ETHNO Botanical walking tour

University of California
Santa Barbara

ETHNOBOTANICAL WALK

The University of California, Santa Barbara prides itself on the academic resources it provides to the campus and community. Unique among these is the outdoor botanical classroom first envisioned by Chancellor Vernon Cheadle. Throughout history and around the globe, humans have gathered resources from plants. This tour highlights 10 plant species that provide us with food, medicine and folklore.

1. **HORSETAIL** • *Equisetum hymenale* . Dating back to the Devonian period (375 mya), this ancient plant is rich in silicon, potassium and calcium, giving it diuretic properties. It can also be used for the treatment of conjunctive tissues or kidney and bladder problems. The silica content also makes it useful as an abrasive agent for polishing and cleaning. It is found throughout the Northern Hemisphere, but locally the Chumash tribe used it as a polish for wooden bowls and arrows. The Blackfoot tribe used the crushed stems as a pink dye for porcupine quills and in Japan the buds are eaten as a spring vegetable.

2. **MAIDENHAIR** • *Ginkgo biloba.* This 'living fossil' from China has been preserved throughout the centuries for its ethnobotanical uses. Nut-like gametophytes are eaten as a snack and are often in a common Asian porridge called congee. Health benefits have not been proven but may enhance memory, improve blood flow or protect from free radicals. It can be used for Bonsai and its leaf is a symbol for the Japanese tea ceremony.

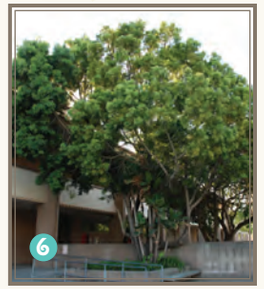
3. **COAST LIVE OAK** • *Quercus agrifolia.* This tree was a very important species for California native peoples. The acorn mush of the coast live oak was preferred despite the long leaching period required for removing the bitter tannins. The dried, unleached acorns contain 4.4% protein, 20.4% fat and 52.7% carbs. The wood was used for firewood, made into bowls and jars and the inner bark was used for tanning hides. Different parts of the plant were used as an astringent and to treat pustules and hemorrhoids.

4. **WHITE ALDER** • *Alnus rhombifolia.* The Chumash, Costanoan, Karok and other Californian tribes harvested many resources from this California native tree. The wood was used as a preservative to smoke salmon, eels and deer meat. It was also useful for making wood bowls, trays and spoons. The bark was used as a dye that could become bright orange if the bark was chewed and set with the help of enzymes in the saliva.

5. **KURRAJONG** • *Brachychiton populneus.* The 'kurrajong' fiber from the bark of this tree was used by aboriginal people for making nets, fishing lines and rope. Since it is soft and spongy, the wood is also useful for making shields while the bark is used as a fiber. The tuberous roots have a sweetish taste and the roasted seeds can be eaten plain or made into cakes. The Dharawal people told their children the Watun Goori legend about scary hairy men who lived inside the trees that might escape and come after them if they did not behave.

6. **ENGLISH YEW** • *Taxus baccata.* In ancient times, this western Eurasian plant was used as a poison for those who would rather die than surrender to their enemies. In 1021, Avicenna discovered the toxins were efficacious in treating cardiac difficulties. From the late 1300's to the Mid-1500's in Europe, demand for yew for the production of bows heightened to such an extent that deforestation became a major problem. Today, extracts from the plant are used in ovarian cancer treatments.

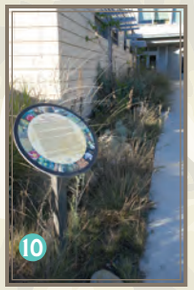
7. **DRAGON'S BLOOD** • *Draceana draco.* This tree of the Canary Islands is famous for producing "Dragon's Blood," the dark red sap that was used in alchemy for protection and empowerment. It is also documented as being used for medicinal purposes, painting and jewelry crafts in medieval Europe. Today, the resin is used to stain and polish wood and to produce incense that is burned for love, strength, and courage.



8. DEVIL'S HAND • *Chiranthodendron pentadactylon.* The Aztecs regarded this Central American tree with so much awe and wonder that an individual tree became the focus of a religious cult. During the Spanish Conquest, these trees were cultivated in the gardens of royalty. Today, the dried flowers, called "flor de manita" in Mexico, are mixed with other plant material to make a tea that is said to alleviate irregular blood pressure and heart ailments. Flavonoids and other active ingredients may also alleviate smooth muscle tension.

9. BUNYA-BUNYA • *Araucaria bidwillii.* Since this tree was sacred to the Aboriginal people of Australia, the "Bunya season" promoted a peaceful gathering of rival tribes for a great feast of the bunya nuts, a chestnut-flavored delicacy. The germinating seed also produces underground tissue that has a coconut-like flavor. The wood is resinous and straight grained so it has become an important source of timber.

10. CHUMASH GARDEN • The Barbareno Chumash Heritage Garden began in 2007 and includes samples of several species used by Chumash peoples around the Santa Barbara region. Please read the interpretive signs for more information.



AN OUTDOOR CLASSROOM

Dr. Vernon Cheadle, Chancellor of UCSB from 1962 until 1977, recognized the special opportunity and favorable circumstances of this botanically rich and unique environment. He had a vision of developing the campus into an outdoor classroom, which would not only serve as an educational tool but would also create an environment of great beauty. Art, Biology, Environmental Studies, Geography, and Geology classes make use of the unique and beautiful plants in UCSB's landscape.

We hope you will enjoy this tour.

Visit our Campus Flora Project Interactive Map
http://earth.geog.ucsb.edu/CampusFlora

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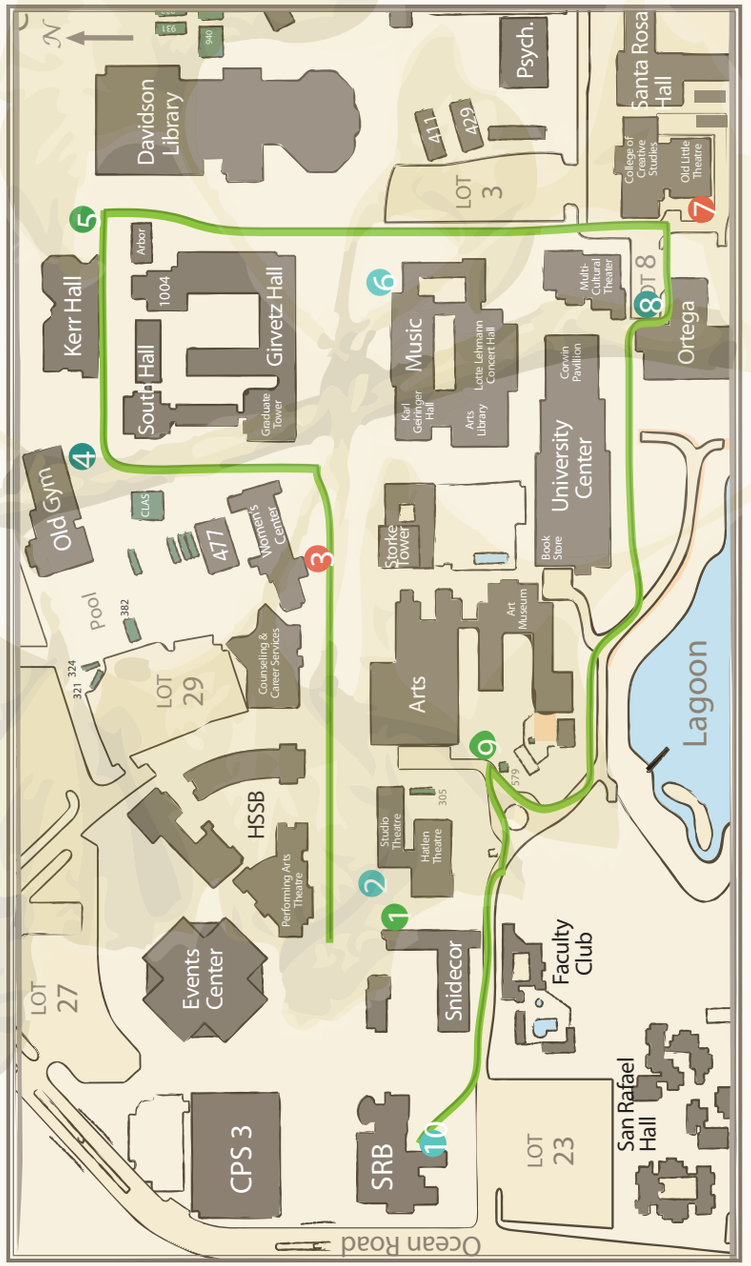
Acknowledgments: Elvenia Slosson Foundation
Campus Flora Committee
UCSB's Physical Facilities Dept.
Cover Illustration: Jennifer Lee Lin, UCSB Student

CAMPUS FLORA PROJECT



This tour starts at Snidecor Hall and follows a large loop on the southern half of the campus, concluding at the Student resource Building, just south of where it began.