

NATURE TRAIL



The trail begins next to the old gas station in front of the Main Lodge — look for the nature trail sign near the building.

The trail, which circles our property, is about three quarters of a mile long and takes ½ - 1 hour to complete.

Numbered point of interest signs correspond to descriptions that follow.

EVERGREEN LODGE NATURE TRAIL

1 LODGE HISTORY

The Evergreen Lodge was established in 1921 as a post office and general store serving the workers building the dam at Hetch Hetchy, 9 miles down the road. Since the dam was completed in 1923, the Evergreen's business has changed many times. Lore has it that moonshine was once brewed in the lodge basement, three illegal slot machines were kept on site and a brothel was run out of two of the original cabins. In the 1930's, a Standard Oil gas station was opened in the small building in front of you. For many decades the station sold gasoline, oil and even camp fuel. There was also a mechanic onsite to repair travelers' cars. We now use the old gas station as a home for our bike and snowshoe rentals. In the 1950's and 60's, the lodge boasted a four-person orchestra on summer weekends - a tradition of live music that continues to the present day. Over the years, the Evergreen has remained a popular and beloved gathering place for people from all walks of life.

2 EVERGREEN MAILBOX

The mailbox before you is a unique piece of Evergreen history. Constructed by former facilities manager Lew West, the box was once a wood burning stove housed in the tavern, and you can still see where it charred the wall to the right of the bar. The mailbox's post is actually a rail from the historic Peach Growers Railroad line (more on that later!), which tied into the larger Hetch Hetchy Railroad, a 68-mile system that brought supplies and labor to the O'Shaughnessy Dam construction site at Hetch Hetchy. The dam, built in two phases, stands at an impressive 430 feet above bedrock and is over 300 feet wide at the base. The Hetch Hetchy Reservoir created by the dam holds 117 billion gallons of clean drinking water for 2.6 million people in the San Francisco Bay Area. It also generates over 230 MW of hydroelectric power downstream. Hetch Hetchy is the part of Yosemite closest to Evergreen and offers hiking and sightseeing opportunities as spectacular as any in the Park.

3 BARK BEETLE

Many of the dead trees found in the forest are the handiwork of bark beetles. The beetles are native to the region, but their impact has risen dramatically as drought, higher temperatures and more frequent fires have created stressed conditions within trees that are favorable to beetle survival and growth. These tiny insects bore into trees and lay eggs in the cambium layer beneath the bark. The beetles also introduce a blue stain fungus that prevents trees from repelling beetles and blocks the transport of water and nutrients within the tree. The combination of fungus and larvae, who feed on and tunnel through the tree's vascular layer below the bark, can kill even a massive tree in a few weeks. The beetles are responsible for over 100 million tree deaths in the Sierras in recent years. Note the small, white, round fungi that often mark a beetle's entry point into a tree.

4 CANYON LIVE OAK

Canyon live oaks thrive in the steep, rocky terrain common to the Yosemite area and are among the first trees to return after a wildfire. While canyon live oaks can grow to 100 feet tall and live for 300 years, they are usually small and shrubby because of the harsh environments they favor. They can be easily identified by

the spiny, holly-like leaves on their lower branches. Despite being part of the oak family, the canyon live oak is an evergreen tree and never loses its leaves during winter. The acorns from this tree, along with those from the black oak, were a staple of the native Miwok peoples' diet. The Miwok pounded the acorns into flour on large rocks called pounding stones, many of which can still be found in the Yosemite area. When roasted, the acorns can also be used to brew a coffee-like beverage. Due to the large number of animals that feed on the tree's acorns and foliage, canyon live oaks make excellent habitats for mountain lions.

5 PLAY AREA

We are excited to have recently opened our Kolana/Dogwood Play Area. We constructed all elements of the play area ourselves, including the custom designed zip line, climb-over net, low ropes course, oversized connect 4 game and chess board, bocce ball court and horseshoe pit. The play area is designed for multi-generational use, and we hope you take time to enjoy a little fun here along your nature trail walk! Just east of the play area toward Dogwood Village is a seasonal drainage corridor and active wildlife area. If you are lucky, you may see mule deer, gray fox, golden-mantled ground squirrels (they look like big chipmunks), acorn or white-headed woodpeckers, ravens and other Yosemite critters moving through the area.

6 BIRDLIFE

Open spaces like this are great places to see our local birdlife, including seasonal songbirds as well as year-round residents like Stellar's jays, dark-eyed juncos, various woodpeckers and even great gray owls. Great gray owls are North America's largest owls, standing 24 inches tall with a wingspan of nearly 6 feet. In 2010, the great gray owls in this area were deemed genetically distinct and renamed as their own sub-species, *Strix nebulosa yosemitensis*. You may spot one of these elusive owls at dusk, or you may hear the drum roll of another of our favorite residents, the iconic pileated woodpecker. This red crested woodpecker, the largest in the U.S., is often heard pecking loudly in rapid succession atop nearby trees. The Stellar's jay is a gregarious blue bird with a black mohawk. The distinctive call of these jays usually signals they have found food, including anything from nuts and berries to insects, eggs and small rodents. This bird is often referred to as a 'camp robber', as they enjoy stealing food from picnics.

7 CALIFORNIA BLACK OAK

California black oaks are found throughout the foothills of California and are known for their broad limbs and abundant acorns. These deciduous hardwood trees typically grow to a height of 80 feet (though some reach 125 feet) and can live for 500 years. Oaks provide vital habitat and food for area wildlife. Cavities in the trees serve as dens or nest sites for animals such as great gray owls, squirrels, woodpeckers and even black bears. Black oak acorns provide nourishment for bears, deer, birds and other wildlife in the Yosemite region. Once considered a 'weed' tree, black oaks were threatened in the 1960's by a National Forest policy calling for the systematic extermination of the trees by girdling them (wrapping a metal strap around them to strangle nutrient flow as they grew). Black oaks have since recovered and are now considered a protected species in certain areas of the Park.

8 INCENSE CEDARS

Incense cedars are native to the western U.S. and are found in Yosemite at elevations up to 7,000 feet. These trees can grow over 200 feet tall, and with their distinctive, vertically furrowed, reddish bark, they are often confused with redwood trees like the Giant Sequoia. Incense cedars, like redwoods, are extremely durable and decay resistant. Cedar wood is also soft and uniform, making it ideal for the precision milling processes involved in making pencils, which is one of the primary uses of the wood. The long straight grain allows it to be sharpened easily without forming splinters. The average cedar tree will produce over 170,000 pencils. Once considered waste, cedar sawdust from pencil and other milling is now combined with wax to form artificial fireplace logs. You will find many incense cedars in this area and along the trail. To find out how this cedar species got its name, crush its flat lace-like foliage between your fingers and smell!

9 EVERGREEN ROAD & CAMP MATHER

You are about to cross Evergreen Road, which travels north to Camp Mather, a 350-acre summer family camp owned by the city of San Francisco. Before construction of the O'Shaughnessy dam at Hetch Hetchy, Evergreen Road was a sleepy wagon route used by Miwoks, ranchers and adventurous Yosemite tourists. In the 1910's, Camp Mather was established as a base camp for construction workers building the new dam, and Evergreen Road bustled with activity. During this time, a sawmill was built at Camp Mather to supply the lumber needed for the dam's construction. Birch Lake, now the camp 'swimming hole', was used to collect and float logs to the mill. Originally called Hog Ranch, the camp was renamed for Stephen Mather, the first National Park Service Director. Camp Mather's facilities are available to Evergreen Lodge guests for a day use fee.

10 GREYWATER REUSE

If you look around a bit uphill you will see several plastic caps in the ground. These are the ends of various greywater lines in one of our commercial laundry greywater fields. Water in these lines comes straight from our commercial washing machines and flows to an array of trees planted in mulch basins throughout the area. Other lines irrigate many of the beautiful dogwood trees you see in Kolana village. This innovative system allows us to reuse all of our laundry water for landscape irrigation. We do the same with your cabin shower water as well, providing a second use for most water used onsite - all of which comes from a series of onsite wells. Innovative greywater technologies such as these offer great promise for minimizing water use throughout the state and beyond, and we are proud to have developed the county's first commercial greywater system, which allows us to reuse over 1.8 million gallons of water each year.

11 GRANITE

The large rock formation you see here is granite, which is the typical bedrock found below most of this area. Granite is made up of quartz, feldspar and mica and is exceptionally hard and abrasion resistant. Yosemite's granite formed 80 to 130 million years ago from molten rock that crystallized under great pressure far beneath the Earth's surface. In areas like Yosemite Valley,

Hetch Hetchy and Tuolumne Meadows, deep erosion, uplifting, glaciation and weathering have made the granitic rock very visible, often in dramatic fashion. The sheer face of Yosemite's El Capitan rises 3,000 feet above the valley floor and is the largest granite monolith in the world. Rock climbers love Yosemite granite for its steepness, friction and crack systems. The first ascent of El Capitan was accomplished in 1958 and took 47 days. Today, most ascents take 3-5 days. Remarkably, the current record for climbing El Capitan is under 2 hours!

12 DOUGLAS FIR

If this tree or the tree directly behind look familiar, it may be because Douglas firs are one of America's most popular Christmas trees. The Douglas fir gave early botanists problems because it shared characteristics with multiple tree species including pines, hemlocks and firs. Though the trees are called firs, they are not actually members of the fir family, but are most closely related to pine trees. Douglas firs are considered the second tallest tree species in the world behind coastal redwoods. They can grow to over 300 feet tall and live for 400-600 years, though Christmas trees are generally only 7-10 years old. Douglas fir cones have long three-pointed bracts protruding from each scale. According to Native American legend, these protrusions are the tail and two tiny legs of the mouse that hid inside each scale during forest fires, with the tree providing enduring sanctuary.

13 STREAM

The area in front of you is home to a small stream early in the year and to a dry streambed later on - a microcosm of Yosemite's climate. The landscape of the Yosemite area undergoes dramatic changes seasonally based on the availability of water. 95% of Yosemite's precipitation falls between October and May, with little to no rainfall during the dry summer months. Much of Yosemite is blanketed in snow throughout the winter and spring months. Average annual snowfall in the park is about 5½ feet, although snowfall varies dramatically by elevation, from atop 13,114 foot Mount Lyell down to the Merced River over 11,000 feet below. As the weather warms and snow begins to melt each spring, streams and waterfalls roar back to life. The snow recedes to reveal vibrant green hillsides and meadows where wildflowers abound. Eventually, the snowpack disappears, the flow of water slowly diminishes, and green fades to brown as summer progresses. By the end of summer, most of the waterfalls that once thundered are silent, waiting for the cycle to begin anew.

14 LICHEN

Note the bright green lichen growing on the tree trunks around you. Although it looks a little like moss, lichen is an amazing and complex organism made up of a fungus and an alga (singular for algae). These two organisms have a symbiotic, or beneficial, relationship that allows them to survive in habitats that they would not be able to live in on their own. Many Native American tribes would boil this lichen down for its toxic vulpinic acid, which can be used to make beautiful chartreuse dyes and paints. Shepherds and other settlers in Europe used vulpinic acid from this lichen for hundreds of years to poison foxes and wolves, giving it the name wolf lichen. Wolf lichen is relatively sensitive to air pollution, so

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scientists can look at the change in the amount of wolf lichen in an area to determine if there are air quality concerns. This is just one of 500 different kinds of lichen found in the Yosemite area!

15 SUGAR PINE

The sugar pine tree is the tallest species of pine in the world, growing over 200 feet tall, which explains why naturalist John Muir called it the 'Queen of the Sierras.' Sugar pines also have the longest cones in the world, which can exceed 2 feet! These cones provide an important food source for squirrels, woodpeckers and other birds and small mammals, who tear the cones open for the nutritious seeds inside. The tree's name comes from its sweet resin, which Muir found preferable to maple sugar. If you can find a cone, try smelling it and see what your senses tell you. Sugar pines were important to Native Americans as well, who used them to make food, baskets, glue, gum, laxatives and tea. Sugar pines remain important to us today, as their soft, even-grained wood makes for some of the best construction timber in the Sierras.

16 RIM FIRE

You will now begin to see evidence of the Rim Fire that threatened Evergreen Lodge in August 2013. The Rim Fire was one of the largest in California's history, burning over 250,000 acres. Firefighters protected the Evergreen and neighboring Camp Mather by back-burning from the property borders to reduce fire fuel, encouraging the fire to pass around the properties. Until the 1960's, park managers believed they should extinguish all fires to preserve the beauty of the parks. We now understand that periodic fires allow forests to be thinned, opening the canopy and letting sunlight through. Fire also facilitates the recycling of nutrients to the soil, while reducing dead, woody debris on the forest floor. To restore the natural role of fire in Yosemite, remote lightning fires are now often allowed to burn, and a series of controlled fires are set each year. These practices reduce the risk of 'mega' fires and encourage a more natural mix of forest vegetation.

17 SUNSET VIEWPOINT

Enjoy a rest and a view from this relaxing vista, and come back later (with your favorite libation!) for a wonderful sunset. The Sierras are known for stunning sunsets of vibrant reds and rich oranges, and this spot affords a panoramic view of the Stanislaus National Forest to the west as the sun sets over the 2,000 foot walls of the Tuolumne River Canyon. At night, this viewpoint also offers a nice, peaceful place for stargazing. The Stanislaus National Forest is 18% larger than Yosemite National Park, encompassing nearly 900,000 acres within its borders. One of the oldest national forests in the United States, Stanislaus contains 139,000 acres of old growth pine forests, 78 lakes, and over 800 miles of rivers and streams. World-class whitewater rafting can be found on the Tuolumne River as it flows through the Stanislaus. There are 2,859 miles of roads within Stanislaus National Forest, but only 188 miles are paved.

18 MANZANITA

Common throughout the Sierra foothills, manzanita is an easily recognizable, magnificent shrub 8 to 15 feet tall with highly polished mahogany colored bark that tends to peel in late summer. Spanish priests first called it manzanita, or 'little apple', because of the shape of its fruit. These small, sticky berries are produced in large number and are edible, though not very tasty. Pioneers and Native Americans used the berries to make teas, jellies and wine. They used manzanita wood to make tools, utensils, pipes and even toothbrushes. Native Americans also used the plant medicinally as a treatment for poison oak and as a mild disinfectant. Manzanita is hearty and drought resistant, and it makes for excellent firewood when dry, although fresh wood should not be burned, as it produces noxious smoke. Black bears are very fond of manzanita fruit and were once hunted in manzanita patches in late summer.

19 BLACK BEARS

Nearby you will see metal 'bear boxes' intended to keep food and scented items from our native black bears. These bears have a keen sense of smell, are highly intelligent, incredibly curious and seek out food wherever it is easily obtained. Bears are active both day and night, although they hibernate in boulder caves in winter. About 500 black bears live in Yosemite, with many more in the surrounding forests. Grizzly bears once roamed these forests as well, although the last known California grizzly was killed in 1922. The name black bear is misleading, since they can be black, cinnamon brown or blonde, with black being least common here. Though they can weigh over 600 pounds and are an intimidating sight, black bears are typically shy around people and will avoid contact. Humans are much more dangerous to black bears than they are to us: 15-20 bears are killed by cars in Yosemite each year.

20 PEACH GROWERS RAILROAD

You are standing on the railroad grade that formerly connected Camp Mather with the Peach Growers community, located a mile south of the Evergreen. Contrary to the name, no peaches were ever grown in the area! A consortium of fruit growers operated a mill along the middle fork of the Tuolumne River that produced packing crate material for fresh fruit grown in California's Central Valley. The mill burned down in 1925, shortly after the market bottomed out. The mill site was converted into a Boy Scout camp for many years until 1974, when it became the Dimond-O campground. Many of the original cabins from the mill remain and are used as private summer homes. The entire railroad system was decommissioned in 1949, but evidence of this historic railroad can still be seen on the front porch of our Main Lodge, whose railings were made from salvaged railroad ties.