

Ethnobotany of the Bushy Lake Area

Sage LaPena, Traditional Knowledge Keeper

The Nisenan People of the Central Valley had been living as agro-ecologists and hunter-gatherers for thousands of years when the Spanish arrived along California's southern shore. Forest gardens were present, though the Eurocentric mindset of the explorers did not see the forest for the trees, medicine and food they were. Through fire regimes, such as cyclical prescribed burning, the Nisenan kept game and trade trails open, fostered chosen crops, and helped keep insects and disease at bay.

Local humans have lived beside other beings for many generations, the cycles of the seasons working in unison with this relationship. Living along the American River for thousands of years gave the people an opportunity to live a life of abundance. All necessities for living were met, and the river itself was a path to trade with neighboring villages and other local tribes for things such as shell from the ocean and obsidian from the volcanic ridges of the north. The riparian corridor provided most everything for everyday life. All material culture, food and medicine were provided by the homelands of the people. This varied landscape of grassland, freshwater marsh and mixed oak woodland gave to the people, as the people, in turn, gave back to the land in stewardship.

Some of the plants present at Bushy Lake still maintain a prominent position today with numerous uses each. Each of these plants remain a vital aspect of the culture of tribes, such as the local Nisenan (Southern Maidu), Miwok to the south, Patwin to the west, and Maidu to the north, who still use these plants for food, medicine, material culture and prayer. This plant community at Bushy Lake also provides refuge to numerous species of animals and birds that are meaningful to the culture of the local natives. Some of these plants and animals have stories about them and their relationship to these homelands of the local Nisenan tribe.

Valley Oak – *Quercus lobata*. At about 100 feet tall and ten feet in diameter at chest height, the valley oak hails as one of the tallest trees on the American River floodplain. The tallest recorded oak in the United States is a valley oak in Covelo, California, that stands 153 feet tall. These tall oaks provide food and shelter to a host of birds, mammals and insects. Snags, or dead trees, of the valley oak become large apartment complexes for acorn woodpeckers.

These large oaks are also used as the timber poles for the large roundhouses of the Central valley and other neighboring areas of California from the Central Coast to the Sierra Nevada's. These can still be seen at several National and State parks here in

California. These semi-subterranean buildings are still used for community events and ceremonial dances. Not only do these trees provide acorns for the local fauna, the oak has always been known as a staple crop to the First peoples of this area and acorns were collected by the ton annually. Some people still continue with this tradition of harvesting acorn in the fall each year. Part of the celebration of the State Capitol's Native American Day is the dancing around a valley oak that is planted on the grounds there. This tree was planted in honor of the native peoples of this area. It is a symbol of strength and longevity.

Cottonwood – *Populus fremontii*. With heights up to 115 feet, the cottonwood is decidedly the tallest tree present at Bushy Lake. Many tribes know cottonwood as a sign of water. Cottonwoods and also willows are in the family *Salicaceae*. All of these plants contain salicylic acids. This is where the word aspirin comes from. Tea made from leaves and bark is used as an anti-inflammatory for rheumatism and other pain relief. It is also high in vitamin C. Shredded bark was made into skirts by many different California tribes. The new growth at the tips of the branches and catkins (flowers) can be cooked and eaten. The fluffy "cotton" of the mature seedpod was once used for diaper material swaddled with babies in the cradleboard or baby basket.

Black Walnut – *Juglans californica*. Black walnut is a stout tree and some can be quite large in diameter. One of the largest known has a diameter 8 feet across at chest height and is 112 feet tall! The rootstock of the black walnut is grafted to the English walnut for commercial growth in California because the root of the black walnut is better suited to California soils. The edible black walnut seed is smaller than the English variety with a very distinct taste. A main component of Walnut is juglone. Juglone is highly effective against parasites. Green hulls are made into strong tea called a decoction and used on fungal infections such as athlete's foot. Medicine made with ripe walnut hulls is used to expel tapeworm, ringworm and other parasites of the intestines. The hulls turn black as they age and are also used for dye and paint. Black walnut is an important wood for its beautiful grain

Ash – *Fraxinus latifolia*. Growing as tall as 60–70 feet, ash has medicinal properties and is used for its wood. The bark of ash can be used for digestive tonic if digestion is slow. Tea from leaves is astringent and antifungal and is used to wash wounds (vulnerary) and to lower a fever. Ash is also anthelmintic and used to expel parasites. Ash is used as bow wood and for tool handles. The Nisenan also use ash for straight pipes to smoke a mixture of local herbs and the native tobacco.

California Blue Elderberry – *Sambucus Nigra ssp. Caerulea*. This large, deciduous shrub can reach heights of 30 feet. With oversized cream-colored flat-top clusters of umbel-shaped blooms, Elderberry is host to California’s local bees and hummingbirds who help pollinate the flowers. It is also the chosen host-species of the protected Long-horn Elderberry beetle.



Sage LaPena 2018



Sage LaPena 2018

The leaves and green berries can cause nausea. Local tribes have used and continue to use the wood of elderberry to make musical instruments such as the clapperstick, whistle and flute. Because of elderberry’s soft pith in the center of the wood, small hollow tubes made from the branches are also used to carry medicine such as tobacco and plugged at each end with another stick or piece of cottonwood root. The cream-colored flowers are used

to make a tea to allay fevers. The berries are made into jellies and syrup, which is equally good on waffles or taken by the spoonful for cough. Some other countries use elderberry to make wine. The medicinal value of the berries is very important for lung ailments such as bronchitis. Years of study have proven the efficacy against influenza virus. The tree provides an insectary for native pollinators such as tiny bees. The berries also provide much forage for local wildlife.

Sandbar Willow – *Salix hindsiana*. These shrubs are about 30 feet maximum. Willow is one of the most important riparian plants because of its ability to hold soils in place due to its root system. Seeing willow (and cottonwood) is almost synonymous with creeks and the presence of water. The long thin roots are also used in traditional basketry of this area as weft or the weaver in twining. Willow is coppiced, or cut to the ground level, and allowed to grow for a season or two and then harvested of its perfectly straight sticks. These are used in traditional basketry of many California tribes as the foundation material of both twined and coiled baskets. Some of these can be seen at local museums such as California State Indian Museum and the Maidu Museum in Roseville.

The bark is used for lashing poles together when building small structures and is also very useful for its analgesic properties. Like the cottonwood, willow contains a large amount of salicylic acids, which gives it aspirin-like qualities for pain relief. Local tribes such as Nisenan and Miwok have used the shredded willow bark for daily-wear skirts. These are still used for ceremonial dress.



Sage LaPena 2018



Sage LaPena 2018

California Wild Grape – *Vitis* CA. Wild grape utilizes taller trees to climb up. These are strong vines that grow up to 35 feet long. This vine's strong rootstock is used commercially worldwide for wine grapes. They are robust enough to help aid an adult climbing up a tree. These vines have been used to lash together large poles in the building of the roundhouses (KUM, pronounced *koom*) of the local tribes and can still be seen at places, such as Indian Grinding Rock State Historic Park (Chaw-Se).

The roots are used for weaving materials on the bottom of workbaskets because of their strength. The leaves are edible and are used to wrap other foods in such as California

native bulbs, corms and root vegetables like wild onion and potatoes (*Brodiaea*, *Allium*, *Calochortus*). The leaves also produce a yellow-gold dye. The small and profuse grapes remain somewhat tart even when ripe and provide forage for many birds and squirrels. These tart grapes are highly edible and provide a large amount of vitamin C and bioflavonoids. Wild grapes are highly antioxidant and have provided summer snacking for thousands of years.



Sage LaPena 2018



Sage LaPena 2018

Mugwort – *Artemisia douglasiana*. One of the most important medicine plants of the area, **Mun-Muni** in Nisenan and **Kuchi-nu** in Miwok, Mugwort is still used today as an important plant of the people.

Wild Cucumber or Man Root – *Marah fabaceae*. Another vine on the American River is the wild cucumber. Also known as Man Root, this plant has an often very large tuberous root. This vine, with star-shaped leaves, goes dormant after fruiting bodies ripen and the seeds drop out of the open pods. Only the underground tuberous root remains growing



Sage LaPena 2018

year after year sometimes reaching sizes of 70–100 pounds. Once used to poison fish due to its toxic saponific (soapy) nature, this is no longer practiced. Pulverized seeds are used as a tonic



Sage LaPena 2018



Sage LaPena 2018

rubbed into scalp to prevent hair loss. They are also used to treat acne. The seeds are also gathered in the early summer, just before dropping, and used as beads.

Sedge, aka White Root – *Carex barbarae*. Sedges have edges and one can tell a sedge by running ones fingers down the blade to feel the tiny teeth. Sedge grows both in water and along waters where there is flooding. Flooding brings sand and other nutrient replenishment to the riparian corridor. Sedge is one of the waterways first line of defense against erosion. Sedge rhizomes are also used in basketry of the local peoples. The rhizome, not the root, is used in this process. The runner that grows from plant to plant is used. It is dug up and split lengthwise, whittled to perfect thickness and then used as the weaver. The Pomo people are the most well-known for using sedge in coiled basketry that has been collected worldwide. Baskets made with sedge maintain a matte-finish patina as they age, unlike willow that has a sheen to it.

Creeping Wild Rye – *Elymus ssp.* These bunch grasses are in the process of being reestablished on this site. Both people and other animals have always used many different native grass seed as forage. A cereal-food of mixed grass and wildflower seed has been a summer staple for native peoples. The ripe seeds are harvested using a basket resembling a small tennis racket, which is beat against the top of the seed stalk. The loose seed falls into a conical basket for collection. All of these are pulverized and cooked into meal resembling oatmeal or cream-of-wheat. Grasses play a vital role in the holding capacity of soils to guard against erosion, provide insectary to pollinators, rebalance soils, require less water, hold nitrogen, displace toxins in soil and provide a vegetable protein source for many. Areas were burned to slow succession (the intrusion



of trees and shrubs) and keep meadows open for grazing which made the hunting of deer and tule elk easier to provide food for winter.

There are many other plants on the American River parkway and Bushy Lake area that were and are used by the local tribes. There is a resurgence in Cultural awareness, pride and Traditional Ecological Knowledge. More tribes are becoming active participants once again in their Home and with traditional Stewardship practices that include coppicing and prescribed burning.

Thank You for taking the time to walk the Bushy lake area and reading this small glimpse into our local native cultures.