#### 17. Mertyl Flats Rest Area

You have reached the half-way point on your trip along the Nature Trail. The balance of the trip is downhill, which may be good news to many of you. If you are interested in some additional hiking, you may take short side-trips to Upper Falls and Basin Falls, or leave the Waterfall Loop completely, and continue up Swanson Creek along the Contour Trail to Alec Canyon.

### 18. Trailing Mertyl (Vinca major)

This non-native plant was introduced into the Swanson Creek area in the late 1800s, to be used as a ground cover around a small cabin that was located near this spot. The plant, also known as periwinkle, has adapted well to this site, and tends to displace native vegetation for growing space. Although not a preferred food, deer will feed on this plant during late summer when browse is scarce.

## 19. California Nutmeg (Torreya californica)

This tree is not a true nutmeg, but is actually a member of the yew family. Each leaf is tipped with a sharp green spike. The tree reproduces vigorously from stump sprouts, as does the redwood, but is slow growing. The seeds require a long period after ripening before germination takes place, and many are destroyed by insects or animals.

## 20. Sticky Monkey Flower (Diplacus aurantiacus)

This perennial shrub gets its name from the fact that the underside of the leaves are rather sticky to the touch, and the shape of the orange flowers resembles the face of a monkey. The plant is typically found in dry, open areas, but will occasionally inhabit other environments. Indians used the young stems and leaves for salad greens.

## 21. California Laurel (Umbellularia californica)

Other common names given this plant are California bay, Oregon myrtle, and pepperwood. Gently rub one of the leaves, notice the spicy smelling aroma which is similar to the true bay used for food seasoning. This however, is not the same leaf sold commercially. The tree's tiny clustered yellow-green flowers bloom in winter or early spring and ripen into oval fruits resembling the olive. The thin flesh turns from green to purple, becoming succulent when mature.

#### 22. Western Sycamore (Platanus racemosa)

The sycamore normally inhabits stream sides. Its bark is smooth and the trunk often leaning. It has broad, deeply lobed leaves that are star-shaped, and a leaf stalk that is expanded at the base to enclose fully the cone-shaped developing bud. Flowers and fruits are in globular clusters distributed along a pendent, slender stem.

### 23. Bigleaf Maple (Acer macrophyllum)

Like the sycamore, the big leaf maple tends to be found growing along streams and in moist canyons. The large, up to 10 Inch deeply lobed leaves, are the largest leaves of any American maple. The tree is particularly attractive in the fall, when these leaves turn yellow and orange, and begin to drop from the tree.

#### 24. California Sage (Artemesia californica)

These shrubs are found on open hillsides or in mixed chaparral. Numerous tiny grey leaves emit a strong odor when crushed. It is said that miners laid sprays of the sage to drive away fleas, and the Spanish-Californians used it in the form of a strong wash to bathe wounds and swellings.

#### 25. Canyon Live Oak (Quercus chrysolepis)

This species is also known as a maul oak, or iron oak, because its heavy and hard wood was used for the head of mauls by the settlers. When fully grown it is the most massive of western oaks. The canyon live oak is usually found at elevations above the range of the coast live oak. Shrubby forms are common in chapparal areas.

## 26. California Buckeye (Aesculus californica)

This buckeye tree is located on the hill above you. The buckeye is one of the showlest and most beautiful native tree species because of the great masses of creamy white flowers that appear on long, erect spikes during May and June. The leaves appear early in the spring, and soon after flowering, turn brown. They fall off in August or early September, probably as a means of protecting the tree from drought. The green buckeye pods continue to enlarge even after the leaves fall, and eventually split open to release the large, tough-coated shiny-brown "buckeye" seed. Indians made flour from the buckeye fruits after extracting the poison. The nectar from buckeye flowers is poisonous to bees.

## 27. Tree of Heaven (Ailanthus attissima)

The tree of heaven is one of the many species of plants found in the Santa Cruz Mountains which is not native to the area. California has approximately 1,000 species of introduced (exotic) plants, most of which are annuals of Old World origin. Exotics are not representative of the natural California flora. Concerns about exotics include their aggressiveness in displacing natives. If an exotic species displaces the native vegetation in an area, wildlife that utilized the native species for food and/or cover, may be unable to adapt to the introduced plant. Native species are therefore, best adapted for the area in which they live, and over the long term will provide a diversity of habitats for wildlife and human enjoyment.

Your tour of the Waterfall Loop is now complete. Hopefully you have enjoyed your hike. Should you have any additional questions, please contact a park ranger.

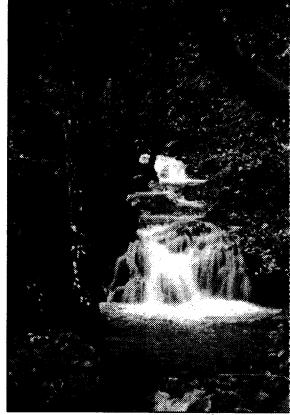


# SANTA CLARA COUNTY

PARKS AND RECREATION DEPARTMENT 298 Garden Hill Drive Los Gatos, California (408) 358-3741

> Uvas Canyon Park 8515 Croy Road Morgan Hill, CA 95037 (408) 779-9232

# WATERFALL LOOP NATURE TRAIL GUIDE



Granuja Falls

## **UVAS CANYON PARK**

SANTA CLARA COUNTY
PARKS AND RECREATION DEPARTMENT



## UVAS CANYON COUNTY PARK SELF-GUIDED NATURE TRAIL

Welcome to the Waterfall Loop. As you walk this one mile route along Swanson Creek, you will be introduced to some of the plants that make their home in this beautiful canyon. The hot, dry, primarily fog free summers, and cool, wet winters of this part of the Santa Cruz Mountains produce the mixed evergreen and deciduous forest types characteristic of the Pork.

For those of you with only a limited amount of time, the hike around the trail can be made in about 40 minutes. For a leisurely hike with time out for enjoying more fully the natural beauty of the trail and adjacent water falls, you should allow approximately one highly for the trip. The trail gains 500 feet in elevation and is moderately steep. Wear appropriate footwear.

The trail begins next to the fee collection station at the campground entrance, or you may access the trail from the trailhead at the Black Oak Group Picnic Area. Parking is available in day-use area parking lot. Please do not park in the campground.

In order to protect the beauty of the natural environment, we ask you not to remove anything from its place. All features in county parks are protected.

#### WATERFALLS

When streams, creeks or rivers flow over precipices and plunge downward, waterfalls are formed. The water in Uvas Canyon's creeks comes from a combination of rainfall and springs. The various springs above and in Uvas Canyon are the creeks' sources or headwaters. The creeks have their highest elevation at the headwaters. At first, headwaters flow in tiny narrow channels called rills. Rills travel downhill and come together forming wider, deeper channels called brooks. Brooks combine to form streams or creeks. Sudden descents of the creeks from higher to lower levels cause waterfalls in Uvas Canyon. In many places, waterfalls are formed when a creek crosses a layer of strong, resistant rock and softer rock downstream is worn away by the flow of water. This leaves a steep drop in the creek's channel, causing waterfalls. Sometimes other geologic forces, such as earthquakes or faults, create cliffs in the paths of streams, also causing waterfalls. Differences in formations cause waterfalls to vary in appearance from narrow and high to wide and low.

The Waterfall Loop is located along Swanson Creek. This is a yearround stream which supports a wide variety of plant and animal life. The plants living along this creek are here because abundant water is available. This is a riparian community. Flowing water's influence on the stream side community extends to the animal community as well. Forty percent of the mammal and reptile species in the Western United States depend on riparian habitats for some or all of their needs. More than 80% of amphibians depend on riparian habitats.

The terrestrial plants of riparian communities are critical to the animals in a stream ecosystem. Fish use overhanging vegetation for cover. Shade from alders, sycamores and maples keeps stream temperatures cool in the summer, which is important to growth and development of young fish. Leaves and other debris fall into

streams and provides an important source of nutrients for insects and other stream invertebrates. Riparian settings attract wildlife, offering favorable micro-climates combined with abundant resources. The variety of trees and shrubs in a riparian community results in a complex forest canopy. This canopy offers perching and nesting sites, as well as a place to hide from predators or bad weather. The variety of plants growing along streams provides a long menu of food items; foliage, fruits, seeds and wood all form the basis for some animals' diet. Insects abound and the food web can be complex and large by the time the top predators visit a riparian site.

#### Use of This Guide

The more common plants along the Waterfall Loop have been marked with numbered posts that correspond to the following listed descriptions. Should you see a plant that is not covered in the descriptions, a park ranger may be able to supply you with information about the plant. Enjoy your hike!

## 1. Tanbark Oak (Lithocarpus densiflorus)

Although the tanbark oak produces acoms after the second growing season, it is not a true oak. Tanoaks are widely distributed in the redwood region, and back from the coast where they associate with madrone, California laurel, and douglas fir. Native Americans of the Coastal Range depended on the tanoak for food. Through a meticulous grinding and washing process, they were able to produce a fine flour. Later, settlers used an extract from the bark in the leather tanning process.

## 2. Coyote Bush (Baccharis spp.)

Also known as chapparal broom, the coyote bush is a common plant of the Coast Range hills and valleys. When in bloom, the stems are covered with small white flowers in vase-shaped pods. Indians used the plant's long stems as arrow shafts by soaking the stems in water and then rolling them on flat rocks.

## 3. Madrone (Arbutus menziesii)

The madrone's green tan and red bark, and its bell-shaped white blossoms are similar to those of the manzanita. Birds enjoy the orange-red berries that ripen from the flowers. The madrone's bark was used by the Indians in a tea to cure stomach-aches and treat colds, and made into a lotion for cuts and sores.

#### 4. White Alder (Alnus rhombifolia)

The alder is the earliest of all streamside trees to bloom. Its leaves do not turn color at all in the fall, but drop while still green. The alder is a member of the birch family. The white alder is replaced near the coast by the red alder. The red alder's leaves are larger and coarser than the white alder's, and its fruits are twice the size of the white alder's fruits.

#### 5. Blackberry (Rubus ursinus)

This member of the rose family can be recognized by the thorny underside of the leaves, thorny stems, and fuzzy leaves which grow in groups of three. The berries develop from white blossoms and ripen to a black color during the summer. The berries are edible, and are a favored food of raccoons and birds.

#### 6. Poison Oak (Toxicodendron diversitoburn)

Poison oak is a versatile plant. It forms shrubs 2 feet or more in height, or may be a woody vine climbing like ivy up the trunks of trees, as is

this poison oak plant in front of you. Poison oak grows very abundantly in all sorts of habitats. It is not to be confused with poison ivy or poison sumac, which are native to the eastern United States. Contact with the oil from this plant may cause a rash or blisters on the skin. Some of the worst infections are likely to occur during a fire, when the irritating oils are released into the air. Poison oak's dark green leaves turn brilliant red in the fall before they drop. Slender brown stalks remain through the winter before new leaves sprout in the spring.

## 7. Thimbleberry (Rubus parviflorus)

In the middle of the creek, you can see a patch of thimbleberry bushes. The 3 to 7 inch wide leaves are hairy and soft. The thimbleberry has white flowers and a soft, bright red, sweet berry that resembles a thimble in shape. The thimbleberry is common in several habitats: coastal scrub, redwood forest, and riparian situations.

#### 8. Coastal Wood Fern (Dryopteris arguta)

This species is commonly found on wooded mountain slopes, mostly below 5,000 feet. The coastal wood fem is rarely found in dense redwood forests. The blades of the fern are slightly leathery, and twice pinnate or nearly so. The sori are large, close, and in two rows.

#### 9. Poison Oak and Blackberry

Now is your chance to compare these two species close together. The leaves of poison oak are typically composed of 3 leaflets, which are variously toothed, lobed, or rarely entire. When leaves emerge in the spring they are shiny green. The foliage turns a beautiful red in autumn, before dropping to the ground. Flowers are present from April to May. They are small, greenish white, and drooping. The fruit is tan or whitish, a smooth, dry drupe, about 1/4" wide, falling soon after maturity. The blackberry's leaves are also composed of 3 leaflets. Differing from poison oak, however, the plant has spines on the stems, petioles, and leaflets. Leaf color is typically a duller green than that of poison oak. The plant does not lose its leaves in the fall as does poison oak, but is evergreen. The blackberry's flower is showy, with white petals. Its fruit is a fleshy, aggregate drupe, purple or black in color when mature.

## 10. Douglas Fir (Psuedotsuga menziesii)

This species is not a true fir. The cones of true firs stand upright on the branches, whereas the douglas fir has hanging cones. The bark on young trees is smooth, greenish-grey, and marked with blisters containing water-white balsam, which the Indians are said to have used as an antiseptic for wounds. The bark on mature trees is thick corky, dark brown, and deeply furrowed. The douglas fir is one of the most common trees in the Santa Cruz Mountains growing from near sea level to about 3,000 feet elevation. The tree grows easily from seed, and is commonly planted as an ornamental. It is perhaps best known as the most widely used Christmas tree throughout the western states.

#### 11. Natural Spring

This spring has developed from the large amount of water that is stored in the hillside. As with most springs, the water is pure, so please be careful to keep your distance, and not contaminate it.

### 12. Golden Back Fern (Pityrogramma triangularis)

These small to medium-sized ferns usually inhabit rock-shaded slopes from 100 to 5,000 feet in elevation. The leaves are erect to drooping,

leathery, green, and glabrous (lacking hairs) above. The underside is covered with a whitish to yellowish powder . . . hence the common name. Ferns differ from seed-bearing plants in their method of reproduction. Instead of reproducing from a multicellular seed, the ferns reproduce mainly by spores, which are one-celled, asexual reproductive units. Fossil records indicate ferns have been a part of the earth's vegetation for millions of years. The living forms are a mere handful compared to the countless number that once flourished.

#### 13. Sword Fern (Polystichum munitum)

The sword fern is one of the most common ferns of the California Coast Range. It is widely distributed in damp woods generally below 2,500 feet. The sword fern generally can be found on drier sites than the wood fern seen on the trail earlier. The leaflets along the frond have a small but distinct "hilt" on the upper edge near the main rib. This probably accounts for the common name "sword fern." The unusual "spots" that form on the bottom-side of many fern leaves are called sori and they contain the fern's spores. Spores fall to the ground and germinate, eventually producing a new fern plant

## 14. Coast Redwood (Sequoia sempervirens)

Growth ring counts on some of the largest coast redwoods have indicated ages of over 2,000 years old. One of the most remarkable characteristics of the coast redwood is its ability to survive fires. Its bark is thick, soft, fibrous in texture, and reddish brown in color. On old trees it is resistant to fire, and the bark contains no flammable sap. Trees that have had all their branches killed by fire often sprout green foliage from top to bottom, producing what are known on burned areas as "fire columns." Redwoods produce hundreds of tiny cones, but the seeds from these cones don't germinate well. The tree reproduces most readily from root sprouts.

#### 15. Swanson Creek

Before you is Swanson Creek. Creeks or streams are described according to permanence of flow. Permanent streams like Swanson Creek flow all year long. Intermittent streams (like the creek at Triple Falls) dry up during portions of the year. Interrupted streams flow above ground in places and underground in others. Water drains slowly out of the earth. Soil acts like a sponge holding enormous quantities of water for days or weeks after a storm. Much of the water is released gradually from the soil into the stream system. Deferred release of soil water together with ground water, drains through springs and seeps and keeps streams flowing even when it has not rained for months.

#### 16. Wood Rose (Rosa gymnocarpa)

This member of the rose family is armed with straight, slender spines. It is a common shrub in the shaded woods of the Santa Cruz Mountains. The pretty rose-colored flowers bloom from May until July. The Indians made a tea of the roots to treat colds. Seeds were cooked for muscle pains, and the fruit was made into a jelly.