# Kupuna Park Ranger



Activity book for older kidsage 13 and Higher!

# Welcome to Kaloko-Honokōhau National Historical Park

Kaloko-Honokōhau National Historical Park is an extraordinary place where the spirit of the traditional Hawaiian way of life lives on. The coastal waters, the shoreline and the uplands are preserved for all to share today as well as in the future.

## What is a Kupuna Park Ranger?

*Kupuna* is a word to describe an elder, grandparent, or an older person. It can also mean *ancestor*, which includes many generations before us. Another meaning is *source*-- source of experience, knowledge, guidance, strength and inspiration for the next generations.

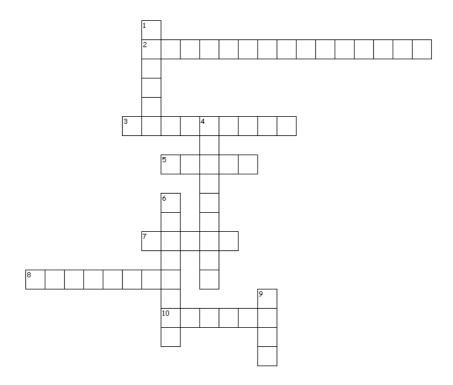
Kupuna Rangers will become a source of knowledge to help preserve and conserve our beautiful natural and cultural resources like our national parks, sites and monuments.

### How to Become a Kupuna Park Ranger

Complete all the pages in the book.

Return completed book to a park ranger at the visitor center before 3:00 pm to be checked and to receive a Kupuna Park Ranger Badge.

## Kaloko-Honokōhau NHP Crossword



#### **Across**

- 2. Brackish water ponds
- 3. Name of one of the *ahupua* 'a (land division) in which the park is located.
- 5. Hawaiian temple
- 7. Fish hook
- 8. Name of the fishpond blocked by a sand barrier.
- 10. Name of the fishtrap near Honokōhau

#### Down

- 1. Which fishpond has a manmade seawall?
- 4. Petroglyphs (Hawaiian name)
- 6. Name of the volcano that the park's lava flows originated from.
- 9. Green sea turtle (Hawaiian name)

As you explore our Visitor Center, called *Hale Ho'okipa* or Welcome House, see if you can identify these items and write a description of what they were used for.



## KO KULA UKA, KO KULA KAI

#### What happens in the mountains, happens to the sea

E ui aku ana au iā 'oe, Where is the Water of Kāne?

Aia I hea ka Wai a Kāne?

Aia I kai, I ka moana, Over the sea, over the open ocean,

I Ke kualau, I ke ānuenue, In the windy shower, in the rainbow,

I ka pūnohu, In the billowing mist,

I ka ua koko, In the rainbow hued rain,

I ka 'ālewalewa; In the buoyant and floating,

Aia i laila ka Wai a Kāne. There is the Water of Kāne.

E ui aku ana au iā 'oe, Where is the Water of Kāne?

Aia i hea ka Wai a Kāne?

Aia i luna ka Wai a Kāne? There above is the Water of Kāne.

I ke 'ōuli, i ke ao 'ele 'ele, In the ominous dark clouds,

I ke ao panopano, In the nimbostratus clouds

I ke ao pōpolohua mea a Kāne lā, 'ē In the cumulonimbus clouds of Kāne!

Aia i Laila ka Wai a Kāne. There is the Water of Kāne.

E ui aku ana au iā 'oe, Where is the Water of Kāne?

Aia i hea ka Wai a Kāne?

There under the ground, in the spring

Aia i lalo, i ka honua, i ka wai hū, water bubbling up,

I ka wai kau a Kāne me Kanaloa In the exceptional water of Kāne and

Kanaloa,

He wai puna, he wai e inu, A water spring, a water of drink,

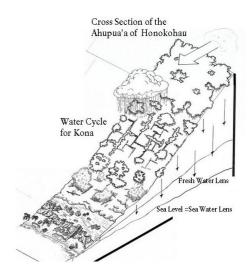
He wai e mana, he wai e ola, A water of spirit, a water of health

E ola nō, 'eā Sustaining life!

Water (*wai*) is the connection to all life, the key to not only our survival but the world's survival.

Hawaiians understood this and created a system that would respect it. Use the cross section of the *Ahupua'a* of Honokōhau to help answer the questions below.

1. Where do you get your freshwater today? Where do you think the water comes from?



2. Do the things we do on land impact the water we drink? How can we help protect our freshwater resources? (Please answer this question either with a short poem or a picture).

# Loko i'a (Fishponds)

Ancient Hawaiians were the only people in the Pacific Ocean to develop aquaculture for fish farming. Using bays and ponds, Hawaiians developed fishponds. Fishponds guaranteed a food supply for the population in lean times and also increased the wealth of the ruling chief of the *ahupua* 'a. Here at Kaloko-Honokōhau we have two types of fishponds and a fishtrap used to collect and raise food.

Read the descriptions of the types of fishponds and fishtraps and match it to the appropriate picture.

Aimakapā



Loko pu'uone – sand berm fishpond. Traditionally, there was a channel dug from the pond to the ocean to allow the water to be flushed out with the tides.

Ai'ō pio



Loko kuapā – walled fishpond. Fish are able to swim in and out of the pond through the 'auwai kai (channel) as the mākāhā (sluice gate) prevents larger fish from leaving the pond.

Kaloko



Loko 'ume iki – made of coral and/or basalt rock walls. Hawaiians place nets across the openings to catch fish as the tides go in and out.

1. Why do you think Hawaiians built different types of fishponds?
2. Do you notice any difference or similarities between the fishponds and fishtrap?
3. Are there fishponds where you live? How are they different from, or similar to, these in the park?
4. Interview a Park Ranger or Park Staff. How are the park's fishponds being taken care of today?
5. Do you think it's important to conserve these resources? Why or why not?

## **Anchialine Pools**

An anchialine (AN-key-ah-line) pool is an enclosed water body that has an underground connection to the ocean.



Because anchialine pools have subterranean cracks and crevices from our volcanic rock, the water level in these pools tends to fluctuate in response to tides. However, most of these pools are often brackish, as groundwater stored in the mountain enter the pools through cracks and crevices as well.

Anchialine pools are also little havens for some of the rarest species on the planet! Among these species are tiny shrimps called 'ōpae 'ula. Because of this, anchialine pools are extremely sensitive to changes in their ecosystem.

Culturally, anchialine pools were extremely significant as they provided a freshwater resource to the Ancient Hawaiians in this dry climate. Hawaiians had designated pools for bathing, washing dishes, and drinking water.

- 1. Is it high or low tide? Do you think there will be any water in the pools? Why or why not?
- 2. Do you see anything swimming in the pools? If so, what?
- 3. Draw the anchialine pool you visited today.

# Native Plants (Lā'au)

As you explore the trails along the park, see if you can find some of these native plants. Match the description of the native plants to the correct picture. Also, discover what these plants have in common by filling the blank below using the **bolded** and underlined letters.

Maiapilo has a beautiful white feathery flower that sometimes turns purple and droopy later on in the day. It is also know as the Hawaiian Caper and has faint smell.

Pua kala literally means "thorny flower" and is the only poppy native to Hawaii. With beautiful white flower and prickly thorns it's one of the few toxic plants in Hawai'i. Despite its toxic properties, its sap and seeds was used to cure toothaches, neuralgia (nerve pain), and ulcers.

Loulu is a palm tree that was once found all across the coastal region of Hawai'i. Loulu means "umbrella" and the leaves were formerly used as protection from rain and sun.







## Honu-Hawaiian Green Sea Turtle

The *Honu*, or Hawaiian Green Sea turtle, is native to Hawai'i and are the most common of the 5 species of sea turtles that are often found in our waters. However, even though they are the most common, they are protected under the Endangered Species Act and their population is slowly increasing.

As you explore the coastline of our park, you can often find them swimming, foraging for algae, and basking (resting) on the land. Basking is becoming very common for sea turtles around the Hawaiian Islands, but it is also very important to know that basking is how sea turtles rest. Just as we require sleep to function, so does our friend, the *honu*. Remember to stay at least 20 ft (6.6 m) away and let them be.

1. Why do you think it's important to let the honu bask and stay 20 ft (6.5 m) away? What do you think would happen if they don't get the rest they need?

2. Why do you think it's important to protect species like honu? Do you have any wildlife and plants that are protected by the Endangered Species Act where you live? What do you think would happen if we didn't have laws like the Endangered Species Act?

#### Honokohau Honu

X A O E F E E D I N G S R H L
V D V Q T C D S E A R G K P Q
T S M E F E K O Q V D W Y K I
Y L J I D I S T A N C E Y A T
R E S P E C T Y B H U X D E B
L I M U Z H H A W K S B I L L
L E D O B Y T U R T L E S G C
O U D O A C V A E U X M W J O
S R V R S J Z M A L A M A D F
J F E K K V S P O N G E S U H
W M G R I D H O N Y E O D Z O
G R E E N S A N A P F P V Z N
J O K B G G V M N W R A C A U
H U A Y R V Z F F Q L L F T E
I Y S R B E A C H T R A S H A

BASKING LIMU

BEACHTRASH MĀLAMA DISTANCE 'OPALA

FEEDING RESPECT

GREEN SEA

HAWKSBILL SPONGES
HONU 'EA TURTLES

# Petroglyphs (Ki'i Pōhaku)

Petroglyphs are best viewed in the early morning and late afternoon. Walk up and down the boardwalk to find the best angle.

Petroglyphs, or *ki'i pōhaku* in Hawaiian, are rock carvings that have been etched into the lava flows. Ancient Hawaiians did not have a written language. With these petroglyphs we get a little insight into the people who once lived here and events that may have impacted their lives.

Find a petroglyph you like and draw it here.

What do you think it is and what do you think it could mean?

Do you know any other places that have petroglyphs? If so, where?

Why is it important to preserve petroglyphs and how can you help protect them?

# **Kupuna Park Ranger Pledge**

As a Kupuna Park Ranger, it is my *kuleana* to (responsibility) *mālama* the earth, sky, and water at special (take care of) places like national parks.

I *kōkua* with small and big things like picking up litter, not disturbing plants and animals, not walking on rock walls, and leaving rocks in place.

With *laulima* and *lōkahi*, a Kupuna Ranger can *kōkua* my '*ohana* to learn about how to protect (help) (family) and preserve precious resources like clean water, clean air, and a healthy earth.

#### Aloha Kahōu!



# Kupuna Park Ranger Certificate is hereby awarded to:

For dedication to and protection of all national parks for future generations.

Park Ranger

Date