PLANTS ALONG THE TRAIL

Many of the plants along the trail are not native. As you hike, look for the indigenous species (native to Hawai'i but also found elsewhere), Polynesian introduced species (brought by the original Hawaiian settlers over a thousand years ago), and alien species (brought intentionally or accidentally after 1778).



Hau. The wood of this low, twisting tree is very buoyant. It was used by Hawaiians for canoe outriggers and floats on fishing nets. The bark was made into ropes and cordage.

Hala. This tree has long leaves (*lauhala*) that are flattened, stripped, and woven into floor mats, baskets, pillows and fans. *Hala* fruit resembles a pineapple. Dried keyes of the fruit were used as brushes to decorate *kapa* (barkcloth).





Kukui. This common forest tree is known as the candlenut tree. The oil in the kernel was burnt as light by the Hawaiians. The nut is cleaned and strung as a *lei* and the "meat" in the shell is used as a seasoning ('inamona') for fish.

Ki (ti). A very important plant to Hawaiians, ti leaves have widespread uses, including house thatching, cooking, clothing, fishing, lei making, and ritual uses.



'Ōhi'a 'ai (Mountain Apple). This tree likes the wet, shady areas along the trail. The bright pink flowers appear in spring. The edible fruit grows off the branches and ripens in late summer. This tree is a Polynesian introduction.

Guava. Introduced to Hawai'i in the early 1800s as a cultivated plant, the fruit is made into paste, jam, jelly, and juice. Guava reproduces prolifically as the seeds are spread by pigs and birds.





Mango. Native to India, this tree was brought to Hawai'i in the 1800s for its delicious fruit. These large trees have become common in the Hawaiian forest and yards. Look for the ripe yellow fruit in summer.

Inkberry. A recent introduction from Malaysia, this shrub is rapidly spreading along the trail. The pink berries turn black as they ripen. Birds eat the berries and drop the seeds throughout the forest.

JUNGLE WARFARE TRAINING

Kahana was used by the military in World War II as a jungle warfare training site for soldiers going to fight in the Pacific. Over 300,000 soldiers learned to live off the land, construct rope bridges for stream crossings, and carry out combat in the forest of Kahana. Villages were built in the valley to simulate combat situations with live-fire training that included rockets, machine guns, flame-throwers, grenades, and rifles.



At #2 along the trail, there are several bunkers and tank barriers that remain from the military's use of the valley, circa 1943-1945. The crushed coral trail you are hiking on is part of the road system built for army jeeps, trucks, and tanks. At the stream crossings are the foundations of the former bridges.

HIKE SAFE

 Stay on the designated trail. Following pig paths or hunter trails will get you lost.



- Wear good footwear. The trail is uneven, rocky, and muddy. Be prepared for several stream crossings with slippery rocks and moving water.
- There are no emergency communication services along the trail and cellular phones will not work.
- Be sure you have enough time for your hike.
- Do not drink water from the stream carry at least one liter of water per person on this hike.
- Mosquito repellent and suncreen are recommended.
- Do not taste or eat unfamiliar plants.



WARNING: Flash Flood!

Be alert, water may rise without warning. Fast moving water may result in serious injury or death. Do not cross streams if the water is high.



State of Hawai'i Department of Land & Natural Resources DIVISION OF STATE PARKS

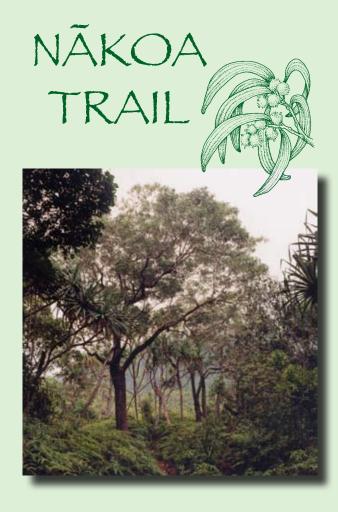
http://www.hawaiistateparks.org

Kahana State Park 52-222 Kamehameha Hwy. Kahana, HI 96717 Phone: 808-237-7767 O'ahu District Park Office 1151 Punchbowl Street, #310 Honolulu, HI 96813 Phone: 808-587-0300



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AHUPUA'A 'O KAHANA STATE PARK Kahana, O'ahu



NÃKOA TRAIL

This 3.5-mile (5.5 km) loop trail meanders on the valley floor and lower slopes about midway along the length of Kahana Valley. The trail goes through a forest of both native and introduced plants with two major stream crossings.

Nākoa refers to the *koa* trees that you will see along the trail. *Koa* and *'ōhi'a* are the two dominant trees in Hawai'i's native forests. Numerous tree roots create uneven and slippery trail conditions. The dense tree canopy can make the trail turn dark quickly. Allow 2 to 3 hours for the hike.

The trailhead is at the end of Kahana Valley Road, but you must park at the designated site before the residential area. It is a 0.6-mile walk from the parking area to the trailhead. Enjoy your hike.



Acacia koa has sickleshaped leaves and small cream-colored flower "balls". The golden, hard wood is popular for woodworking.

LOTS OF WATER

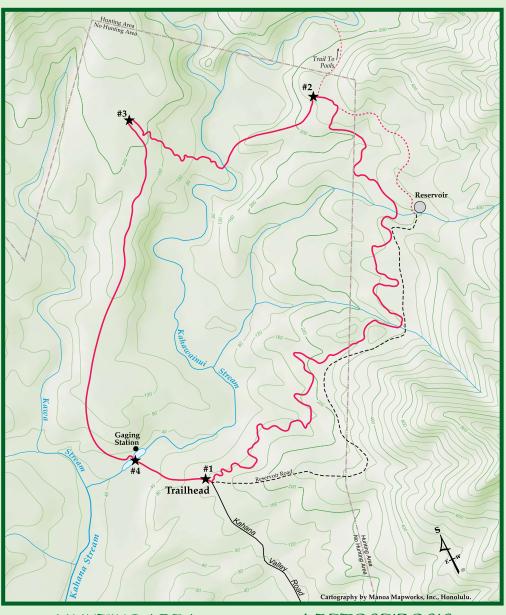
Kahana is the wettest valley on O'ahu and sits atop the island's largest aquifer. Rainfall is abundant in the back of the valley where the clouds atop the Ko'olau Mountains drop their moisture. The water is channeled into the many tributaries that drain into two large streams - Kahawainui Stream on the west side of the valley and Kawa Stream on the east side. These streams join *makai* (seaward) of the trail to form Kahana Stream which flows across the valley floor to enter the ocean at the eastern side of Kahana Bay.

The water in the streams of Kahana is fast-flowing. You may need to wade in knee-deep water to



cross the stream and walk over slippery rocks. Do not try to cross these streams during or after rainy weather when water levels

Be prepared for frequent rain showers during your hike. A light rainjacket or poncho is recommended. Good hiking boots are needed for the slippery, muddy trail conditions.



HUNTING AREA

The trail is adjacent to a hunting area and you may see signs of wild pigs on the trail. Pigs root in

the muddy areas and eat fallen fruit. Hunters often have dogs to assist with their hunt for the wild pigs in the valley. Use caution if you see pigs or hunting dogs on the trail. Hunting is allowed on weekends and holidays. Hunters use the trail to access the hunting areas in the park.

LEPTOSPIROSIS

Leptospirosis is a bacterial disease transmitted from animals, such as rats and pigs, to humans. It

can enter the body through the eyes, nose, mouth and broken skin. You can get leptospirosis by drinking or swimming in contaminated water or hiking in contaminated mud. See a doctor if you develop flu-like symptoms after hiking or swimming.

HIKING THE TRAIL

There are 4 major points along the trail that serve as landmarks during your hike. Please take a minute at these points to make sure you take the correct trail route. Hikers have gotten lost on this trail because they go off on hunter or pig trails that lead far back into the valley or up the steep valley walls. For your safety, stay on the designated trail.

Trailhead (#1) to #2: 1.6 mile

The first part of the loop takes about 1 hour. The trail is relatively level, going through a forest of hala (pandanus), hapu'u (tree fern), guava, kukui (candlenut), and an occasional koa tree. The trail is carpeted with lauhala (leaves of the hala tree) and kukui nuts. You will cross numerous small



tributary streambeds that are generally dry or have small amounts of water. However, they can still be slippery and subject to flooding.

Options at #2

Four trails intersect at #2. Going right (west) will take you to the reservoir tank and back down a road to the trailhead (about 1.5 mile). Going straight towards the bunkers, there is a 0.5-mile side-trip that takes you through a bamboo forest down to Kahawainui Stream.

#2 to #3: 0.5 mile

Going left (east) at #2, you follow the old military road marked by the crushed coral surface. After a short walk through the rose apple forest, you will need to cross Kahawainui Stream. It is a gradual uphill climb toward the east side of the valley.

#3 to Kahana Dam (#4): 1.3 mile

Along this part of the trail, you will see some of the largest *koa* trees. Look for the sickle-shaped leaves on the ground. The native vegetation gives way to exotics such as the inkberry shrubs, guava, and orchids as you continue *makai* (seaward).

#4 to Trailhead (#1): 0.1 mile

You will cross Kahawainui Stream a second time



at the dam. Use caution as the dam is slippery and the water moves swiftly. It is a short 15 minutes back to the trailhead.