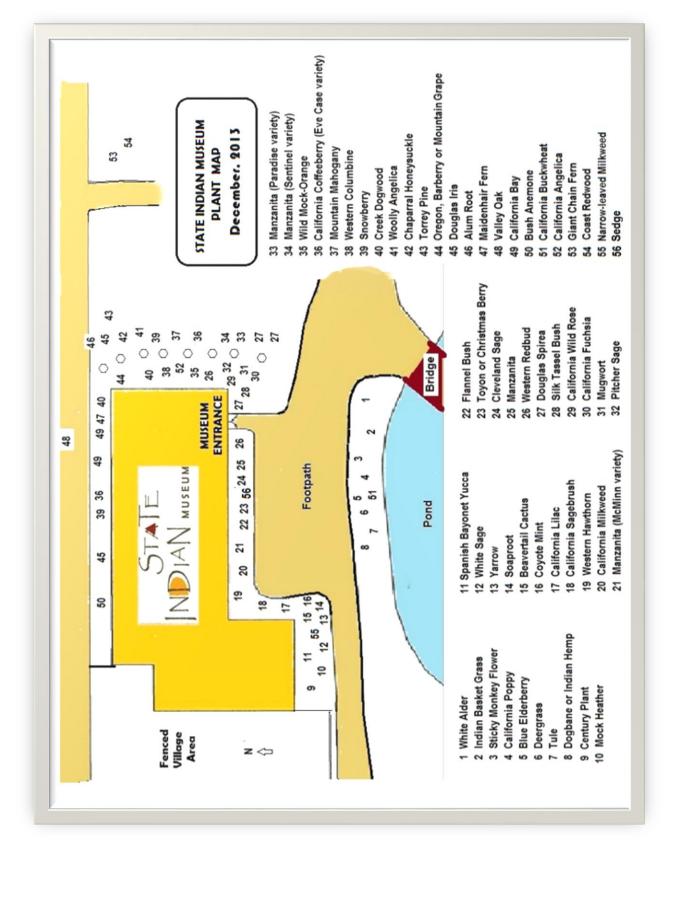
State Indian Museum Plant Reference Guide

A Comprehensive Guide to Native Plants at the State Indian Museum and their California Indian Uses

Prepared by the Plant Project Team of Docents and Associates



Purpose and Content

This directory describes plants of cultural significance to California Indians. Users will learn about the plants found in and around the Museum. Content includes plant names, characteristics, and fun facts as well as plant uses by California Indians. Descriptions also note how the plants link to the Museum displays and surrounding landscape.

The map shows the locations of the plants around the Museum grounds to help you find and appreciate the plants there. We ask for your help in preserving them for other visitors to observe and enjoy. Please do not touch, taste, or take any parts of these plants.

The directory is intended as a resource to those seeking further understanding of the importance and value of native California plants to the indigenous people of the state. We hope that the document is helpful to you. Thank you for your interest and cooperation.

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Native Plants at the State Indian Museum

ALUM ROOT or CORAL BELLS (Heuchera micrantha)

Characteristics:

- Found throughout California and west coast; preferred growing condition: partial shade
- Evergreen perennial with low-to-ground foliage
- In bloom several times, spring through fall

Uses:

- Roots mashed and used as medicine to treat wounds, liver conditions, and sore throats
- Young leaves steamed for food (Miwoks)

Museum Links:

- · Consumable plants not displayed
- Plant found on east side of museum (46 on map)

ANGELICAS (Angelica tomentosa) Woolly variety and (A. californica) California variety

Characteristics:

- Native to coastal, wooded foothills of California and Oregon, preferring part-shade for growing
- Perennial herb with a large taproot
- Several varieties: Wooly from foothills; California from lowlands
- Summer blooming, with umbrella-shaped group of flowers

Uses (by Pomo, Kashaya, Yana):

- Young shoots and leaves used for food
- Teas made from roots used to treat colds, menstrual problems, stomachaches, sores
- Pieces of root chewed to relieve sore throats
- Root shavings smoked by shaman when doctoring
- Root used in purification and protection ceremonies

Museum Links:

- Angelica root in "The Hunt," item 10
- Plants found on east side of museum (41 and 52 on map)

BEAVERTAIL CACTUS (Opuntia basilaris)

Characteristics:

- Found in the Mojave and other desert areas of Southern California
- Flat, broad joints (characteristic of prickly pear group of cactus)
- · Large showy flowers; berry fruit

Uses:

- Large split and scraped fleshy joints or pads used as a wet dressing to reduce swelling and to deaden
 pain from bites or wounds
- Sun-dried fruit and young fleshy joints boiled for food after spines removed
- Young fruit cooked for food source in stone-lined pits for 12 hours
- Dried flower buds boiled and eaten with salt
- Fine fuzz from spines rubbed into skin to remove warts and moles

Fun Fact:

• The fruit can be eaten as is or made into jelly or pickles.

- Consumable plants not displayed
- Plant found on south side of museum (15 on map)

BLUE ELDERBERRY (Sambucus caerulea)

Characteristics:

- Native to western United States, growing along rivers and in moist, well drained soils
- Deciduous shrub
- White flowers in late spring becoming clusters of purple berries in summer

Uses:

- Flowers and leaves used to make teas to treat fever and inflammation
- Flower extract used to soften skin and lighten freckles
- · Berries eaten fresh and dried
- · Berry juice used as dye and treatment for burns
- Branches used to make arrows, flutes, and clapsticks

Museum Links:

- Elderberry clapsticks and flutes in "Men's Regalia" and "The Singers," items 2 and 4
- Young plants found on pond bank, opposite south side of museum (5 on map)
- Older plant found in the village area, visible growing over the fence on the southwest side of the museum

BUSH ANEMONE (Carpenteria californica)

Characteristics:

- Found along creeks; preferred growing conditions: decomposed granite soils, partial sun, and low water
- Evergreen shrub
- Large, fragrant white flowers in late spring
- · Originally from Fresno area

Use:

Unknown other than aesthetics

Museum Links:

- Consumable plants not displayed
- Plant found on north side of museum (50 on map)

CALIFORNIA BAY or PEPPERWOOD (Umbellaria californica)

Characteristic:

Native to the mountains of California; also found in Oregon

Uses:

- Leaves used to cure headaches, toothaches, and earaches
- Poultices of leaves used to treat rheumatism and neuralgias
- Tea made from leaves to treat stomachaches, colds, sore throats, and to clear up mucus in the lungs
- Leaves steeped in hot water to make an infusion used to wash sores

Fun Fact:

 The Pomo tribes of Mendocino County treated headaches by placing a single leaf in the nostril or bathing the head with a laurel leaf infusion.

Museum Links:

- Consumable plants not displayed
- Plant found on north side of museum (49 on map)

CALIFORNIA BUCKWHEAT (Eriogonum fasciculatum)

Characteristics:

- Native to western United States, growing in chaparral and coastal sage plant communities
- Low evergreen shrub
- · Showy white flowers blooming for roughly half the year

Uses:

- Leaves used to make teas to treat headache and stomach pain
- Dried flowers and roots used to make tea to prevent heart problems
- Roots boiled in tea to treat colds and laryngitis
- Roots used in a poultice applied to wounds

- Consumable plants not displayed
- Plant found on pond bank, opposite south side of museum (51 on map)

CALIFORNIA COFFEEBERRY (Rhamnus californica) Eve Case variety

Characteristics:

- Found throughout California in varied conditions
- Evergreen shrub, growing to 6-8 feet tall
- · Many white flowers in spring, becoming red/black fruit in summer

Uses:

- · Fruit used as food and as beads
- Juice used to treat poison oak
- Tea from bark and roots used to relieve pain and as laxative

Fun Fact:

Coffeeberry seeds resemble coffee beans, but do not taste anything like them.

Museum Links:

- Consumable plants not displayed
- Plant found on east side of museum (36 on map)

CALIFORNIA FUCHSIA (Epilobium canum)

Characteristics:

- Native to California
- Found in most parts of the state from mountains to deserts, and in rocky dry soils

Uses:

- Leaves reportedly used as detergent in washing, and as dusting powder for cuts, wounds, and sores on horses
- Decoction (extract obtained by boiling) of leaves used for tuberculosis, kidney and bladder trouble, and as a cathartic

Museum Links:

- · Consumable plants not displayed
- Plant found on east side of museum (30 on map)

CALIFORNIA LILAC (Ceanothus thyrsiflorus)

Characteristics:

- Found in open, sunny areas of California
- Evergreen shrub
- Purple flowers in spring

Uses:

- Dried leaves used to make tea and to treat inflammation and infection
- Branches used to make baskets (Miwok)

Fun Fact:

Modern studies of Ceanothus indicate that it is effective in treating high blood pressure.

Museum Link:

Plant found on south side of museum (17 on map)

CALIFORNIA MILKWEED (Asclepias californica)

Characteristics:

- Found in dry, sunny places
- Perennial, growing to 1-2 feet tall
- Gray-green leaves with fine hairs
- · Dried out leaves and stems in late fall

Uses:

- Young shoots and leaves cooked and eaten in small amounts
- Sap treated to make a chewing gum; also used to cleanse wounds
- Tea made from roots to treat rash and coughs
- Fibers from dried stems twisted into cord for making nets, baskets, and regalia

Fun Facts:

- Five milkweed stems yield one foot of cord; 500 stems make cord for a feathered cape or skirt; 35,000 stems needed for a deer-catching net.
- Some plant parts contain poisonous chemicals that affect the heart.

- Cord in "The Gathering," item 25
- Plant found on south side of museum (20 on map)

CALIFORNIA POPPY (Eschscholzia californica)

Characteristics:

- Native to California and Oregon
- · Perennial found statewide in fields and foothills
- In bloom February through summer
- Pale yellow to deep orange flowers

Use:

· Leaves used for toothaches

Fun Facts:

- In 1903, the California Poppy became the state flower because of its wide distribution, brilliant color, satiny flowers, and long flowering period.
- Blooms close at night and on gray days.

Museum Links:

- Found in museum store
- Plant found around pond in museum (4 on map)

CALIFORNIA SAGEBRUSH or SAGEWORT (Artemisia californica)

Characteristics:

- Found in areas with hot summers and moist winters, especially along the central California coast
- Shrub with stringy, grayish leaves; loss of leaves only in extreme drought

Uses:

- Tea used for sore eyes and stomachs, and during menstrual cycle
- · Poultice from ground leaves used for rashes
- Dried leaves smoked like tobacco and used in sweat lodges
- Branches used for light arrow foreshafts (Chumash)

Fun Fact:

Sagebrush produces chemicals in the soil to prevent other plants from growing too close to it.

Museum Links:

- Arrow-making process in "Hunting and Fishing Tools"
- Plant found on south side of museum (18 on map)

CALIFORNIA WHITE SAGE (Salvia apiana)

Characteristics:

- Southern California native plant found statewide
- Found at the edge of deserts; preferred growing conditions: dry, sunny areas
- Small perennial shrub; plant die-back possible in cold weather
- Gray-green leaves containing fragrant oils
- · White to lavender flowers and brownish fruit appearing in spring and summer

Uses:

- Seeds ground into flour and used in mush and biscuits
- Leaves and roots used in teas to treat colds, sore throats, and bleeding
- Leaves used for food flavoring
- Dried leaves smoked with tobacco; rubbed on skin to reduce odor; used for shampoo, dye and hair straightener; and, burned as smudge in purification ceremonies

Fun Facts:

- Plant's white flowers attract pollinating bees in spring. (Apiana refers to bees).
 - White sage extracts have been shown to kill some bacteria.

- · Smudge bundles in museum store
- Plant found on south side of museum (12 on map)

CALIFORNIA WILD ROSE (Rosa californica)

Characteristics:

- Common throughout California, primarily in central and southern coast areas; limited in valleys
- Shrub, growing to 6 feet tall
- Flowering through the summer

Uses:

- Fruit (hips) used as food (Pomo and Wappo)
- Wood used for arrow shafts (Wappo)

Fun Fact:

Kashia Pomo preferred this plant's fruit after the first frost when it tasted best.

Museum Links:

- Sketch of plant in "The Gathering," item 28
- Plant found in southeast section of museum (29 on map)

CENTURY PLANT (Agave americana)

Characteristics:

- Not native to California; found in very dry areas of state
- Evergreen perennial
- In bloom May-July
- Related to species Agave deserti, native to the Mojave desert

Uses (by Southern California Indians):

- Fiber used to make cord, rope, sandals, baskets, and nets
- Stems and flowers cooked and eaten
- Sharp leaf tips used for guiding fibers in basket making and for tattooing

Museum Links:

- Consumable plants not displayed
- Plant found on south side of museum (9 on map)

CHAPARRAL HONEYSUCKLE (Lonicera interrupta)

Characteristics:

- · Native to California mountains and foothills, preferred growing condition: dry slopes
- Deciduous shrub with flowers attracting hummingbirds

Uses:

- Extract from leaves used as eyewash and to treat sores
- Nectar sucked from flowers
- Root extract used to reduce swelling
- Stems used in basketry (Mendocino Indians)

- · Consumable plants not displayed
- Plant found on the east side of the museum (42 on map)

CLEVELAND or MAIDEN SAGE (Salvia clevelandii)

Characteristics:

- Native to Southern California; found on dry slopes
- Evergreen shrub, growing to 3-5 feet tall
- · Very fragrant, inch-long leaves
- Whorls of purple/blue flowers in spring

Uses:

- Toasted seeds used as food
- Leaves used as spice
- Leaves chewed to relieve gas pains
- Poultice of warmed leaves applied to neck for earaches and sore throats

Fun Fact:

Flowers attract hummingbirds, butterflies, and bees.

Museum Links:

- Consumable plants not displayed
- Plant found on south side of museum (24 on map)

COAST REDWOOD (Sequoia sempervirens)

Characteristics:

- Large, tall, straight evergreen, often growing to over 300 feet, with a narrow, loose crown
- Linear leaves, ½ to 1 inch long
- Egg-shaped, reddish brown, woody cone, ³/₄ to 1 inch long; maturing in one season
- Fibrous, reddish to gray-brown, thick bark (up to one foot); deeply furrowed with rounded ridges

Uses:

· Logs used for canoes and housing

Museum Links:

- Dugout canoe in "People Along the River"
- · Redwood pillow in "Smoking"
- Plant found on east side of museum (54 on map)

COYOTE MINT (Monardella villosa)

Characteristic:

Native to California coastal ranges

Use:

• Used to make decoctions, poultices, and salves for treating respiratory problems

Museum Link:

- Consumable plants not displayed
- Plant found on south side of museum (16 on map)

CREEK DOGWOOD (Cornus sericea)

Characteristic:

Found in wet forests, wetlands, creeks, and streams in much of California

Uses:

- Bark dried and used as a tea for treating fevers
- Shoots used in basketry (Miwok)
- White, sour berries occasionally eaten

Fun Fact:

Original name was "dagwood" for the small straight stems called "dags."

- References in book in museum store: After the First Full Moon in April, Peters/Ortiz
- Plant found on east side of museum (40 on map)

DEERGRASS (Muhlenbergia rigens)

Characteristics:

- California native plant, found throughout the state
- Large perennial

Use:

Flower stalks used for foundation of coiled basketry (extensive use by most southern California Indian tribes)

Fun Facts:

- Leaves can be removed and used at any time.
- Burning the old chaff allows the center to remain alive.

Museum Links:

- Southern California baskets containing deergrass and yucca fibers near the "Basketmakers" wall
- Plant found around pond, opposite south side of museum (6 on map)

DOGBANE or INDIAN HEMP (Apocynum cannabium)

Characteristics:

- Native to west coast of United States, growing in wetlands and in moist, open areas
- Perennial herb

Uses:

- Ground leaves used as a wound dressing
- Tea made from roots used to treat earaches, diarrhea, vomiting, and other digestive disorders
- Sap used to treat warts
- Crushed root extract used to stimulate hair growth and to treat head lice
- Silky fibers, harvested in fall from inside of stems, twisted into strong string and cord to make nets and regalia

Fun facts:

- Approximately five stalks of milkweed or Indian hemp produce one foot of cordage. A Sierra Miwok feather skirt or cape contains about 100 feet of cordage made from approximately 500 plant stalks. A deer net 40 feet in length contains some 7,000 feet of cordage, requiring the harvesting of 35,000 plant stalks.
- After harvesting, above-ground parts of plants are burned in the fall, to stimulate new straight growth.
- Plant sap is poisonous to many animals and contains compounds affecting heart function. Apocynum means "poisonous to dogs."

Museum Links:

- A game bag made of hemp cordage in "The Journey," item 5
- Display of how cordage forms the foundation for the feathered cape in "Men's Regalia"
- Plant found on pond bank facing the south side of the museum (8 on map)

DOUGLAS IRIS (Iris douglasiana)

Characteristics:

- · Found in coastal mountain ranges; preferred growing conditions: open slopes and grassy areas with afternoon shade
- Evergreen perennial with long thin leaves
- In bloom in spring

Uses:

- Flowers used to decorate ceremonial headdresses
- · Iris seeds ground into flour for food
- Leaves used to wrap babies to prevent thirst and heat exposure
- Teas from roots used to treat wounds, kidney disease, and colds
- Strong and flexible fibers from leaves used to make cordage

Fun Facts:

- Only two fibers along the outside of each leaf are used to make cordage.
- To make twelve feet of rope from iris leaf fibers requires nearly six weeks.

- Iris leaf fibers and cord in "The Gathering," items 21, 23, and 26
- Iris fiber cord in "The Hunt," item 17c
- Plant found on northeast side of museum (45 on map)

DOUGLAS SPIREA (Spiraea douglasii)

Characteristics:

- Moist areas preferred, but tolerant of many conditions for growing
- Height of 3-6 feet
- Spreading roots that produce more plants
- Clusters of pink/purple flowers; leaf-drop in winter

Use:

Tea made from plant to reduce fever, inflammation, and pain

Fun Facts:

- Douglas Spirea, Douglas Iris, and Douglas Fir are named after David Douglas, a botanist who studied these and many other plants in the early 1800s.
- Methyl salicylate, a chemical related to aspirin, is present in the plant.

Museum Links:

- Consumable plants not displayed
- Plant found on south and east sides of museum (27 on map)

FLANNEL BUSH (Fremontodendrum californicum)

Characteristics:

- Found throughout California in dry soil
- Evergreen shrub
- Yellow flowers in spring

Uses:

- Inner bark used for tea and soothing ointments
- Outer bark fibers used for making nets

Fun Fact:

Fuzz on leaves can be used as an itching powder.

Museum Links:

- Nets with flannel bush fibers in "The Hunt"
- Plant found on south side of museum (22 on map)

GIANT CHAIN FERN (Woodwardia fimbriata)

Characteristics:

- · Found throughout western North America, preferred growing conditions: rich, moist soil and part shade
- Non-flowering evergreen plant
- Growth potential to 6-8 feet tall

Uses:

- Root extract used to treat pain and wash wounds
- Leaves used to line earth ovens (Pomo)
- Leaf and root fibers used to make baskets
- Fibers dyed red using alder extract and used for basket designs

- Karuk, Yuruk, and Hupa baskets in "Designs"
- · "Gathering from Nature," item 6
- Plant found on east side of museum (53 on map)

INDIAN BASKET GRASS or COMMON RUSH (Juncus effusus)

Characteristics:

- Native to western United States, growing in wetlands and in moist soils
- Evergreen perennial

Uses:

- · Shoots eaten raw, boiled, or roasted
- Stalks used to make dye, cordage, and as basket fiber

Fun Fact (Not So Much):

Juncus can be invasive, spreading by underground roots.

Museum Links:

- In "Coiling and Twining," item 16
- Juncus mentioned in the description of Southern California baskets near the wall labeled "Basketmakers"
- Plant found next to the pond and on the south side of the museum (2 on map)

MAIDENHAIR FERNS (Adiantum pedatum) Northern variety and (A. capillus-veneris) Common variety

Characteristics:

- Found throughout California in shaded, moist places, often on north slopes and under trees
- Tolerant of dry weather by going dormant, looking dead, and then growing again when moisture returns
- Not a flowering plant

Uses:

- Tea to treat pain "below the shoulder" (Costanoans)
- Split stems used for black designs in basket making and for earrings (Pomos and Kashaya)

Museum Links:

- In "Gathering from Nature," item 3
- In "Made for Others," item 11
- In "Designs" near the "Basketmakers" wall
- Plant found on the north side of the museum (47 on map)

MANZANITA (Arctostaphylos densiflora) McMinn and Sentinel varieties and (A. pajaroensis) Paradise variety

Characteristics:

- Native to northern California foothills; preferred growing conditions: sunny, well-drained areas
- Many varieties
- Evergreen perennial
- In bloom winter through spring

Uses:

- Berries used for tea and flavoring for other foods
- Tea made from bark used to treat poison oak and kidney infections
- Wood used to carve spoons, canes, head ornaments, pipe stems

Fun facts:

- Manzanita berries are rich in vitamin C.
- Manzanita wood is used during ceremonies because it burns with little smoke.

Museum links:

- Carved spoons and pipe stems in "Ceremonial Feasts" and "Traditional Tobacco"
- Plant found on south and east sides of museum (21, 25, 33, 34 on map)

MOCK HEATHER (Ericameria ericoides)

Characteristics:

- Found in coastal areas; preferred growing conditions: sandy soils with full sun
- Evergreen perennial
- In bloom in summer and fall

Use:

Unknown, perhaps for fragrance

- Consumable plants not displayed
- Plant found on south side of museum (10 on map)

MOUNTAIN MAHOGANY (Cercocarpus betuloides)

Characteristics:

- Native to dry slopes along California coast
- Evergreen shrub
- · Small flowers in spring, followed by fruit with long, wispy tails

Uses:

- Hard, light wood used to make arrows, spears, digging sticks
- Bark and leaves used to make tea to treat tuberculosis

Fun Fact:

Genus name, Cercocarpus, derives from cerco for "tail" and carpus for "fruit," meaning "fruit with a tail."

Museum Links:

- Digging sticks in "The Gathering," items 14 and 27
- Arrows and spears in "The Hunt"
- Plant found on east side of museum (37 on map)

MUGWORT (Artemisia douglasiana)

Characteristics:

- Perennial herb found throughout California
- Preferred growing conditions: sun or partial shade and occasional moisture year round
- Fragrant leaves

Uses:

- Teas made from leaves to get rid of parasitic worms, to treat colds and poison oak, and to make hair healthy
- Seeds ground up and mixed with other ground seeds to make cakes
- Leaves smoked or consumed in ceremonies to stimulate vivid dreams
- Leaves used to repel insects in food storage containers

Museum Links:

- Consumable plants not displayed
- Plant found on east side of museum (31 on map)

NARROW-LEAVED MILKWEED (Asclepias fascicularis)

Characteristics:

- Native to California in dry locations below 7,000 feet
- Tough, winter-dormant perennial with an upright form
- Round flower clusters blooming all summer in colors from pale mauve to white

Uses:

- Fibers used to make string and cordage
- Juice from the stems used as a gum
- Sweet and spicy tasting blossoms when eaten raw
- Flowers and leaves used to make teas and a gum from the boiled juice to treat eye infections, snakebites, wounds, and coughs

Museum Links:

- Consumable plants not displayed
- Plant found on south side of museum (55 on map)

OREGON, BARBERRY, or MOUNTAIN GRAPE (Berberis aquifolium)

Characteristic:

 Native to slopes, canyons, coniferous forests, oak woodlands, and chaparral areas of state from 900 to 7300 feet in altitude

Use:

Bark and wood used to make a yellow dye

- Consumable plants not displayed
- Plant found on northeast side of museum (44 on map)

PITCHER SAGE (Lepechinia fragrans)

Characteristics:

- · Native to open areas in southern California foothills; adaptable to variety of soil, water, and sun/shade conditions
- · Evergreen shrub
- Purple flowers in spring and summer
- Fragrant leaves and flowers

Uses:

- Teas made from leaves to treat colds
- Seeds ground, toasted, and eaten with other seeds

Museum Links:

- · Consumable plants not displayed
- Plant found on east side of museum (32 on map)

SEDGE (Carex barbarae)

Characteristics:

- Perennial herb native to California; found in western North America
- Bright green sharp blades in clumps 1-3 ft. tall
- Oval-shaped tufts of small reddish brown flowers on spikes at the tip of the flowering stems

Use:

· Fibers used in traditional basket making

Museum Links:

- Display: "Yokuts Baskets," Photo above Case 21: "Gathering Sedge"
- Case 21: item 1. Sedge Willow Basket; item 2. Coiled Sedge Basket; items 5. and 6. Sedge Root
- Plant found on south side of museum (56 on map)

SILK TASSEL BUSH (Garrya elliptica)

Characteristics:

- Found on dry slopes and in coastal areas from Oregon to Central California; part-shade preferred for growing
- Evergreen, growing to 10-15 feet tall
- Long strings of flowers from January-March

Uses:

- Branches used to pry mussels off rocks (Yurok)
- Leaf extract used to hasten start of menstrual cycle (Pomo)

Fun fact:

Silk tassel plants have male flowers on one plant and female flowers on another.

Museum Links:

- Consumable plants not displayed
- Plant found on southeast side of museum (28 on map)

SNOWBERRY (Symphoricarpos albus)

Characteristics:

- Deciduous, perennial shrub found in foothills
- Varied soil types and sun exposures tolerated for growing
- · White flowers in late spring and summer becoming white berries that then turn black

Uses:

- Berries used to make antiseptic wash for sores, rashes, and burns
- Tea made from leaves and roots used to treat venereal disease and to stimulate urination
- Branches used to make brooms (Southern California tribes)

Fun Fact:

Snowberries are so named because the inside of the berry resembles snow.

- Consumable plants not displayed
- Plant found on northeast side of museum (39 on map)

SOAPROOT (Chlorogalum pomeridianum)

Characteristics:

- Perennial growing from a bulb; related to lilies
- Widespread in California except for desert, mountain areas, and valleys to 1500 feet

Uses:

- Bulb used for soap and shampoo, and for fish poison
- Bulb cooked for food
- Fibers used for brushes and rope
- Flower stem fibers used for string

Museum Links:

- Soaproot items in "The Gathering," items 15, 16, 17
- Plant found in south section of museum (14 on map, often dies back in summer)

SPANISH BAYONET YUCCA (Yucca whipplei)

Characteristics:

- Native to hot, dry southern California regions
- Sharp, elongated leaves present year-round
- Flower stalks and fruit appearing in spring

Uses:

- Seeds and flower stalks cooked and eaten
- Fibers from leaves and roots used to make baskets and sandals
- · Fibers from leaves used to twist into string and cordage
- Sap used as soap

Fun fact:

This yucca is pollinated at night by the California yucca moth, helping plant reproduction and feeding the moth.

Museum Links:

- Basketry containing yucca in "Southern California Baskets"
- Quiver in "Today's Art," item 6
- Plant found on south side of museum (11 on map)

STICKY MONKEY FLOWER (Mimulus aurantiacus)

Characteristics:

- Found on rocky slopes throughout California and in variety of soil types; sun exposure, good drainage preferred
- Evergreen shrub; occasional leaf loss
- Many orange flowers in late spring and summer
- Flowers attractive to hummingbirds and butterflies.

Uses:

- Flower extract used as eyewash and antiseptic
- Tea from root used to treat diarrhea

Fun fact:

The plant is called "sticky" because of the texture of its leaves.

- Consumable plants not displayed
- Plant found growing near pond (3 on map)

TORREY PINE (Pinus torreyana)

Characteristics:

- · Native to California coastal regions with ability to grow in dry, sandy soil and richer, moister conditions
- Growth to 40-100 feet tall in richer soils
- Needles in bundles of five
- Very deep roots
- · Capacity to live over 100 years

Use:

Pine nuts roasted and eaten (Kumeyaay)

Fun Facts:

- Male pine cones grow near the bottom of the tree; female cones near the top.
- Cones are pollinated in early spring and take 2-3 years to reach maturity. Mature cones measure 4-6 inches and fall from the tree in autumn.
- Cones contain pine nuts (pinyon), ½-1 inch long.

Museum Links:

- Pine nuts from related species seen in ceremonial aprons in "Flower Dance," items 6 and 13
- Plant found on east side of museum (43 on map)

TOYON or CHRISTMAS BERRY (Heteromeles arbutifolia)

Characteristics:

- Native to coastal ranges
- Tolerant of wide range of soil types and lighting
- Evergreen shrub, growing to 8-15 feet tall
- Clusters of white flowers in summer, turning into red berries in winter

Uses:

- Berries eaten fresh, dried, roasted, or boiled
- Berries used to make dye
- Bark and leaves used for tea for stomachaches and other pains
- Wood used for tools, arrows, hairpins

Fun Facts:

- Hollywood may have been so named because of the many toyons growing in the area.
- It is illegal in California to pick wild toyon.

Museum Link:

- · Consumable plants not displayed
- Plant found on south side of museum (23 on map)

TULE (Schoenoplectus acutus)

Characteristics:

- · Native to western and southern United States, Mexico, and South America, growing on edges of wetlands
- · Large, reed-like relative of grass
- Tall, hollow, pointed stems
- Flowers apparent in small clusters at top of stem; leaves not apparent

Uses:

- Ashes used to treat poison oak (Chumash)
- Flour made from tule roots (Yokuts)
- Stems used to make boats, baskets, mats, duck decoys, houses, toys (Central California Indians)

- Twined basket made of tule near the "Basketmakers" wall, item 2
- Tule basket in "Made for Others," item 27
- Plants found at the edge of the pond, opposite the south side of the museum (7 on map)

VALLEY OAK (Quercus lobata)

Characteristics:

- Native to California; indigenous to California alone
- Found in mountain areas and in lower-elevation foothills and valleys
- Deciduous tree with growth potential to 70 feet
- Deeply-lobed, greenish-gray leaves with no bristles

Use:

Acorns ground into meal, which was a staple food for Indians in the Sacramento Valley

Fun Fact:

• Oak wasp galls were collected, stored, and used for tinder.

Museum Links:

- Acorns in stone anvil in "Ooti Maidu Way"
- Tree found on north side of museum, along K Street sidewalk (48 on map)

WESTERN or RED COLUMBINE (Aquilegia formosa)

Characteristics:

- · Found throughout California, along rivers or mixed in with shrubs, oaks, or conifers
- Average size of 1-4 feet tall
- In bloom spring through summer; plant die-back in fall and winter

Uses:

- Leaves boiled for food (Miwok and Maidu)
- Chewed leaves used on sores and bee stings
- Root extract used for digestive upset
- Ground-up seeds used to kill head lice and as perfume

Fun Fact:

Seeds contain a poison related to cyanide.

Museum Links:

- References in books in museum store: After the First Full Moon in April, Peters/Ortiz and Chumash Ethnobotany, Timbrook/Chapman
- · Consumable plants not displayed
- Plant found on east side of museum (38 on map)

WESTERN HAWTHORN or BLACK HAW (Crataegus douglasii)

Characteristics:

- Found throughout northern and western United States
- Small tree with ½ -1-inch thorns, growing to 3-20 feet tall
- White flowers in bloom May to June; becoming black-purple fruits that resemble small apples

Use:

· Fruit served as food

Fun Facts:

- Plant is a member of the rose family.
 - Name is derived from "haw" meaning "hedge" and "thorn" meaning a "pokey spine projecting from a branch."

- · Consumable plants not displayed
- Plant found on south side of museum (19 on map)

WESTERN REDBUD (Cercis occidentalis)

Characteristics:

- Native to California, Arizona, and Utah
- Widespread in California, predominantly in foothills below 4000 feet
- Shrub or small tree, growing to 10-18 feet tall
- In bloom in spring and summer with magenta flowers, new seed pods, and blue-green leaves

Uses:

- · Shoots and bark used for baskets
- Bark used for cordage and dye
- Bark also used for a tea to treat diarrhea

Fun Fact:

In fall, the entire plant turns light yellow or red.

Museum Links:

- In the "Basketmakers" display area, Washo and Yokuts basket; and in the Miwok case, items 1, 2, 4, and 5
- In "Gathering from Nature," items 13, 19, 20, and 21
- In "Coiling and Turning," items 2 and 17
- In "Preparing the Meals," items 6 and 10
- In "The Journey;" item 1
- In "Made for Others," items 7, 20, 24, and 29
- In "Trails of Trade," item 25
- Plant found on south and east sides of museum (26 on map)

WHITE ALDER (Alnus rhombifolia)

Characteristics:

- Found along rivers in northern California
- Average size of 30-80 feet tall
- Hanging flowers (catkins) in fall and winter; leafless in winter

Uses:

- Bark used in tea to treat diarrhea, hemorrhage, and fever
- Bark used for dyeing basket fibers rust/orange (Chumash, Yurok, Karuk, and Hupa)
- Young, thin roots used to make basket caps
- Small branches used to make arrow shafts (Pomo)

Fun Fact:

Alder roots contain nitrogen-bearing bacteria that nourish it and nearby plants.

Museum Link:

- Fibers dyed with alder bark can be seen in baskets and basket caps
- Plant found near pond, opposite museum entrance (1 on map)

WILD MOCK-ORANGE (Philadelphus lewisii)

Characteristics:

- Found throughout western United States
- Shrub, growing to 5-10 feet tall
- Leaf-drop in fall
- · Clusters of white flowers, smelling like orange blossoms, in late spring

Uses:

- Hard wood used to make arrow shafts, tools, snowshoes, baskets, regalia, and furniture
- Bark and leaves contain saponins, chemicals used to make soap.

Fun Fact:

 This species is named after Meriwether Lewis of the Lewis and Clark Expedition. In 1806, he was the first European-American to collect and describe the plant.

- Arrows in "The Hunt," items 12 a-d
- Flower dance sticks in "Flower Dance," item 10
- Plant found on east side of museum (35 on map)

YARROW, MILLFOIL, SINAM KE-TEY (Pomo), NUN-ALT'-MIL (Yuki) (Achillea millefolium)

Characteristics:

- Found statewide in open, well drained areas
- Drought-tolerant perennial
- Average size of 1-3 feet tall
- Feathery leaves
- Flat-topped clusters of flowers in bloom May-October

Uses:

- Crushed leaves used for blood clotting and rashes
- Teas from roots, leaves and flowers used to treat headaches, colds and flu, stomachaches, and fever
- Green dye made from leaves (Maidu)
- Plant juice used to soothe sore eyes

Fun Fact:

Achillea refers to Achilles, the Homeric hero, because of his reported use of the plant to treat wounds.

- Consumable plants not displayed
- Plant found on south side of museum (13 on map)

References and Sources of Additional Information

Chumash Ethnobotany by Jan Timbrook, 2007, Heyday Books

Living Wild (Gardening, cooking, and healing with native plants of California) - 2nd edition, by Alicia Funk & Karin Kaufman, 2013, Flicker Press

Tending the Wild by M. Kat Anderson, 2005, University of California Press

US Department of Agriculture Natural Resources Conservation Service

Web site: http://plants.usda.gov/java/nameSearch allows you to search for a plant by common or scientific name and to find "Related Links," including "Native American Ethnobotany" references compiled by the University of Michigan

University of California Santa Cruz Arboretum Plant Uses Guide

Web site: http://arboretum.ucsc.edu/pdfs/ethnobotany webversion.pdf

Sacramento Valley Chapter of the California Native Plant Society

Web site: http://www.sacvalleycnps.org/index.php?option=com_content&view=article&id=61&Itemid=101

Many thanks to the Sacramento Valley Chapter of the California Native Plant Society for their generous donation that helps enable us to continue our work.

