurel | *Sephora secundiflora*

The red mescalbeans, or seeds, were used by Native Americans for ceremonial purposes. The seeds were also said to bring good luck, and strings of them were often traded with other Native Americans. They were also used to adorn clothing, worn as jewelry, or to decorate warrior dolls. Be careful as the bright red seeds and flowers are poisonous to humans! When the flowers bloom in early spring, they have a sweet-smelling grape scent.



Photo: Claudia Leon

Ashe Juniper | *Juniperus ashei*

Locally known as “cedar”, Ashe Juniper was an important tree for Native Americans. The wood and bark were used as fuel and tool making. The blue juniper berries, or “cones” on the female tree were used for medicine and ritual purposes. These berries were also used to flavor meat and stews. The smashed juniper berries can be used to repel mosquitos since they contain insecticidal properties. Today, cedar wood oil is shipped all over the world to scent soaps, perfumes, room sprays, candles and cosmetics.



Photo: Ray Matthews

Sotol | *Dasyliirion texana*

Another important food source, the sotol root was roasted in an earthen oven for three days and pounded into patties that could be stored for months at a time. The sotol also provided the fibers for sandals, mats, and rope. Harvesting the root is certainly no easy task! Using sharp stone tools, one would need to trim the spiny leaves to expose the central heart and break apart the tap root.



Mesquite | *Prosopis glandulosa*

The mesquite-bean pod was also an important food source and the pods were ground into a type of flour and made into bread or mixed with water to form a sweet, nutritious *atole* (or warm drink). Native American women used mesquite bark for diapers, skirts, and other articles of clothing. They also wove baskets, ropes, and twine from mesquite fibers. The bark was also used to make a poultice for treating wounds and illnesses, and the sap from the tree was used as candy, as well as glue for mending pottery, and as a black dye, shampoo and conditioner.



Hackberry | *Celtis laevigata*

Used as food, medicine, fiber, and dye, the hackberry tree has sustained populations for thousands of years. Hackberry fruit are rich in sugar and calcium, and when pounded to make a pulp, they were dried and mixed with other foods. The Comanche mixed the berries with fat and rolled them into balls, then roasted them over a fire.



Photo: Gretta Blankenship

Pecan | *Carya illinoensis*

Pecan stands of south Texas were a regular stop for hunters and gatherer groups during winter. The “meat” of each nut is an important, high energy food source and has 19 vitamins and minerals, yielding important carbohydrates, lipids, protein and more. During good years, Native Americans stored pecans in the ground.



Photo: Sally and Andy Wasowski

Live Oak | *Quercus virginiana*

Acorns from live oak trees were an important food source for Native Americans as they contain fiber, fat, protein, and carbohydrates. Some native groups made cornmeal from endosperm, or “nutmeat” by pulverizing the nutmeat, and leaching or rinsing until the bitterness was gone. The acorn meal was also used as flour and sometimes baked in an earthen oven, yielding a tasty pancake with a nutty flavor. Oak bark is also a source for tannin (a type of astringent) and was used as a skin wash to reduce irritations.



Photo: Ray Mathews

Mexican Buckeye | *Ungnadia speciosa*

The round, black, shiny seeds were used as marbles by pioneer children. The Spaniards called these seeds, “ojo de venado,” or the eye of the deer. They were said to be a good luck charm and ward off bad spirits. Native Americans ground the seeds and spread them on water and this stuns the fish. After that, they scoop up the fish with a net.



Photo: Nicole McLeod

Agarita | *Mahonia trifoliolata*

In Springtime, the agarita produces a bright red, tart fruit that makes delicious pies, jellies, and cobblers. The alkaloids in the roots are said to have medicinal benefits used to treat ailments such as upset stomach, wounds, skin problems, gum disease, stiffness of joints, and scorpion bites. The color yellow was extracted from the bark and used by indigenous groups to dye basketry and buckskin. It was also used as face paint for ceremonial purposes.



Photo: Nicole McLeod

Prickly Pear | *Opuntia engelmannii* var. *lindheimereri*

The prickly pear cactus stores water in the fleshy pads, and when cut open, the pads yields a soothing poultice for wounds. The fruit are called tunas and turn red when ripe, and can be made into jelly or syrup. Young pads, or *nopalitos*, can be boiled and eaten. Prickly pear pads were also dried and stitched together by Native Americans to make bags for food collection and leaching acorns. Cactus pads sometimes display white clusters of fluff called cochineal. This is the female scale insect used to make a beautiful crimson red dye.



Photo: Norman Flaigg

Western Soapberry | *Sapindus saponaria* var. *drummondii*

The fruit is pounded and mixed with water to make a lathering soap for shampoo and washing clothes, hence the nickname, Indian soap plant, or Jaboncillo (Spanish for little soap). The Latin name comes from *sapo*, meaning soap, and *indicus* meaning Indian. Not only was this tree used for soap, the fruit was also crushed and used to stun fish. It was also used to treat fevers, arthritis and kidney problems. The inner bark was also used in medicinal remedies as an astringent. The wood also splits easily making it perfect for boxes, baskets, and crates.



Desert Willow | *Chilopsis linearis*

This small tree had a variety of purposes across the Southwest. Twigs were chewed to relieve toothaches as it has similar properties to aspirin. The wood is flexible and had a variety of uses including bows, basket-making, and tooth brushes. Native populations were said to use the flowers, leaves and bark in hot poultices for the treatment of arthritis, skin infections, and as a tea to soothe coughs. The bark was also beaten to make a type of fabric and twisted to make cordage for nets.



Evergreen Sumac | *Rhus virens*

A close relative of poison ivy and the mango tree, the Evergreen Sumac was an important component of Native American pharmacopeia (herbal medicines). The red-orange fruit were eaten and sometimes ground into meal or made into a beverage or soup. The Mescalero Apaches mixed baked agave with the sumac fruit and dried the mixture for storage. They also used the fruit for jams and mixed it with sunflower seeds. The Comanche chewed the bark and swallowed the resulting juice to treat colds.



Texas Persimmon | *Diospyros texana*

Persimmon fruit were used as a black or brown dye, and it's still used in Mexico today, mostly for dyeing leather. The strong heartwood of the tree is used for furniture and carvings, such as tool handles, bowls and other objects. The fruit are very acidic and the Cherokee were said to eat the raw fruit. In Spanish, the tree is called "chapote," a word derived from the Nahuatl word, *tzapotl*, meaning "fruit bearing tree".

Sources:

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