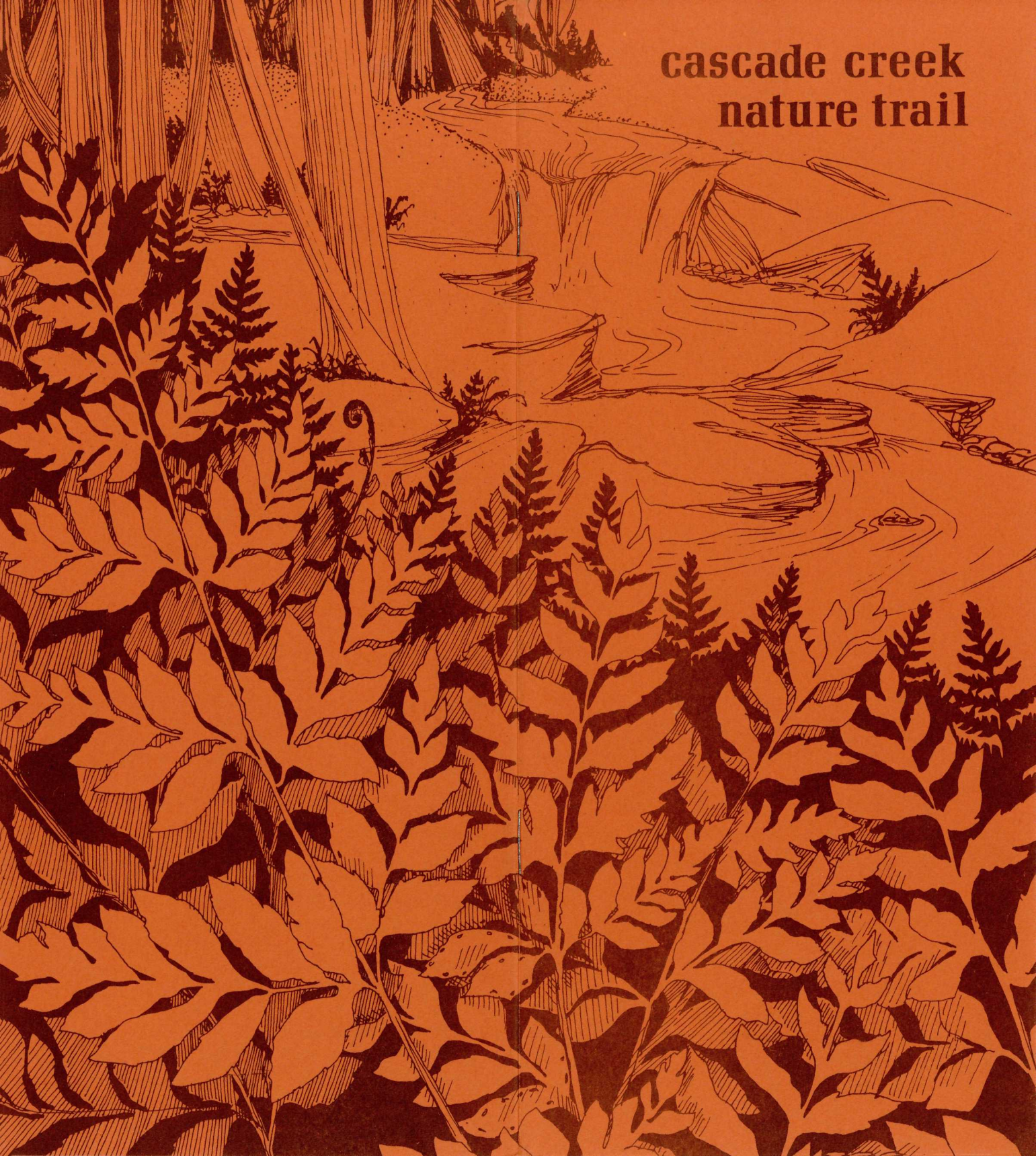


**cascade creek
nature trail**



INTRODUCTION — Now that you have completed your guided tour through Crystal Cave, we hope this little leaflet will help you to enjoy and more fully appreciate the outstanding scenery and other natural features to be seen along the trail to the parking area. During the half-mile climb of 320 feet, there are six short flights of concrete steps, and the average grade is 12%.

Along this trail are many plants, birds, and mammals characteristic of the two different life zones which merge at this elevation; but sunlight, temperature, moisture, slope of mountain, soil type, and several other factors also affect this varied plant community.

Stop 1 (base of lower steps)

As you begin your climb, on the left side of the railing, the low plant with the large, heart-shaped leaves is **wild ginger** (*Asarum hartwegi*). Common along shaded canyon streams, one author described this plant "as seeming to enjoy the gossiping of the brook as it gurgles by." Overhead, at the top of the first steps, is an unusual tree, the **California nutmeg** (*Torreya californica*). The dark green foliage has flat, spine-tipped needles, and its green, plum-like fruit is highly aromatic. Unlike the true nutmeg, the fruit is of no value for flavoring. Here, also, on your left, growing out of a crack in the wall, is a delicate fern call **fragile fern** (*Cystopteris fragilis*). Many different species of ferns grow in this area. Because of their grace and beauty, people have long been attracted to ferns.

As you continue your climb, keep in mind the important role water has played in shaping this scenic canyon and the surrounding mountains, as well as Crystal Cave. Here, along Cascade Creek with its picturesque cascades and waterfalls, we see the results of the tremendous cutting power of water.



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Design and illustrations by Annie Tong

California nutmeg

Stop 2 (short side trail to base of cascade)

In this cooler canyon, the stream provides added moisture, allowing the vegetation to be lush and green. Less sunlight is received here than on the surrounding hillsides, and the trees consequently grow taller and have larger leaf surfaces to capture the available sunlight. Typical of the canyon trees growing here is the **big leaf maple** (*Acer macrophyllum*), whose simple, opposite leaves often up to a foot wide, are the largest of any American maple. The thin trunks and gray bark of the **white alders** (*Alnus rhombifolia*) with their much smaller leaves, are also a familiar sight along foothill streams.

As you leave this beautiful cascade and climb the second flight of steps, please be careful not to disturb any plant or natural feature, as all are protected in our National Parks. Be especially careful not to come in contact with **poison oak** (*Rhus diversiloba*), for the best preventive is to keep away from it. To do so, you must know it when you see it. Poison oak can be a shrub, a tall vine on the side of a tree, or a low ground cover, as on the hillsides above and below the trail. Its distinguishing mark is the triple leaf: "Leaflets three, let it be!" states the old rule-of-thumb rhyme. This common plant grows in many places in the foothills, from about this elevation to the San Joaquin Valley.

Stop 3 (sharp turn in trail between first fenced railings)

Rocks that have been changed from one type to another are called metamorphic rocks. These changes occurred under the influence of tremendous heat and pressure during mountain building processes of a former geologic age. Limestone became marble, sandstone was changed to a dense quartzite—harder than steel—and shale was converted into slate and schist. Crystal Cave ridge is formed from these rocks, many of which are exposed along the trail ahead of you.



California laurel

Stop 4 (Cascade Creek Bridge)

As you approach the bridge, on your left, at the base of the rock outcropping, notice the **false Solomon's seal** (*Smilacina racemosa* var. *amplexicaulis*). These showy plants are perennial herbs with thick, creeping, underground rootstocks and attractive white flowers. The multibranched tree next to it is the **California laurel** (*Umbellularia californica*), the only native representative of the laurel family in western North America. It is also growing on the opposite side of the trail.

Of particular interest is the left bridge post, where a **black bear** caused considerable damage, and left his tooth marks as evidence.

From this rustic bridge, the view of Cascade Creek is pure delight. Here, in the cool of the shadows and sheltered by the nearby trees, the creek more than lives up to its name. Originating from streams and smaller springs higher up, Cascade Creek is one of the headwater tributaries of Yucca Creek in the western portion of Sequoia National Park.

Just beyond the bridge, on your left, look for the conspicuous **bleeding heart** (*Dicentra formosa*), growing along the edge of the creek next to the "No Fishing, Cascade Creek" sign. This is a completely elegant plant, from its gracefully divided leaves to its delicate, blooming clusters of pendant hearts. Mosses and other vegetation carpeting the forest floor hold water like a sponge, and there is little erosion where forested mountainsides remain undisturbed. Along the banks, on the bottom, and in the waters of Cascade Creek live many specialized types of animals, including fish, frogs, toads, salamanders, and tiny water insects. Larger animals, whose tracks are often found along the stream, are also attracted here in search of these aquatic dwellers.

Such a picturesque spot as this offers both an intriguing glimpse into the ecology of our natural environment and a peaceful retreat from the busy world we left behind.

Stop 5 (Sweet Shrub)

Beyond the next fenced railing, on both sides of the trail look for **sweet shrub** (*Calycanthus occidentalis*), a pleasantly fragrant and common shrub in moist areas of the foothills. The showy flowers are wine-colored with velvety petals. It is from the persistent cup-like fruits, shaped somewhat like an urn, that the genus, *Calycanthus*, derived from two Greek words meaning flower and cup, takes its name.



Bleeding heart

Stop 6 (Circular Rock Wall)

One of the few **white fir** (*Abies concolor*) trees to be found at this low elevation can be seen just a few yards below the circular rock wall, where you may wish to rest a bit before continuing your climb. At higher elevations, the **white fir** is the most common tree in association with the **giant sequoias**.



White fir

Stop 7 (Canyon live oak))

On the right at the top of the next flight of stairs is a very large **canyon live oak** (*Quercus chrysolepis*). Its yellowish green leaves are thick and leathery and often quite variable. Because of the yellow coating on the cup of the acorn, the tree is also known as the **golden cup oak**. These trees are long-lived, and often develop large limbs and a wide-spreading crown.

Can you find three other species of oaks that grow here? Look for the evergreen **interior live oak** (*Quercus wislizenii*) similar to the **golden cup oak**; the **Oregon oak** (*Q. garryana*), a small tree with leaves having rounded lobes; and the **black oak** (*Q. kelloggii*), a much larger tree whose leaves have pointed lobes. The latter two oaks are deciduous. Seldom do we find all these oaks in one location, yet here, where the two plant communities occur together, all can grow.



Live oak

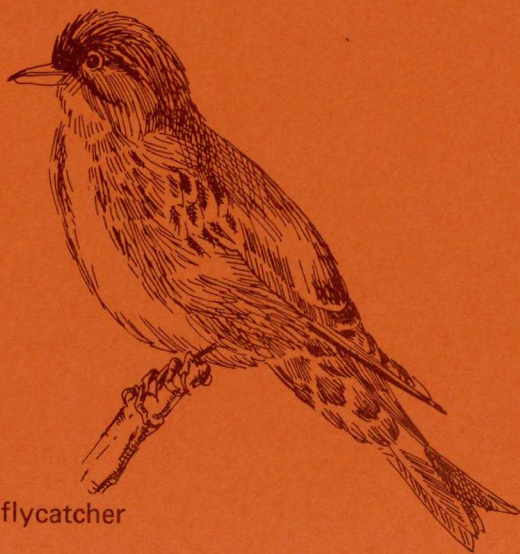


Interior live oak

Stop 8 (Marble Ridge Sign)

This marker adds to the information of Stop 3, in helping to explain more of the geology of the Crystal Cave Ridge. The marble of Crystal Cave is but one of a number of lime deposits that were laid down at different times in ancient seas. For further information on the geology and origin of Crystal Cave, please refer to the Crystal Cave booklet on sale at all visitor centers. Notice that the marble ridge contains tall spikes of **yucca** (*yucca whipplei*), commonly called Our Lord's Candle. This plant favors soil with a high concentration of calcium, one of the basic elements, of marble. On the right, only a few more yards up the trail, is a common shrub, **California hazel** (*Corylus restrata* var. *californica*). Look for it at elevations of 4,000 to 7,000 feet.

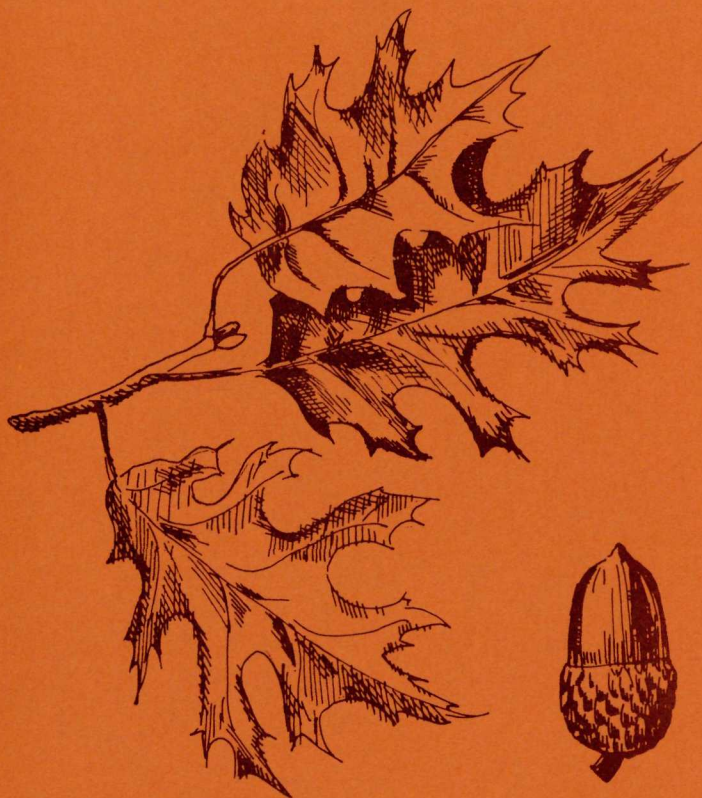
From here to the parking area, we suggest that you take your time, perhaps watch and listen for birds, and make other observations on your own as you complete your climb. Among the birds that may be seen or heard in this area are the **canyon and winter wrens, black-headed grosbeak, Nashville warbler, Steller's jay, violet-green swallow, olive-sided flycatcher, western wood pewee, rufous-sided towhee, band-tailed pigeon, and solitary vireo**. **Western fence lizards** can often be seen on rocks or tree trunks. They are usually dark in color, with bluish bellies.



Olive-sided flycatcher

Stop 9 (Parking Area)

As you arrive at the parking area, near the end of the trail, look for several fine specimens of the **California black oak** (*Quercus kelloggii*). The large acorn of this species was a favorite of the California Indians, who utilized it as their staple diet in making acorn meal, for mush, and even a bread.



California black oak

We hope you have enjoyed your trip through Crystal Cave and your walk over one of the most scenic and beautiful trails leading to any cave. Please place this booklet in the container by the end of the trail, or deposit 10 cents in the same container should you wish to keep it.

For further information about Sequoia and Kings Canyon National Parks and the naturalist program, please stop at the Lodgepole Visitor Center or contact any of the uniformed men and women of the National Park Service.