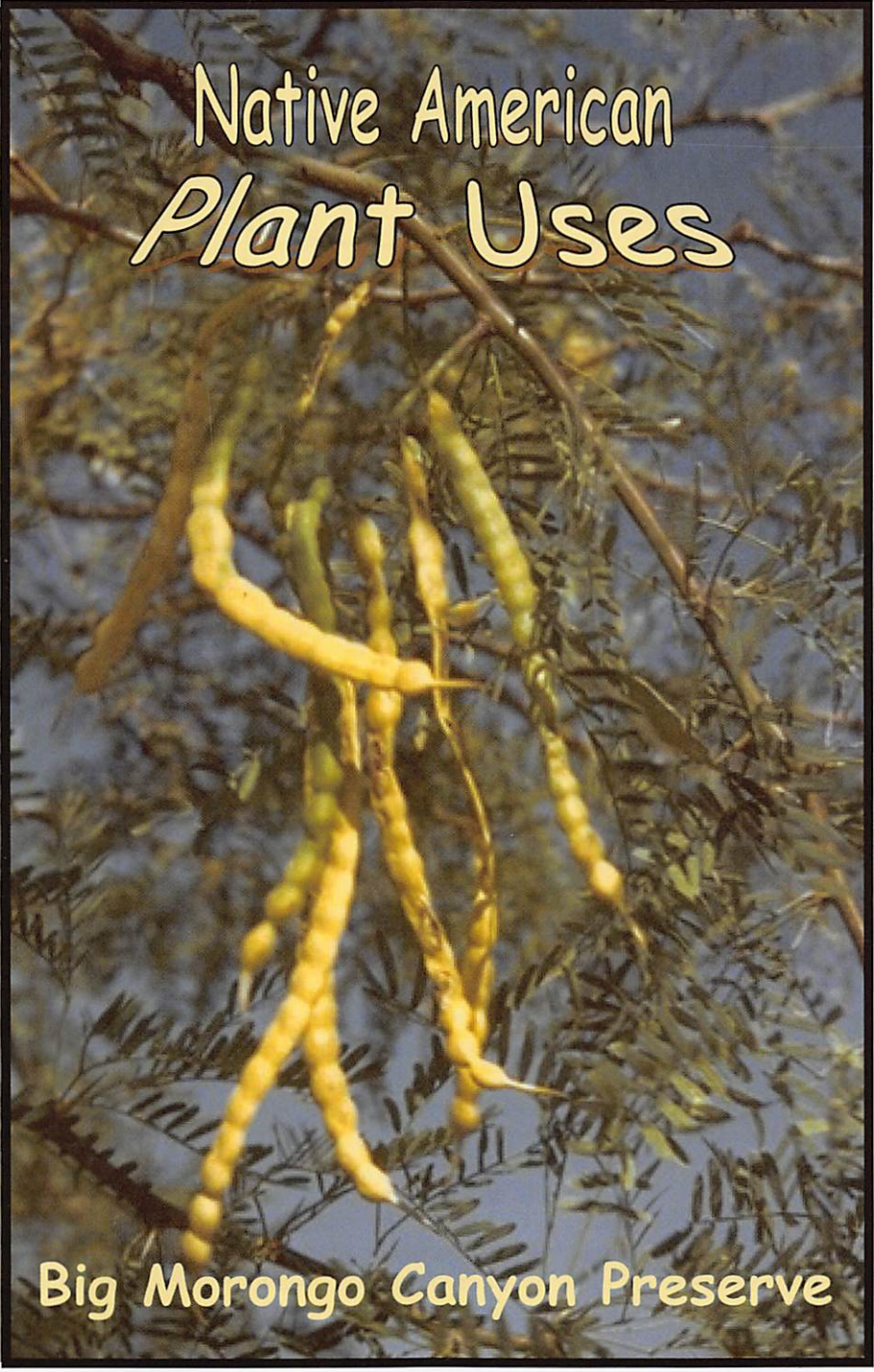




Native American *Plant Uses*

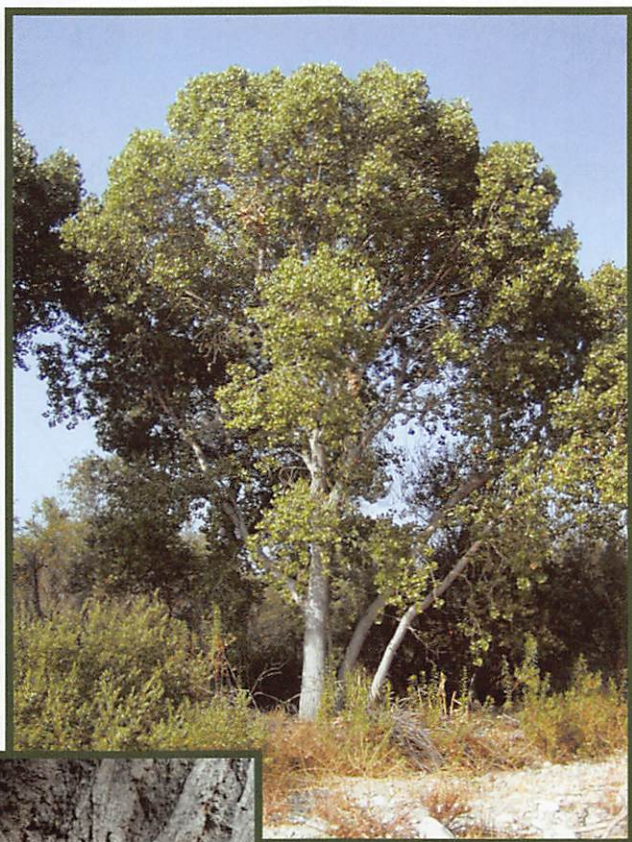
Big Morongo Canyon Preserve



Cottonwood Trees

- Bark fibers were pounded and used to make clothing.
- Wood was used as fuel for cooking fires.
- Tree trunks were made into fence posts building materials.
- Mortars for grinding soft foods were made from the center of the trunk.
- Leaves and bark were boiled to make a poultice for the swelling of sore and strained muscles.
- Tea made from the leaves and bark was used to treat cuts and a cloth was soaked in the tea and wrapped around the head.
- Fallen Cottonwood trees provided a growing area for mushrooms, which were a favorite food delicacy of the Cahuilla.
 - Cottonwood stands provide habitat for wildlife.

Cottonwood Tree



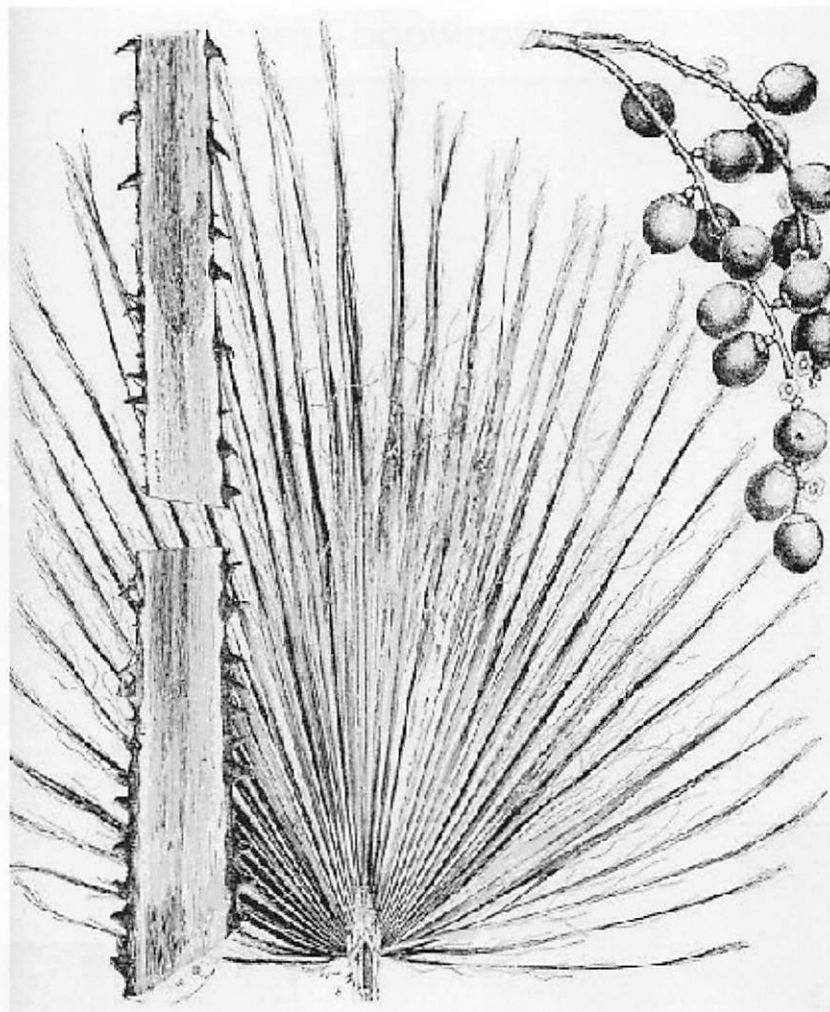
Outer Bark



Bark Fibers



Stirring Paddle



California Fan Palm / Skirted Palm

- Palm Fronds were used for roof thatching.
- The Cahuilla ground the seeds into flour and made it into a mush.
 - The fruit was eaten fresh from the tree or as dried fruit.
- Fruits were sometimes soaked in water to make a sweet beverage.
 - Jelly was also made from the fruit.
- The spongy pith in the center of the tree was boiled to make maul pasun or "heart of the palm" and was a delicacy eaten during ceremonies.
 - Leaves were stripped into fiber and used in weaving.
 - The Cahuilla preferred the Fan Palm for making sandals.
 - The stems were used for fire making tools.
- The hard seeds that fell after fruit pulp dried were the preferred fill for gourd rattles. They were considered to be better than stones.

California Fan Palm / Skirted Palm



Fire Starter



Fiber



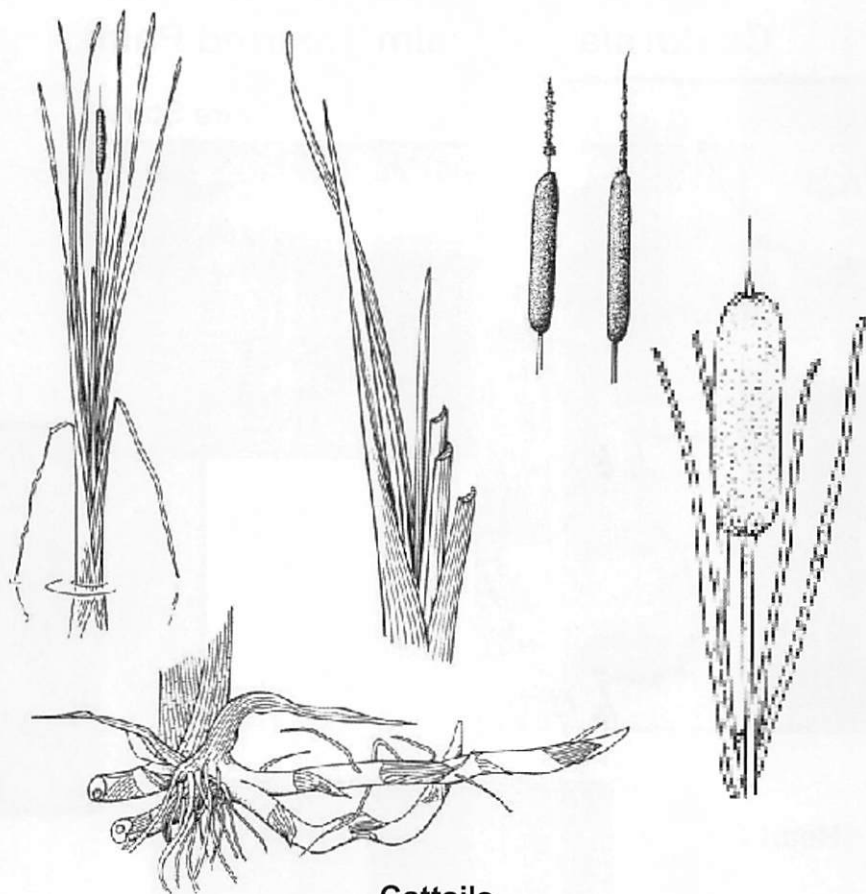
Heart Of Palm



Fruit

Sandal





Cattails

- Roots were cooked and eaten like a potato or boiled to produce a sweet syrup, which was used to sweeten other foods.
- A small drop of a honey-like excretion, found near the base of the plant, was used as an antiseptic for small wounds and toothaches.
- Medicinal uses included making a poultice from the roots which were split and bruised and then applied to cuts, wounds, burns, and stings.
- Leaves were used to make baskets and toys and were often woven into mats that were used as walls or floor coverings.
- The ash of the burned leaves was used as an antiseptic for wounds.
- Yellow pollen from the tops was used as a complete meal or added to flour to make a pancake-like meal.
 - Immature green pollen spikes were boiled and eaten like corn on the cob.
- Mature brown seed heads were burned to extract the small seeds, which was then used to make gruel and then added to soups.
- Mature brown seed heads were used as insulation, or sometimes burned and used as a torch.

Cattails



Yellow
Pollen



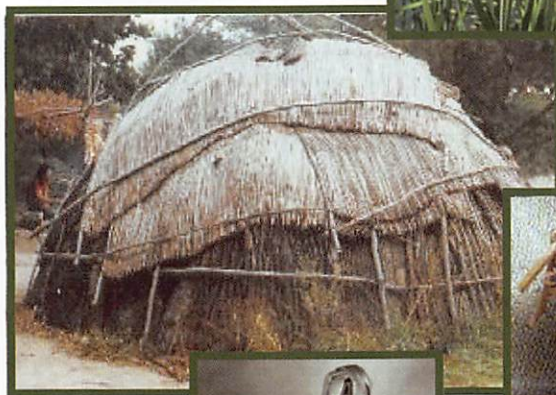
Immature
Cattail Spike



Cattail Roots

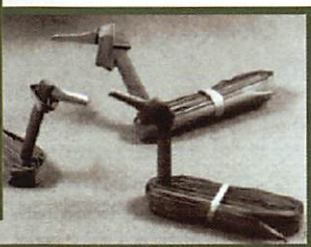


Cattail Mat Walls



Cattail Basket

Cattail Doll

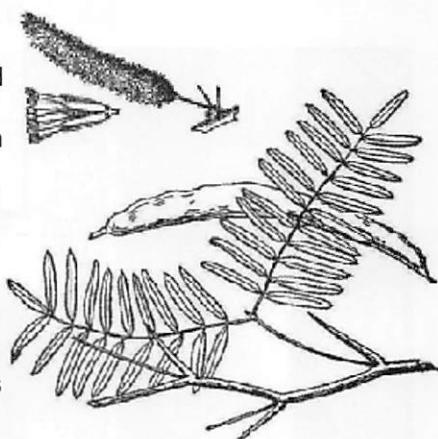


Toy Duck

Honey Mesquite

- Green seeds were eaten whole as a trail mix or pounded into a juicy pulp and consumed as a summer beverage.

- The ripe pods were gathered and eaten without any processing, cooked and eaten as whole beans or were pounded into flour in a mortar. The flour was then placed in a vessel, dampened with water, and left for a day to harden. The meal was formed into cakes and eaten dry, made into a mush, or mixed with water for a beverage. Some dried seeds were fermented to make a favorite intoxicating drink.



- The dark to dusky green leaves were used to make tea, which was drank to treat headaches and stomachaches. Juice from the leaves was applied to eyelids as a treatment for irritation, and whole leaves were chewed and the juice was swallowed to neutralize stomach acidity.

- Cahuilla and other Native American tribes used the thorns to tattoo their upper bodies. The charcoal from the burnt mesquite wood was used as the tattoo ink. Larger thorns, some reaching a length of two inches were used as awls.

- Rough bark was used for fire kindling and was also used for making granary baskets. Strips of inner bark were twisted into cordage and large pieces of inner bark made a rough wrapping material or were pounded to make fabric for clothing and baby diapers.

- Cahuilla made use of the gum, secreted from the bark, to make candy. The sticky substance was also utilized as glue for mending pottery and for attaching fore-shafts to arrows, and the black substance was also used to clean and dye their hair.

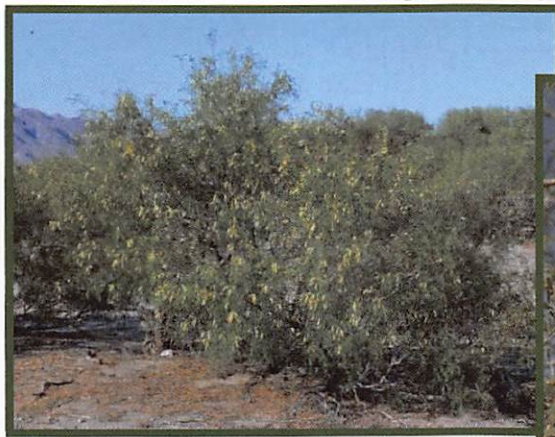
- Trunks and branches provided a very hot, slow burning fire for warmth and baking pottery. The sweetness of the wood added flavor to foods that were cooked over the open flame. Large branches were used for dwelling and fence construction as well as furniture. Smaller branches were used for bow making and fire hardened wood was made into arrowheads for hunting and defense.

- Wood was carved and shaped into shovels, awls for weaving baskets, bread trays, ladles, pestles for pounding seed pods, and wooden handles for cordage twisters.

- The roots of young trees were harvested and made into cordage for fishing lines, to bundle reeds, and make carrying nets. Tender, sweet roots were used as a teething tool for infants.

- Ceremoniously, the mesquite seed was used during the harvest festival and mesquite charcoal was used as a black face-paint ingredient.

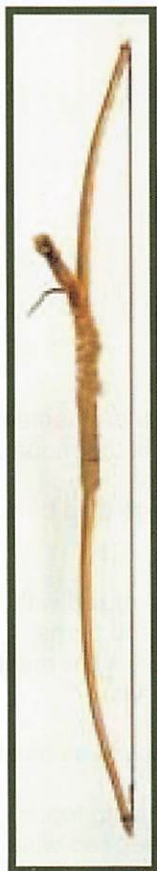
Honey Mesquite



Seed Pods

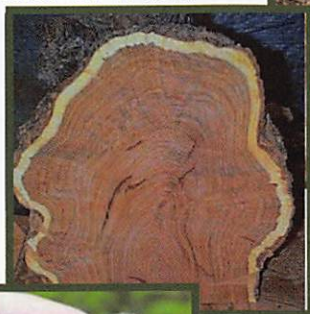


Bow



Flowers

Center of Trunk



Rough Bark



Thorns



Arrowhead



Yerba Mansa

- The plant, dried and powdered, was sprinkled on wounds as a disinfectant.
- Dried leaves were used to make a tea for healing infections of the mouth, sores throat and intestinal problems such as ulcers.
- The roots were gathered in the fall and winter, when the foliage died back.
Eaten raw, the root was used as an astringent for afflictions of the mucous membranes.

Some aromatic roots were dried and ground into powder and mixed with water for tea or an antiseptic wash to treat abrasions, cuts and burns.

- Because of the anti-bacterial and anti-fungal properties, leaves were made into a poultice to be used for skin infections and wounds.
 - A tonic was made for purifying the blood.
- Seeds were pulverized in a mortar and the meal was then cooked as mush in a pot or baked as bread in hot ashes.

The seeds have a pepper-like flavor and were used for seasoning foods.

- The bark was also harvested in autumn and boiled into a deep red-wine color and drank to alleviate ulcers or applied externally to wash open sores.

Yerba Mansa



Flowers



Flower
Cone

Leaves

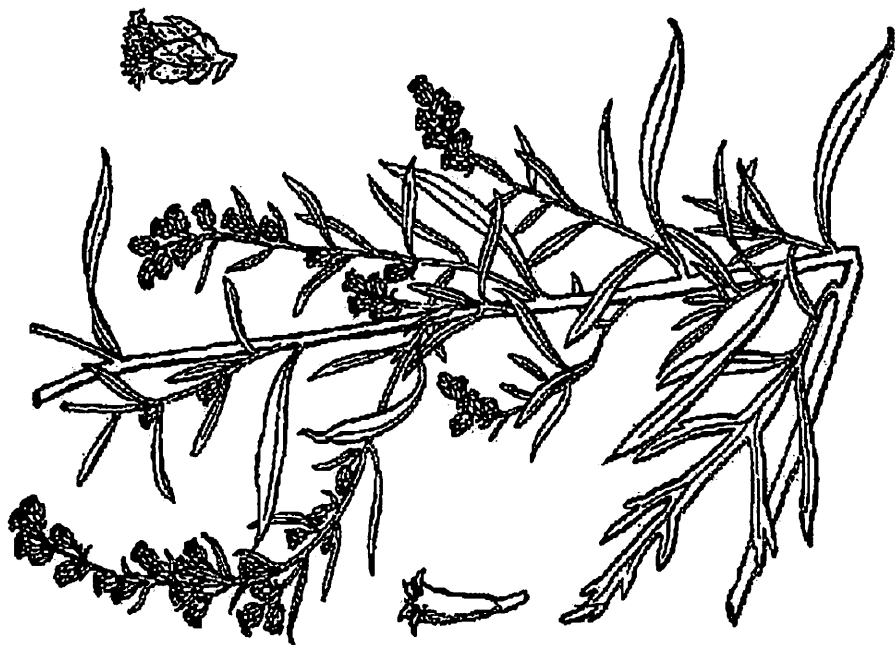


Creeping
Rhizomes



Roots





White Sage

- White sage seeds were one component in Pinole, which was a staple food. Seeds were collected with a seed beater basket and flat basket, and were dried and ground into meal. The Cahuilla used this meal to create a mix with flour, and a little sweetener. This mixture was eaten dry, mixed with water to form gruel, or baked into little cakes or biscuits.
- The seeds were stored in baskets in the home.
- California tribes also ate leaves and stems of white sage.
- The Cahuilla and other tribes of California used white sage seeds to clean and heal their eyes. One method was to place a few seeds in their eyes at bedtime.
- Cahuilla women drank a concoction of white sage roots after giving birth to promote internal healing.
- Seeds were eaten to cure colds.
- Leaves of white sage were smoked, made into a tea, and used in sweathouses to cure colds.
- White sage leaves were also used as a shampoo to clean their hair and to keep it from turning gray.
- Crushed leaves were rubbed on the body to eliminate body odor. This was often done by Cahuilla men before they went hunting.
- The smoke from burning white sage smudging wands was used widely by many Native Americans as part of their purification ceremonies.
- White sage is widely valued and cherished among many Indians.

White Sage



Flowers



Seeds

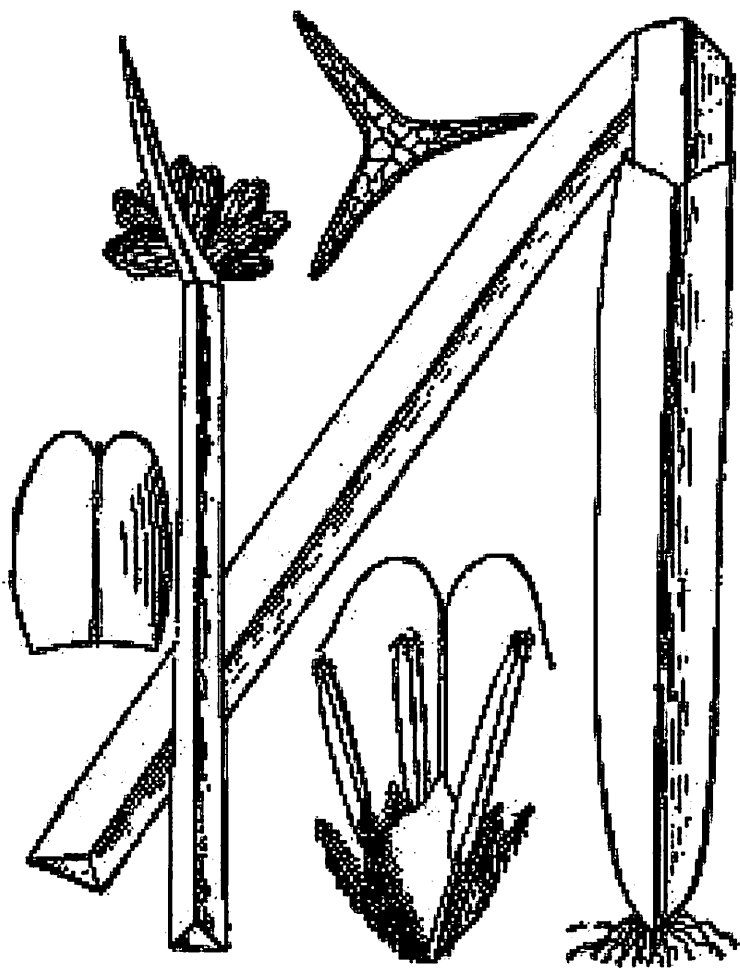


Leaves



Smudging
Wands





Olney's Bulrush

- Also known as the American three-square because of the triangular stem.
 - It is actually a "sedge" not a "rush".
- Long, three-sided leaves die every year and renews its nutrients for next year's growth.
- The roots have a celery-like taste and were dried and pounded into flour or were eaten raw.
 - Leaves were used to weave baskets and mats.
- The baskets were used to trade for items that were not readily available in this area.
- Floating duck decoys, made from Olney's bulrush were an essential hunting tool to lure birds to within reach of the bow and arrow, spear or net.

Olney Bulrush

Stem Cross Section



Flower



Roots

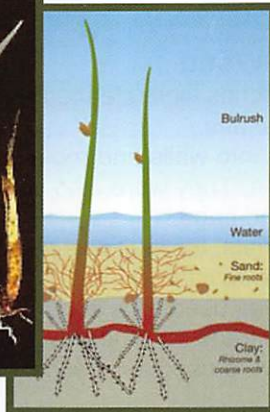


Off-Shoot



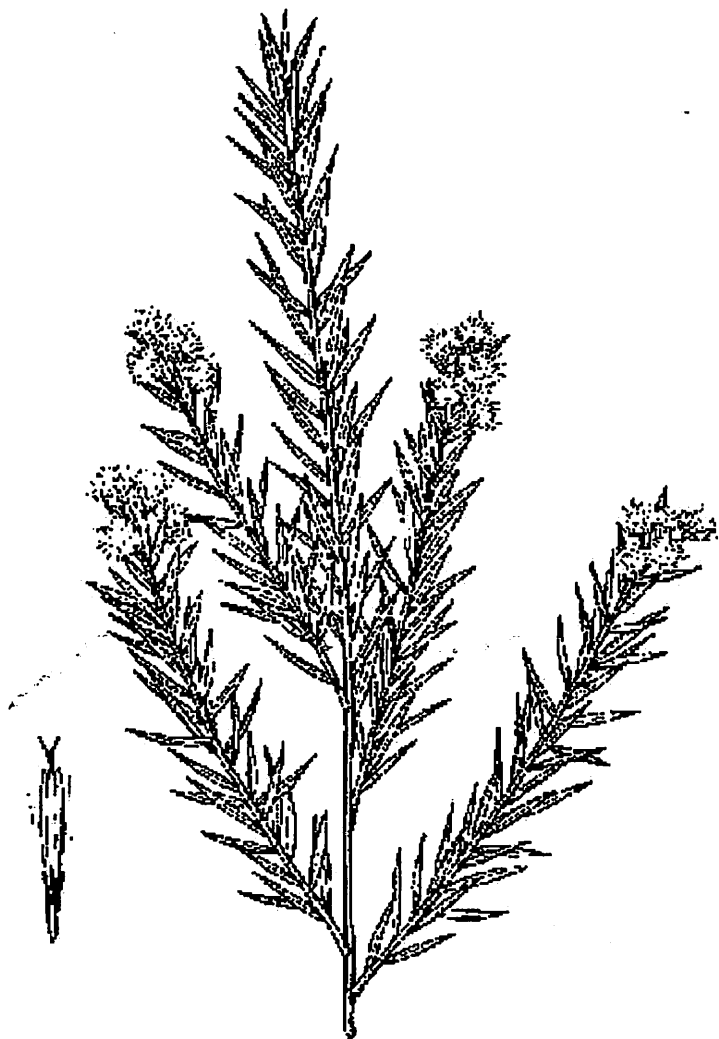
Duck Decoys

How New Plants Grow



Basket





Arrow-Weed

- Using an Arrow Straightener, branches were cleaned and made into arrow shafts.
- Flexible branches were woven into walls and roofs of homes, windbreaks and granaries, for strength. They were also used to construct fences and cage.
- When interwoven with other materials, the wall was almost solid and was impervious to rain and wind.
- A tea made from the stem tips was used as a soothing eyewash.
- Large quantities were used to trade for other raw materials.
- Small twigs and branches were used as ribs in baskets.

Arrow-Weed



Arrow-Weed Roofs
And Walls



Strong Flexible Branches



Small Twigs And Branches

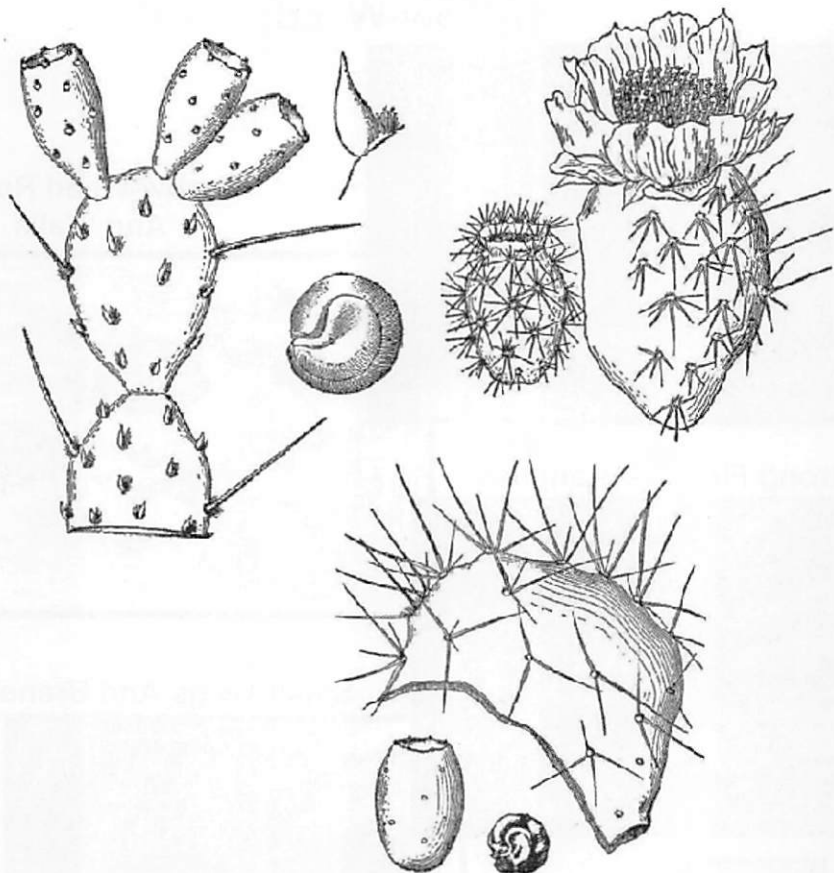


Arrow Branch



Arrow Straighteners





Prickly Pear

- The fruits were eaten fresh, dried, boiled, or made into a juice.
- As a beverage, the juice was used to rid the body of intestinal parasites.
 - The juice was used to make jelly or syrup.
 - The fruit was also used for paint.
- The pads were peeled, boiled or roasted, or their pulp was formed into cakes and dried for later use.
 - The seeds were ground into flour.
 - The spines were made into needles.
- Native American used the spines of the cactus in a manner similar to acupuncture, where the offending part of the body was stuck with spines that were then ignited. The spines that burned most actively were thought to be the most effective.
 - Dried trunks were burned as firewood.
- Plants were grown in circles to make a fence for keep animals.
- The skinned and filleted pads were used as a covering for wounds, boils and abscesses.

Prickly Pear



Pad

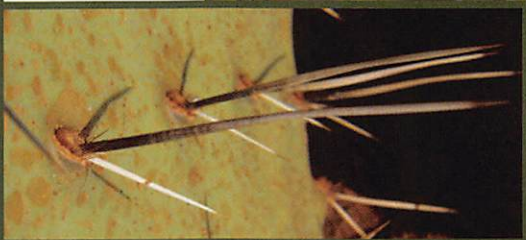


Fruit

Seeds



Needle



Spines



PO Box 780 • Morongo Valley, CA 92256

(760) 363-7190 • www.bigmorongo.org

Open: 7:30 am to Sunset year round

Friends of Big Morongo Canyon Preserve is a nonprofit organization supported entirely by donations and volunteers.