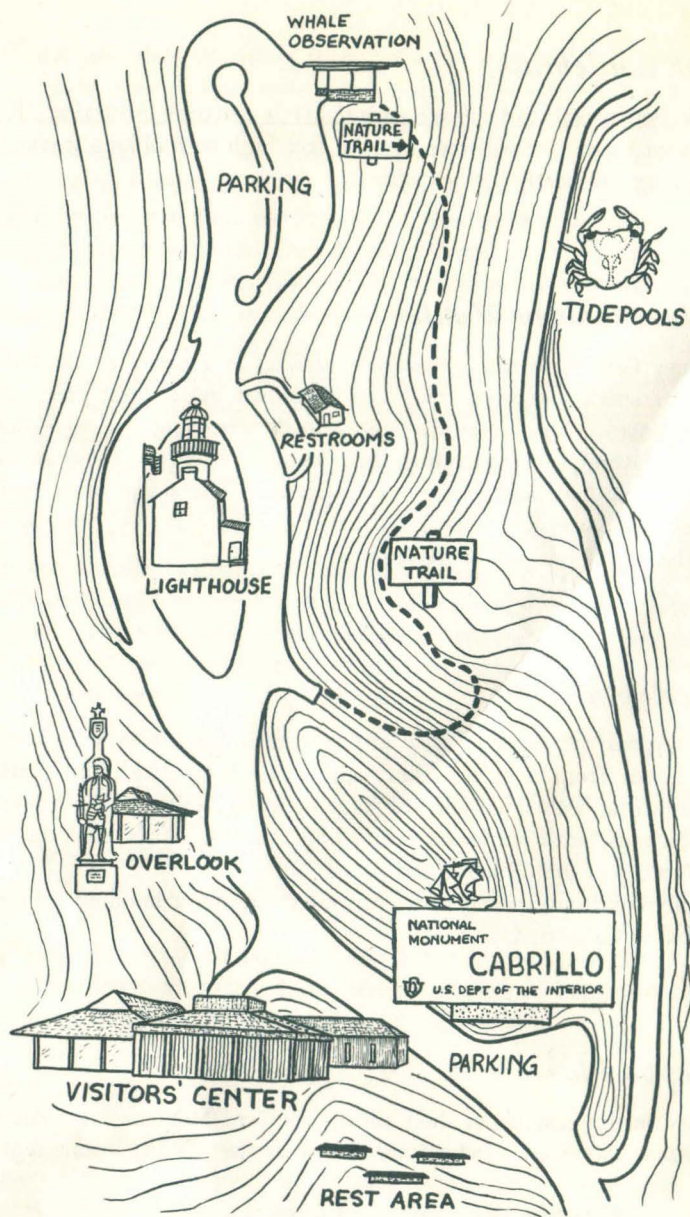


Plants

This guide has errors
in it and should be
checked against other
sources.

Denny Davies 1/23/74

GUIDE TO THE NATURE TRAIL



1967

Guide to the Nature Trail

The Cabrillo National Monument was set aside in 1913 to commemorate the exploration of the west coast of the present United States by Juan Rodriguez Cabrillo in 1542. It has been administered by the National Park Service, U.S. Department of the Interior, since 1933.

We of the National Park Service hope that you will enjoy your visit to the Cabrillo National Monument, and we are sure that you will help us to protect and treasure its beauty.

Instructions

The Cabrillo Nature Trail starts near the Whale Lookout and ends near the Weather Station. It is a pleasant walk of about one-fourth mile through an environment typical of much of the coastal and foothill region of southern California and northern Baja California. It provides a spectacular panorama of the Pacific Ocean.

By comparing the numbers on the trailside posts with this trail guide, you may learn the names of the major plants found along the trail and something about them.

SEE MAP ON BACK COVER.

1 Lemonade Berry and California Sagebrush

The Lemonade Berry (*Rhus integrifolia*) is one of the commonest shrubs along the nature trail. It is easily recognized by its stiff, leathery and ~~usually toothed leaves~~ and, in the spring, by its tight little bunches of pink blossoms, and later its slimy orange-red fruits.

The California Sagebrush (*Artemisia californica*), often called the Old Man, is also very common along the trail. It is a gray shrub with finely divided aromatic leaves. The Indians and early Spanish Californians regarded California Sagebrush as a cure-all, and used it in the form of a strong wash to bathe wounds and bruises, with excellent results. Early miners laid sprays of sagebrush in their beds to drive away fleas.

2 Sea-Fig

Sea-figs (*Carpobrotus*) are prostrate succulent perennials with long stems set with fleshy, three-sided leaves that are bright green or often tinged with red. The native sea-fig has purple flowers; an introduced one has yellow. ?

3 Ice Plant

The Ice Plant (*Mesembryanthemum crystallinum*), an annual weed from the Mediterranean region, is usually seen higher up the slope.

The Ice Plant is remarkable for its glittering, often reddish succulent stems and foliage, which seem frosted with crystals. A creeping mat-forming plant, its stem is repeatedly and rather shortly forked, and from 1 to 2 feet long. Its alternating leaves are oval, flat, and to 6 inches long.

The fruit capsules are tightly closed in dry weather, but have the remarkable property of absorbing moisture from the air. After a rain they open, permitting their numerous small seeds to escape. When the weather clears, they close until another shower.

4 Barrel Cactus

The Barrel Cactus (*Ferocactus viridescens*) is common along the trail. It is a solitary oval cactus plant seldom a foot high, with 10 to 21 ribs armed with clusters of from 9 to 13 radial spines and 4 central spines. It bears yellowish-green flowers.

5 Spurge

Several kinds of Euphorbia or Spurge, including both (*Euphorbia misera*) and (*E. polycarpa*) are common on the dry mesas and rocky slopes of San Diego County. (*E. polycarpa*) is a prostrate herb while (*E. misera*)

is a much-branched straggling shrub from 2 to 3 feet high. They bear tiny oval or heart-shaped leaves and minute whitish or yellow flowers. As in other Euphorbias, what appears to be a flower is really a bouquet of several male flowers surrounding one female.

6 Lichens

Several kinds of the primitive plants called Lichens ("LY-kens") grow on the granite rocks above the trail. Lichens are pioneer plants that help break down rock by acid root secretions, making way for other plants to follow.

7 Buckwheat and Black Sage

Flat-top Buckwheat (*Eriogonum fasciculatum*) is one of the conspicuous plants of the coastal region; it is a familiar sight almost everywhere at all times of the year. It is a shrub, woody at the base, from 2 to 3 feet high. Its white flowers slowly change to a rich mahogany color as they die; they are not unsightly even in their dead and withered state.

This Buckwheat is a valued beeplant, and from its leaves Indians made a remedy for headaches, stomach pains, and bladder trouble. A tea made from the flowers was used for high blood pressure, for bronchial ailments, and as an eyewash.

Black Sage (*Salvia mellifera*) is also common along the trail and on most coastal landscapes in southern California. It is a shrub 3 to 8 feet high and is dry and brittle in the summer months. In the spring whole hill-slopes are often colored by its small white or slightly lavender flowers. The leaves are oblong; they are fragrant when crushed.

8 Velvet Cactus

The Velvet Cactus (*Bergerocactus emoryi*) forms thickets of upright cylindrical stems concealed by needle-like yellow spines.

The fruits are along the stem. The red pulp containing the seeds oozes from the ripe fruit like toothpaste from a tube, though looking more like blackberry jam than like toothpaste.

9 Prickly Pears

Prickly pears (*Opuntia spp.*) are common along the coast of southern California. The stems are fleshy joints called "pads." The flattened pads are from 6 to 12 inches long and bear bundles of sharp spines, from 1/2 to 1 inch long, surrounded by tiny barbed bristles. The bristles cause much discomfort to persons handling the plants. The young pads bear tiny conical green leaves, but these soon fall off. The plant bears beautiful yellow flowers and red fruit.

Prickly Pears provide homes for many different animals. If you look carefully, you may see tiny insects congregated to feed upon the juices of the more tender portions of the plants; you may see where spiders have spun their webs to trap flying insects; and you may see pads that have been nibbled by dusky-footed woodrats (*Neotoma fuscipes*). The woodrat obtains its water from this source.

Indians gathered the ripe fruit from the Prickly Pears, carefully removed the spines, and ate it raw. They also boiled the fruit and strained out the seeds to make a syrup. Early Spanish settlers further reduced the syrup to make a delicious thick paste called "Queso de Tuna." Indians also dried the seeds and ground them into flour to make a thick soup called "atole." They split and used the fleshy pads for poultices, and the fine bristles were rubbed into warts and moles to remove them.

Mexicans today cultivate Prickly Pears to fence their property. They also boil and crush the pads; the sticky juice is added to mortar or white-wash to make it stick more securely to adobe walls. They also gather the tender pads, cut them into strips, and boil them to serve as a vegetable.

10 Fishhook Cactus

You can see many globular plants called Fishhook Cactus (*Mammillaria dioica*) along the trail. They are armed with clusters of small radial spines and a stout hooked central spine.

Their cream-colored blossoms, and the fruits, form a circle around the crown of the plant. The red, egg-shaped fruits, which ripen early during the winter, are a favorite food for rodents.

11 Jumping Cactus

This Cholla or Jumping Cactus (*Opuntia prolifera*), is common along the trail. It has a thick, fleshy stem with numerous spreading branches. The branches are cylindrical and jointed; the joints are from 3 to 6 inches long, and are covered with bundles of "fuzzy," yellow-colored bristles and longer spines. Both bristles and spines are barbed.

12 Yucca

The Yucca (*Yucca schidigera*) has a rosette of stiff, erect, spine-tipped leaves 2 to 3 feet long. The long leaves common to the group account for its name, Spanish Bayonet. Several kinds are native to California.

Some Yuccas were highly prized by the Indians and early settlers. Indians extracted strong white fibers from the leaves by first soaking them

in water and then pounding them on a flat rock with a wooden mallet. The leaves were plunged into water from time to time during the process to wash out the soft pulp and outer skin. The fibers were cleaned, separated, and twisted into threads. The Indians made twine, rope, bow strings, nets, hammocks, and other useful articles from the threads. The fibers, tied into bundles, also served as a paintbrush or a hairbrush. Mexicans today weave a coarse fabric from the fibers.

The roots and stems from all the Yucca plants were sometimes used as soap by the Indians and early California settlers. The roots were washed and cleaned and pounded until soft. They could then be used for bathing or cleaning clothes. The roots could also be dried and kept for long periods before being used; and, sometimes, a washing fluid was made by boiling the roots.

The Yuccas produce flower stalks and blossoms with amazing rapidity under favorable conditions. The fruit of some Yuccas was an important food of many Indians. As deer, birds, and insects feed on the same fruit, the Indians often gathered it while still green. It was sometimes cooked while green and eaten immediately; the ripened fruit was eaten raw or cooked. The cooked fruit was sometimes worked into a paste and dried for storage. The product could be eaten dry or after boiling. Frequently pieces were broken off, dissolved in water, and used as a sweet drink. The dried product from the fruit was an important article of barter with neighboring tribes.

One of nature's interesting relationships exists between the Yuccas and (*Pronuba*) moths. The flowers are dependent upon the moth for pollination, and the larval moths are dependent upon the Yucca seeds for food. The female moth works by night, collecting pollen and rolling it into a little ball. She flies to the flower of another plant, deposits her eggs in the ovary, and fertilizes the flower by thrusting the pollen ball down the stigmatic tube. Later, the developing larvae destroy some of the seeds, but many perfect seeds usually are left.

13 Chamise

There is a stand of Chamise (*Adenostoma fasciculatum*) next to the Ranger Office. This plant is common along much of the trail. It is a native spreading shrub, from 2 to 10 feet high, with slender wandlike branches, with tiny leaves in bundles or fascicles. In early summer it bears clusters of tiny white blossoms on long spikes; bees visit the blossoms for pollen. Birds and rats eat its seeds.

Commonly called Greasewood, the Chamise catches fire very easily. Resin in the leaves enables fire to spread quickly through a growth of Chamise. The plant is usually able to make a quick recovery from its surviving roots.

14 Pink Bottlebrush

The Pink Bottlebrush (*Melaleuca nesophila*) is native to Australia. It is an evergreen shrub or small tree 6 to 30 feet high with oblong leaves 1/2 to 1 inch long and nearly 1/4-inch wide.

15 Sydney Golden Wattle

The Sydney Golden Wattle (*Acacia longifolia*) is a native of Australia. A shrub or small evergreen tree, it is identified by its light green and elongated leaves. The leaves are from 2 to 6 inches long and to 5/8-inch wide, with several veins extending their length. However, these are not true leaves, but flattened petioles or leafstalks. The acacia bears small, bright yellow flowers with numerous stamens. The fruit, 1 1/2 to 4 inches long, is the typical pea pod of the legume.

16 Eucalyptus Tree

The Eucalyptus (*Eucalyptus sp.*) are evergreen trees with thin, sharp-pointed leaves from 3 to 6 inches long. The leaves are often curved, equally green on both sides, and are fragrant when crushed. Their flowers are conspicuous, with numerous protruding stamens. They are protected in bud by a cap of united sepals and petals.

Eucalyptus trees are native to Australia. About a hundred different kinds grow in California.

17 Aleppo Pine

The pines on the grounds of the Cabrillo National Monument are Aleppo Pines (*Pinus halepensis*) which are native to the Mediterranean region.

18 Jade Plant

Beside the garage are several specimens of Jade Plant (*Crassula argentea*). It is a succulent shrub with thick stems and stout branches, oval bright-green rubbery leaves, and dainty pink winter flowers. It is one of the most familiar and widely grown succulents in the world.