

**★**awai'i Volcanoes National Park encompasses 333,000 acres (133,547 hectares) of dynamic, ever-changing environments including alpine, rain forest, rugged coastline, desert, and active volcanism. Explore the rough, hot, and windy environment of the coast or experience Mauna Loa, where plants and animals have adapted to survive in temperatures as low as 10° F (-12° C).

The park offers over 150 miles (241 km) of trails ranging in elevation from sea level to 13,667 feet (4,169 m). With a third of the park designated as wilderness, there are numerous opportunities for solitude and to experience life on active volcanoes.

## Things to Know Before You Go

# All Overnight Backcountry Hikers Must Register

Obtain a permit at the Backcountry Permit Office (visit www.nps.gov/havo for current hours of operation and instructions for obtaining a permit). Permits are currently (July 2015) issued on a first-come basis, no earlier than the day before your hike. Contact the permit office at 808-985-6178 to ensure this process is still valid.

When you return from your trip, stop at the Backcountry Permit Office or call 808-985-6178 to check out. Failure to check out will not automatically trigger a search by park rangers.

### **Services are Limited at Trailheads**

There is no water at any of the trailheads and public transportation is unavailable. There are 911 phones (for emergency use only) located at the Pu'u Loa and Ka'ū Desert Trailheads, and at the top of Mauna Loa Road.

## **Leave No Trace and Safety**

## **Leave No Trace**

- ☑ Plan Ahead and Prepare
- ☑ Follow Marked Trails
- ☑ Camp at Designated Sites
- ☑ Pack It In, Pack It Out
- ☑ Leave What You Find
- ☑ No Campfires
- ☑ Do Not Feed or Harm Wildlife
- ☑ Be Considerate of Other Visitors

# Pack the Essentials for a Safe and Comfortable Trip

- ☑ Water—minimum 3 quarts / liters of water per person per day
- ☑ First aid kit
- ☑ Cook stove, fuel, utensils
- ☑ Sunglasses, sunscreen, hat or head gear, rain gear
- ☑ Trail map
- ☑ Toilet paper and bag to pack it out
- ☑ Broken-in sturdy boots, moleskin
- ☑ Emergency food supplies ☑ Reflective Gear for visibility
- ☑ Signaling device (mirror, whistle)
- ☑ Flashlight and extra batteries



### In Case of Emergency

Before you go, leave a trip plan with another person. If lost, stay where you are. Use bright colors and reflective materials to attract attention. To report a lost or overdue hiker, call 911 or 808-985-6170.

# **Explore Kilauea's East Rift and Coastal Areas**

#### **Camping Limits**

Campers can stay a maximum of three (3) consecutive nights per site. The daily campsite limit varies from site to site. When you return, check out at the Backcountry Permit Office or call 808-985-6178.

#### **Backcountry Facilities**

- Kaʻaha, Halapē, and Keauhou have three-walled shelters (not for camping). Due to centipedes and ants, tents
- **Pepeiao** has a cabin with three beds, but campers may also
- 'Āpua Point and Nāpau Crater campsites do not have water or shelter.
- Water: Kaʻaha, Halapē, Keauhou, and Pepeiao may have water in their catchment rainwater tanks. You must treat any water before drinking. When registering at the Backcountry Permit Office, check for the current water levels as the tanks could be empty.
- **Toilets:** All campsites have pit toilets. Please use them. Do not put trash in the toilets—pack it out.

#### Nāpau Crater Area

Anyone who plans to hike past Pu'u Huluhulu or up the Nāulu Trail from Kealakomo must self-register at the check-in stations located along each of the trails. Trails are marked with ahu (stacked rocks). Stay alert and hike during daylight hours. Trails over lava flows are almost impossible to follow at night. Contact the Backcountry Permit Office to check on the status of overnight camping.



Pu'u 'Ō'ō and all areas beyond the Nāpau Campsite are **closed** to hikers by the park superintendent. Catastrophic collapses have weakened Pu'u 'Ō'ō. The entire area is unstable, riddled with deep cracks, and extremely dangerous.

### **Extreme Weather**

Intense sunlight, wind, and high temperatures can lead to dehydration, heat exhaustion, or sunstroke. Cold wind and driving rain are possible any time of the year and may cause low body temperature (hypothermia). Pace yourself, drink fluids, eat snacks, and avoid hiking at mid-day. Wear sunglasses, sunscreen, and a hat. Take proper clothing as variable weather conditions should be expected.

#### **Steep and Rocky Terrain**

Watch your footing along the hot and windy trail. Steep pali (cliffs) mark the flank of Kīlauea. Maximum elevation change between trail and campsite is 3,000 feet (1,000 m). Stay on trails. Do not cut across switchbacks as this accelerates erosion. Trails are marked by *ahu* (rock cairns) that may be difficult to see in the rain and mist, and impossible to find in the dark. Trails are rocky and uneven, and may be overgrown with thick vegetation. Follow the ahu through these areas.

#### **Pesky and Dangerous Animals**

Centipedes, scorpions, and black widow spiders are common in stone walls and rocky areas. Sharks are sometimes seen

in coastal waters. Beware of wana (sea urchins), tubeworm casts, and sharp rocks when wading or swimming. Invasive mongooses, mice, and feral cats scavenge on unattended food supplies. Store food securely and keep a clean camp.



### **Unexploded Ammunition**

In the Ka'ū Desert and coastal areas of west Ka'aha, there may be unexploded World War II ammunition on the ground. If you see any, do not touch it. Report the location to a park ranger or call (808) 985-6170.

## **Tsunami and other Volcanic Hazards**

An earthquake can cause a locally-generated tsunami at the coast that could hit nearby shores within minutes. If you feel a strong earthquake, move to higher ground immediately. Successive waves may be higher than initial ones so remain at higher elevations. On the rift zones, volcanic eruptions are possible at any time. Stay upslope and upwind from active lava flows and their gases. Volcanic gas like SO<sub>2</sub> can present problems miles downwind from its source and cause breathing problems. Stay on trails — earth cracks and lava tubes are numerous and often hidden beneath a thin crust.

# Fire Hazards

Thick alien grass and brush create a fire hazard in the coastal area. Do not smoke while in the backcountry. Campfires. firearms, and fireworks are prohibited.

## **Protect Precious Plants, Animals, and Archeological Sites**

### **Sea Turtles**

Endangered Hawaiian Hawksbill sea turtles nest and threatened green sea turtles rest on park beaches. Do not camp in areas posted as turtle nesting habitats at 'Āpua, Halapē, and other beaches. Federal and state laws protect all sea turtles from harm.



## Archeology

Respect and help protect Hawaiian archeological sites. Do not climb on or alter any rock structures, such as walls, house platforms, pits, or mounds. Do not walk on or make rubbings of petroglyphs.

### **Fishing**

Fishing along the coastline from the park's eastern boundary to Makaloa, the cliff midway between Keauhou and Halapē, is restricted by law to native Hawaiian residents of Kalapana.

Fishing West of Makaloa is open to the public for fishing. It is your responsibility to understand and obey all State and Federal fishing regulations.

### **Swimming**

There are very few sheltered swimming sites along the coast. Rough seas, high surf, and strong, unpredictable currents are typical of the park's coastline. Avoid entering the open ocean. Help protect the rare plants and animals that live in tide pools and brackish ponds. Rinse off all soap and sunscreen before entering them.

### **Pets and Stock Use**

Pets are not allowed on park trails or in wilderness areas. Horses, donkeys, and mules are allowed in the backcountry with a valid backcountry permit (limit of 6 animals per group). Tether livestock to designated hitching posts at least 100 feet (30 m) from campsites in an area that presents no hazard or sanitation problems to other campers. Hikers encountering horse parties should quietly step off the trail and allow the animals to pass.

#### **Hike Mauna Loa**

#### **Camping Limits**

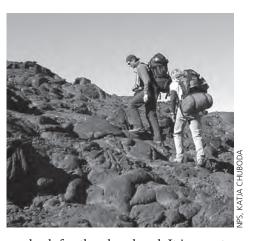
Campers may stay a maximum of three (3) consecutive nights per site. A total of eight (8) people are allowed per night in Pu'u'ula'ula (Red Hill) Cabin, and 12 people in the Mauna Loa Summit Cabin. When you return, check out at the Backcountry Permit Office or call 808-985-6178.

#### **Backcountry Facilities**

- Pu'u'ula'ula (Red Hill) Cabin at 10,035 feet (3,059 m) has eight (8) bunks with mattresses. Available on a first-come basis.
- Mauna Loa Summit Cabin on the rim of Mokuʻāweoweo at 13, 250 feet (4,039 m) has 12 bunks with mattresses. Available on a first-come basis.
- Water: Cabins have attached water catchment tanks. Check on current water levels when registering. Water tanks may be empty. Treat all water before drinking.
- **Toilets:** Composting pit toilets are provided. Please use them. Do not put trash in the pit toilets—pack it out.

#### **Extreme Weather**

Be prepared for severe winter conditions any time of the year, including blizzards, whiteouts, snow, and heavy rain. Temperatures drop below freezing at night. The ahu (rock cairn) trail markers can be obscured by fog. Do not lose sight



of the ahu behind you as you look for the ahu ahead. It is easy to become disoriented. If you can't find your way, stop and wait for the weather to improve. *Sunglasses, sunscreen, tent and/or* bivy sack, and space blanket are all recommended for a safe trip.

### **Health Hazards**

You will be hiking at high altitudes under rigorous conditions—altitude sickness is common. The only cure is to descend to lower elevations. Pace yourself and drink plenty of water. Pack clothing and sleeping bag in plastic bags for waterproofness. Stay warm and dry-hypothermia (low body temperature) is a killer.

## **Volcanic Hazards**

Eruptions are possible at any time. Stay upslope from active lava flows and remain on high ground. Stay upwind of volcanic gasses. Stay on trails—earth cracks and lava tubes are numerous and often hidden beneath a thin crust.

# **Fire Hazards**

The Mauna Loa Road traverses areas which contain very flammable grasses and brush. Do not smoke while hiking. Campfires, firearms, and fireworks are prohibited.

## For more information:



## www.nps.gov/havo

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