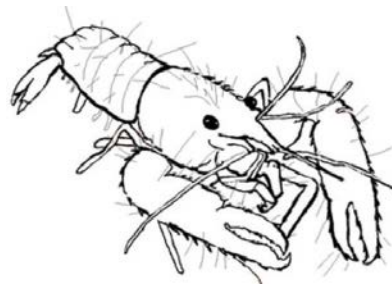
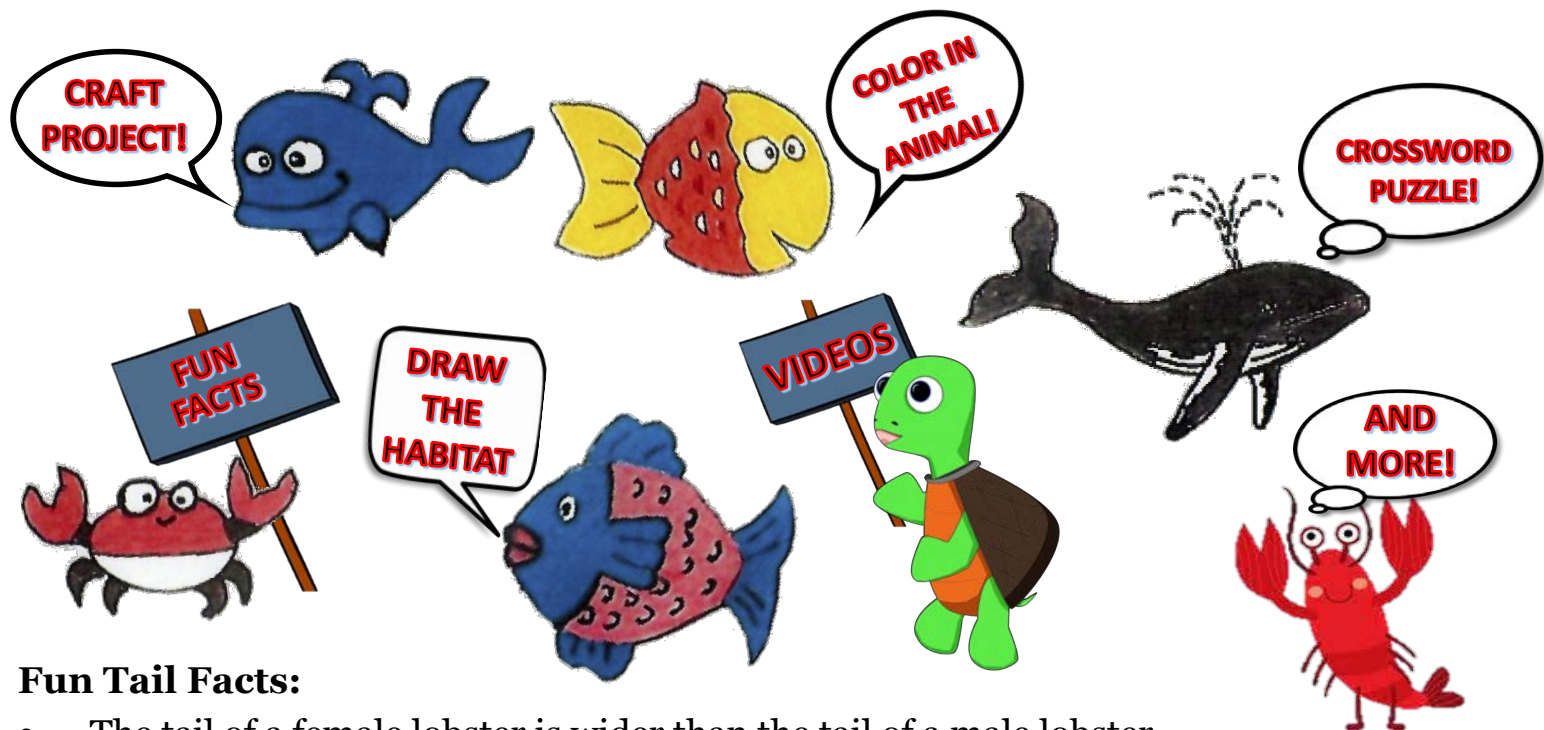




## Red Hawaiian Reef Lobster ('Ula)



Inside this packet you will find:



### Fun Tail Facts:

- The tail of a female lobster is wider than the tail of a male lobster.
- A lobster can swim backwards by curling and uncurling their tail.
- A female lobster can hold thousands of eggs underneath her body, attached to the swimmerets under her tail.

Created through cooperation with:



NOAA  
FISHERIES



PAPAHĀNAUMOKUĀKEA  
Marine National Monument

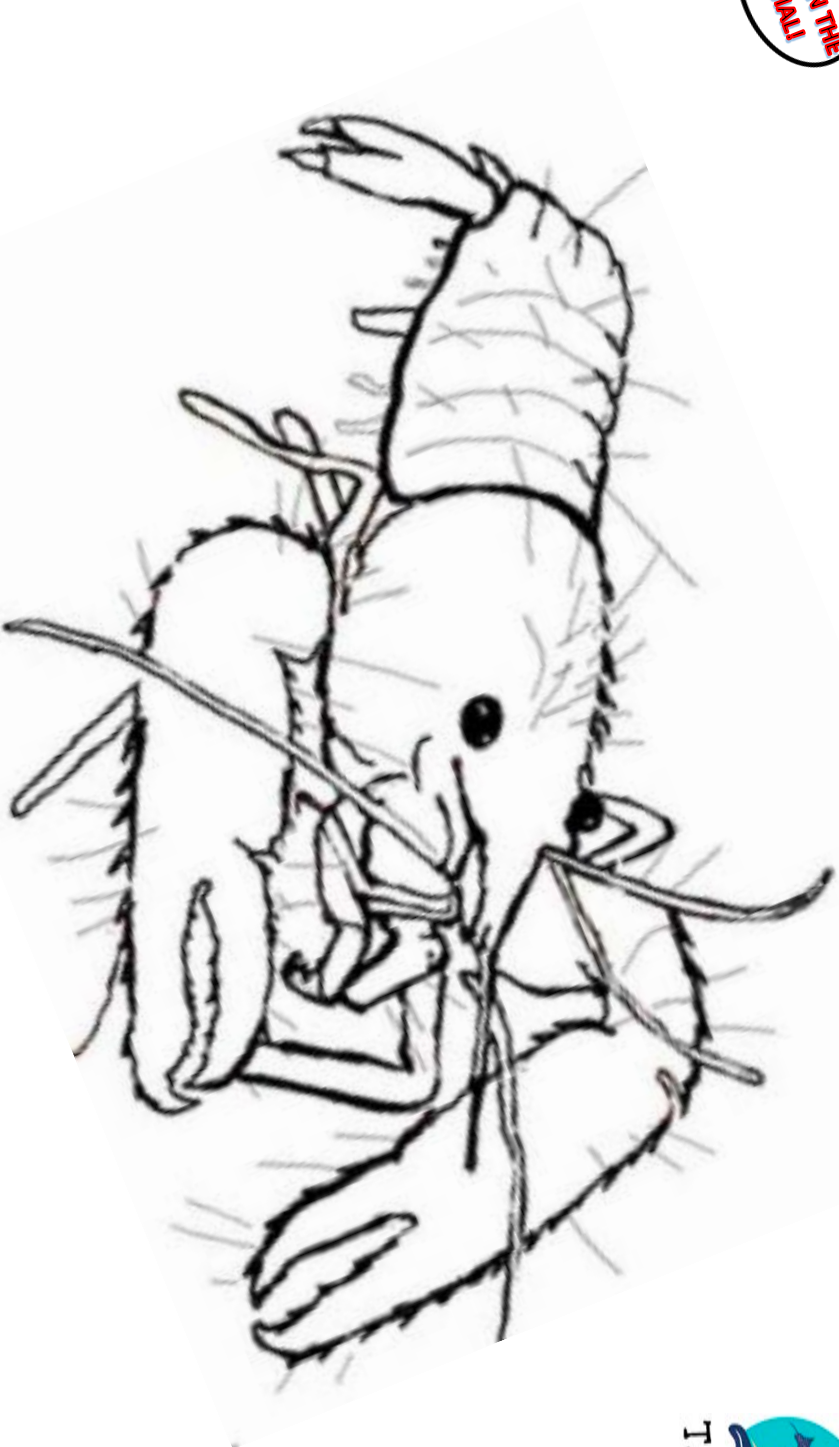
# Table of Contents

- Coloring Pages
- Fun Facts
- Craft Project
- Draw the Habitat
- Crossword Puzzle
- Video Links
  - HSPLS Tails and Tales with NOAA Video Playlist:  
<https://www.youtube.com/playlist?list=PLwp9id7RKgdUumVhHALrcreguMYTfJPeQ>
  - PBS Kids: Wild Kratts: Swimming with the Lobster:  
<https://www.youtube.com/watch?v=pl-d9AUHEg8>
- And More!





# Red Hawaiian Reef Lobster Coloring Sheet

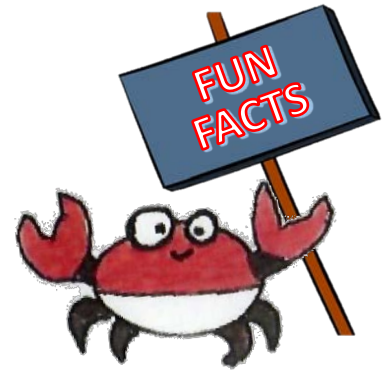


Office of National Marine Sanctuaries  
National Oceanic and Atmospheric Administration

HAWAIIAN ISLANDS HUMPBACK WHALE NATIONAL MARINE SANCTUARY



# LOBSTERS



- All lobsters are crustaceans. This is the same group of marine life that includes shrimp, crabs, and even barnacles!
- Lobsters are nocturnal, meaning that they are active only at night.
- The Hawaiian spiny lobster uses sound to warn other lobsters (and humans too!) to move away from their home.
- Lobsters don't have bones but instead have hard external skeletons, called exoskeletons.
- Some species of reef lobster can live at 1,000 feet under the ocean's surface!
- The red Hawaiian reef lobster has hairs all over its body that can sense changes in the surrounding water to alert it if a predator is nearby.
- The Hawaiian Islands do not have "true" lobsters which have very large pincer claws at the end of their first pair of legs. The Hawaiian spiny lobster doesn't have any claws at all!
- Spiny lobsters use forward-pointing sharp pointy spines on their antennae and upper body surface as a defense from predators.
- Some female lobsters can lay half a million eggs at one time!
- Lobsters can pee out of special tubes found right under their eyes and use it for fighting or mating with other lobsters.

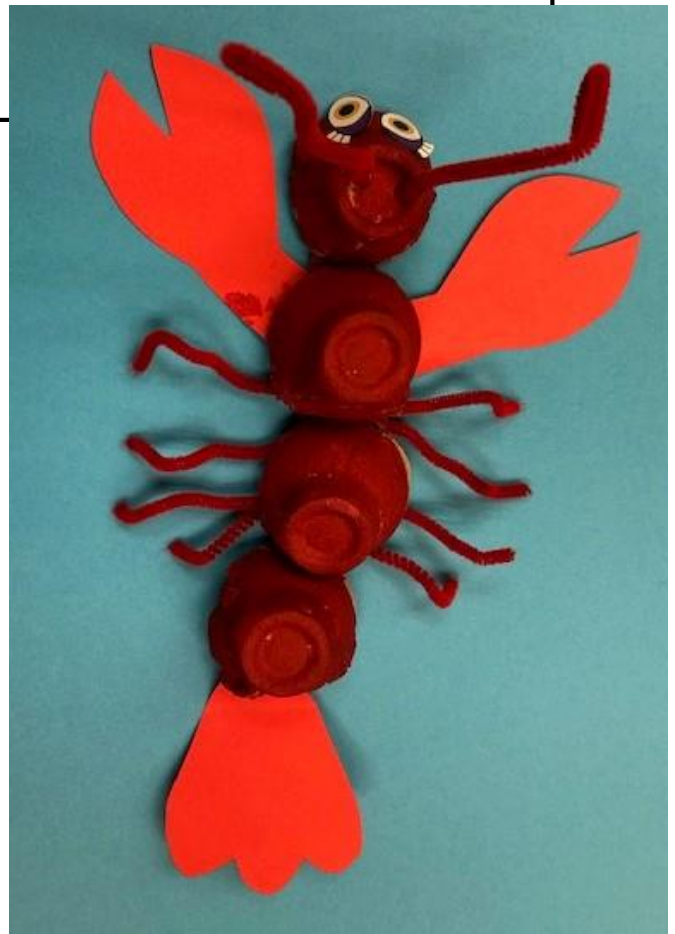
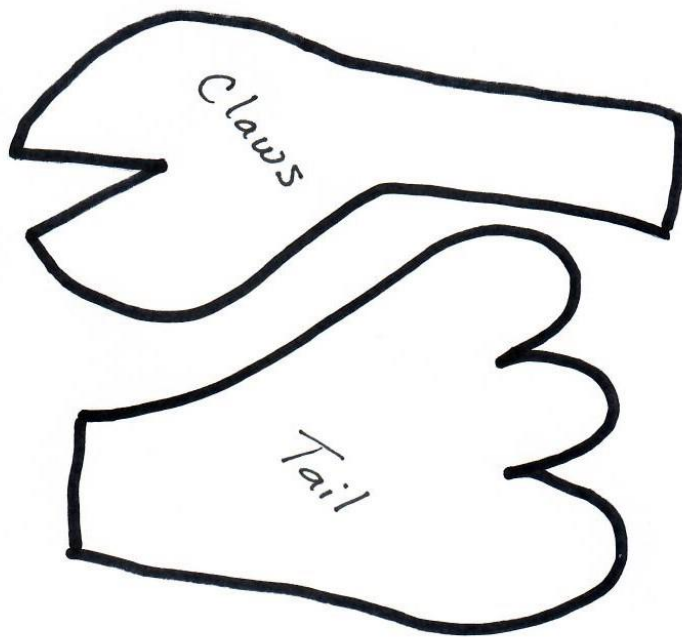


# CRAFT PROJECT

## Let's Make Lobsters

Did you know that crabs walk sideways and lobsters walk straight? This lobster is made from parts of an egg carton, pipe cleaners and with construction paper claws and a tail.

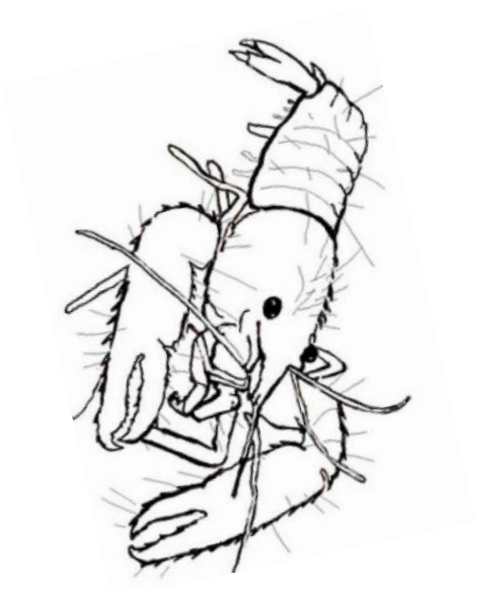
- Cut out 4 sections of the egg carton and glue or tape them together.
- Paint or color your lobster egg carton body.
- Add 8 legs, 2 antennas and eyes.
- Make paper claws and a tail.





# Where does a red Hawaiian reef lobster live?

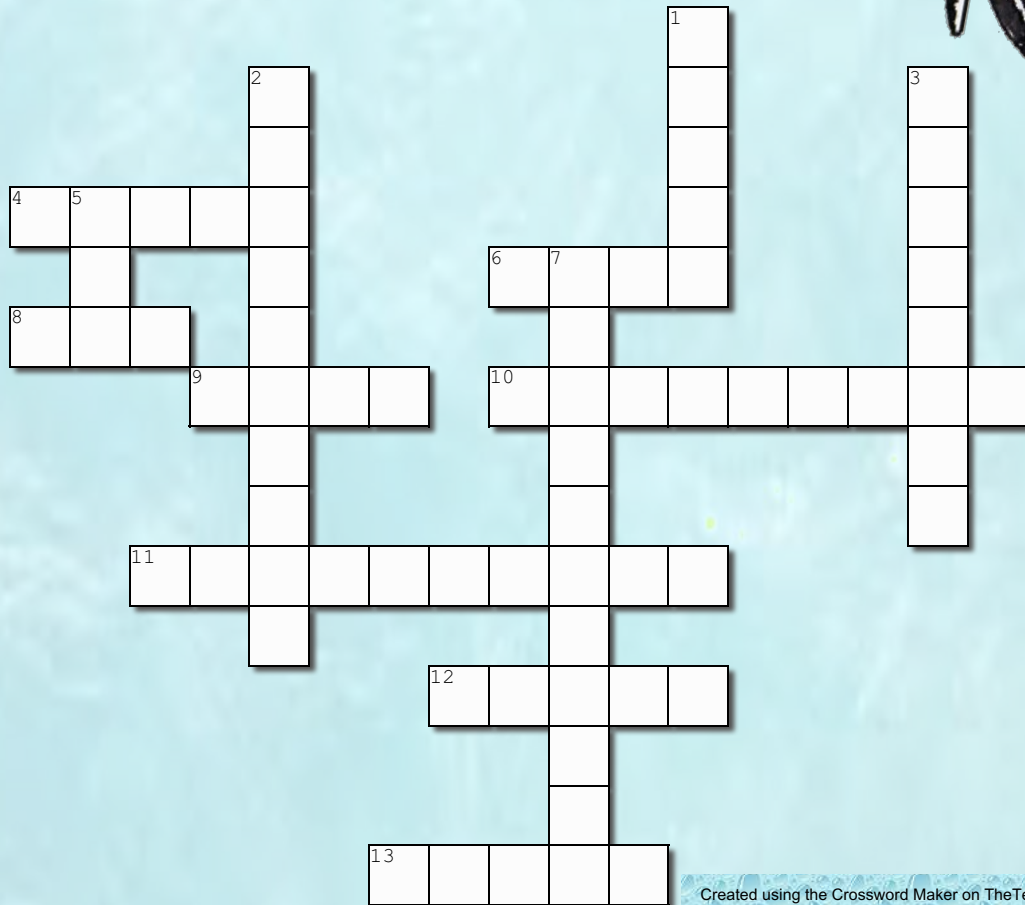
Draw in and color its habitat below!





# Lobster

**CROSSWORD  
PUZZLE!**



Created using the Crossword Maker on TheTeachersCorner.net

## Across

4. A lobster does not have this usually important organ!
6. Lobsters can taste food in the ocean water with these.
8. The number of legs found on a lobster.
9. What it's called when a lobster sheds its shell so it can grow bigger!
10. Lobsters are \_\_\_\_\_, meaning they are active at night.
11. A lobster isn't a fish, it is a \_\_\_\_\_.
12. Where you will find lobsters.
13. This Hawaiian species of lobster doesn't have pincer claws.

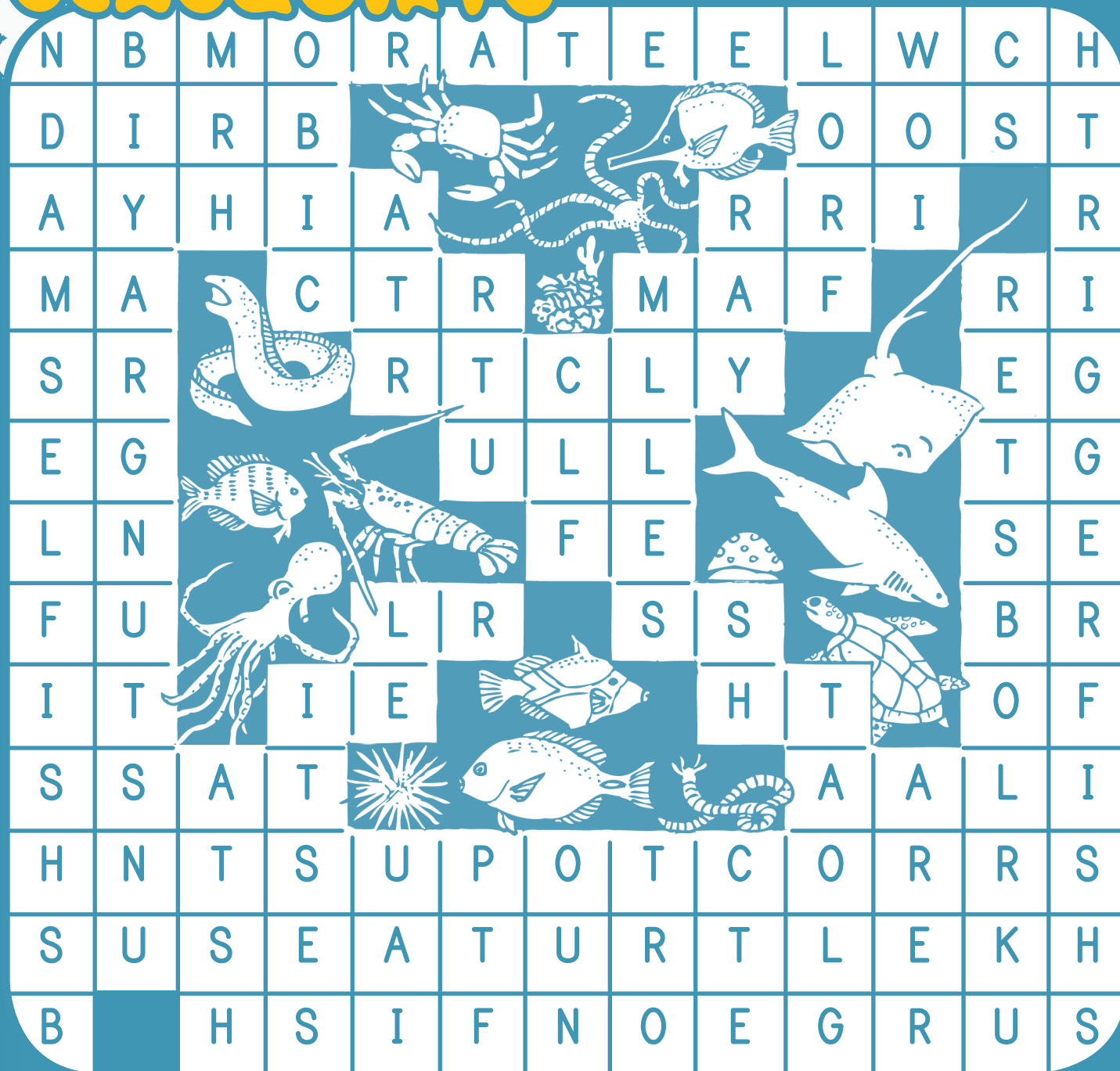
## Down

1. Like fish, lobsters use these to breathe.
2. Lobsters are \_\_\_\_\_, meaning they can eat plants or animals.
3. Lobsters can swim \_\_\_\_\_!
5. Just like fish, lobster eggs are called \_\_\_\_\_.
7. Another name for the hard external skeleton of a lobster.

# SEASQUIRTS



FIND THE WORDS!



## GOOD REEF VISITOR WORD FIND

THE REEF PROVIDES LIVING SPACE FOR MARINE LIFE OF ALL KINDS

BRITTLE STAR

BUTTERFLYFISH

CORAL

CRAB

DAMSELFISH

LOBSTER

MORAY EEL

OCTOPUS

SEA TURTLE

SHARK

SNAIL

STING RAY

SURGEONFISH

TRIGGERFISH

URCHIN

WORM

Artwork by A. Tsukamoto



WAIKIKI  
AQUARIUM

UNIVERSITY OF HAWAII







# HAWAIIAN ISLANDS HUMPBACK WHALE

Office of National Marine Sanctuaries  
National Oceanic and Atmospheric Administration

HAWAIIAN ISLANDS HUMPBACK WHALE NATIONAL MARINE SANCTUARY

## A SPECIAL PLACE

Hawaiian Islands Humpback Whale National Marine Sanctuary protects one of the world's most important humpback whale habitats. Between November and April, more than half of the North Pacific humpback whale population returns here to mate, give birth, and nurse their young. The sanctuary is co-managed by NOAA's Office of National Marine Sanctuaries and the State of Hawaii's Department of Land and Natural Resources.



The sanctuary protects humpback whales and their habitat by working with the community to reduce harmful impacts and monitor their health.



Sanctuary programs focus on educating the public about humpback whales in Hawai'i and other ocean life.



The sanctuary enhances awareness of Native Hawaiian culture and its values to protect humpback whales and the marine life of Hawai'i.



Research is conducted by the sanctuary and its partners to broaden the understanding and protection of humpback whales.

Background photo: Jason Moore/NOAA, under NOAA Permit #15340



## TO LEARN MORE

Stop by our visitor centers to learn more about Hawai'i and its unique marine environment, its cultural significance, and how your national marine sanctuary and marine national monument are protecting these extremely important areas.

### Sanctuary Visitor Center

The scenic beachfront visitor center in Kihei on Maui provides a unique setting to learn about the sanctuary. Volunteer docents share knowledge about the marine environment.

### Kalepolepo Fishpond

One of Maui's last remaining Native Hawaiian fishponds is located in front of the sanctuary visitor center. Tours are offered by reservation.



### Mokupāpapa Discovery Center

Housed in Hilo's historic, century-old Koehnen Building, Mokupāpapa features the unique geography, resources, and cultural connections of Papahānaumokuākea Marine National Monument. The center features a 3,500-gallon saltwater aquarium, interactive educational exhibits, life-size models of wildlife found in the Northwestern and main Hawaiian Islands, and artwork inspired by those islands and Hawaiian culture.

## THINGS TO DO



### Wildlife Viewing

Hawai'i marine environments nurture many marine species beyond humpback whales. In addition to large animals, Hawaiian waters are also home to important coral reefs, which sustain thousands of marine plants and animals. Extensive coral reef colonies are also found in the remote Papahānaumokuākea Marine National Monument. This vast area supports a dynamic habitat containing an incredible diversity of coral, fish, birds, marine mammals, and other flora and fauna, many of which are unique to the Hawaiian Island chain. Hawaiian marine wildlife remains fragile and vulnerable. Care should be taken when viewing.

### Whales & Dolphins\*

- Over 20 species in Hawaiian waters
- Look for spouts and breaching
- Give them space, do not approach
- Best seen from boats



### Hawaiian Monk Seals\*

- Only about 1,400 remain
- Haul out on beaches to rest
- Feed both during day and night
- Endemic - found nowhere else



### Sea Turtles\*

- Green sea turtles are most common
- Rest on shore during the day
- Require air to breathe
- Swim close to shore



### Seabirds & Shorebirds\*

- More than 30 species
- Foraging, breeding, nesting habitats
- Endemic, resident, migratory species
- Nest in coastal and upland areas



### Ocean Etiquette

- Keep your distance and watch quietly
- Don't feed wildlife
- Keep pets on leash
- Dispose of trash properly



### Threats

- Human disturbance
- Marine debris
- Changing ocean conditions
- Feral and invasive animals



\*These animals are protected under federal and state law. Photos (left to right): NOAA, under NOAA Permit #14037; Paul Wong/NOAA; Ed Lyman/NOAA; Paul Wong/NOAA; HBS/NOAA, under NOAA Permit #14037; Ed Lyman/NOAA, under NOAA Permit #022-1965



### Whale Watching

During the winter and spring, humpback whales are easily seen from shore. Many companies offer whale watching tours to observe whales on the water.



### Snorkeling and Diving

Coral reefs in sanctuary waters are some of the best places to be immersed among sea life. You may even hear humpback whales sing.



### Surfing

Hawai'i is a year-round surfing destination for beginners and veteran surfers. While surfing, always be cautious of submerged rocks and powerful waves.



### Paddle Sports

Canoes, kayaks, and stand-up paddleboards provide unique on-water experiences. Businesses provide rentals, lessons, and tours for paddlers of all skill levels.



### Fishing

Whether from shore or charter fishing boat, there are many places to fish in the sanctuary. Please follow all regulations so that future anglers can enjoy this activity.



### Boating

Whether by motor or sail, while deep-sea fishing, wildlife or whale watching, you are almost guaranteed to have a wonderful time in the sanctuary.



### Cultural Experiences

Learn more about Native Hawaiian culture. Participate in cultural canoe tours, Hawaiian fishpond restoration, and Hawaiian dance and music classes.



### Volunteer

The sanctuary needs you! Be a volunteer and participate in wildlife monitoring, beach cleanups, and more. Contact us to learn about great opportunities.

### Protecting Humpback Whales

Federal and state regulations prohibit approaching humpback whales by any means within 100 yards or within 1,000 feet when operating an aircraft. Interception or "leapfrogging" into the path of a humpback whale is also prohibited.

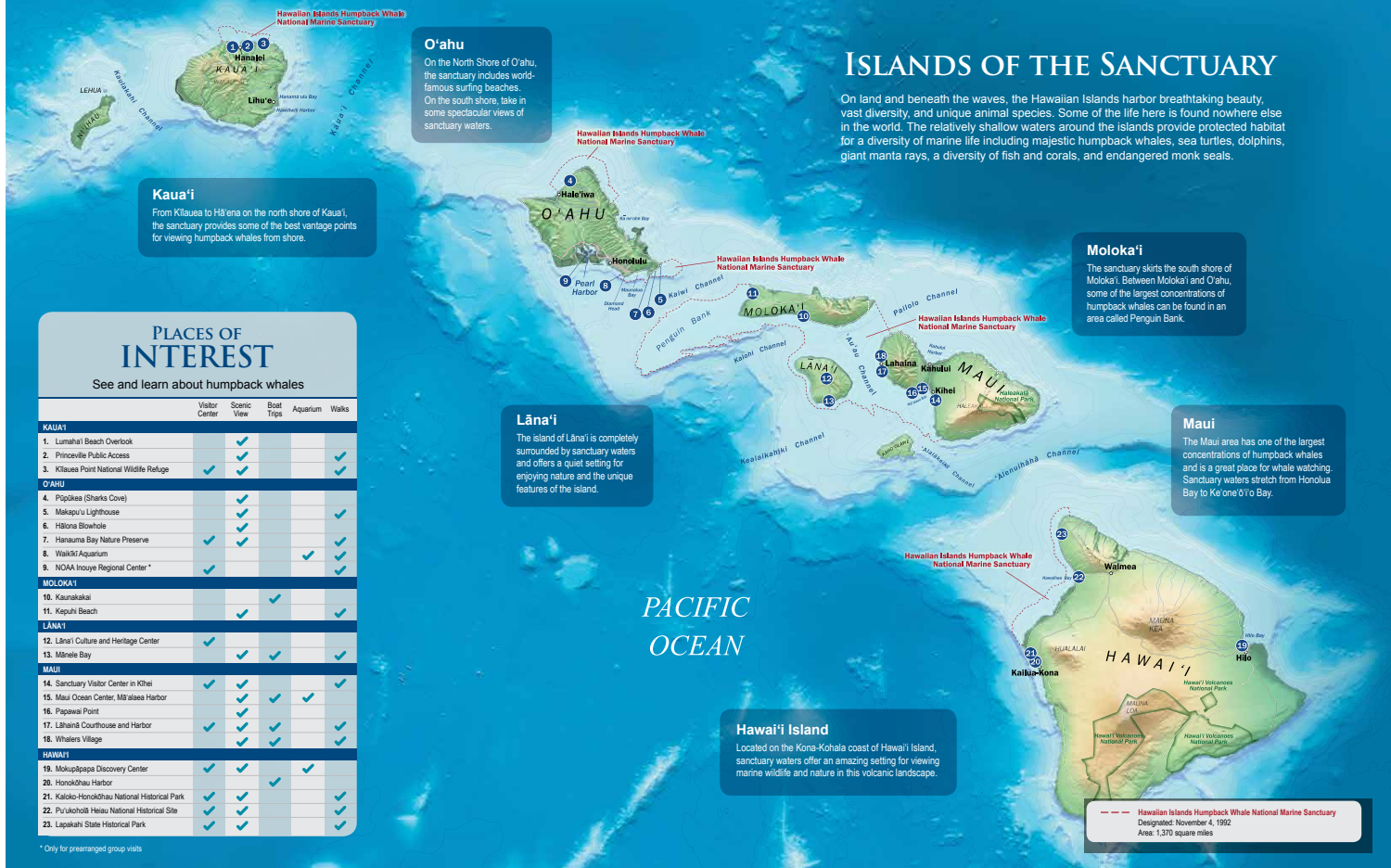
All whales, dolphins, and seals are protected under the Marine Mammal Protection Act. Humpback whales are additionally protected by Hawaiian Islands Humpback Whale National Marine Sanctuary regulations and Hawai'i state law. See NOAA regulations: 50 CFR Sections 216.11, 216.19, and 15 CFR 922.184.

#### For more information:

Hawaiian Islands Humpback Whale National Marine Sanctuary  
725 South Kihei Road  
Kihei, Hawai'i 96753  
Phone: (808) 831-4888  
Email: [hihumpbackwhale@noaa.gov](mailto:hihumpbackwhale@noaa.gov)



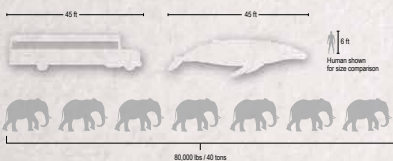
# SANCTUARY MAP



## HUMPBACK WHALE FUN FACTS

Once listed as endangered under the Endangered Species Act, the Hawai'i humpback whale population has rebounded. Up to 12,000 humpback whales return to Hawai'i every year. Known as koholā in Hawaiian, the scientific name is *Megaptera novaeangliae*, which means "big-winged New Englander," referring to their 15-foot-long pectoral fins. These whales get the name "humpback" from the distinct hump that appears when they arch their back into a dive. The humpback whale is the state marine mammal of Hawai'i.

**Food**  
Though they are among the ocean's largest creatures, humpback whales eat some of the ocean's smallest creatures, like krill and small fish. An adult humpback whale can eat more than one ton of food per day, that's equivalent to half the weight of a small car.

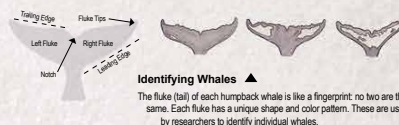


**Mouth**  
A humpback whale has a huge mouth, about one-third the length of its body.

**Size**  
Humpback whales can grow to the length of a school bus (45 ft), with females generally being larger than males. They can weigh approximately 80,000 lbs (or 40 tons), around the same weight as seven adult African elephants.

### Breathing

Humpbacks breathe through two blowholes (one for each lung) every seven to 15 minutes. However, they can remain submerged for up to 45 minutes. A humpback whale's lungs force air through the blowhole so fast that the air creates a mist fountain 15 to 20 feet high, which can be seen from miles away. Whales typically exchange over 90 percent of their air per breath, making their lungs much more efficient than humans'.



**Identifying Whales**  
The fluke (tail) of each humpback whale is like a fingerprint: no two are the same. Each fluke has a unique shape and color pattern. These are used by researchers to identify individual whales.

**Calves**  
Humpback whales are warm-blooded mammals that give birth to live young. At birth, humpback whales average 15 feet in length and one ton in weight, about the same size and weight of an adult male giraffe. Calves are born in the warm shallow waters around Hawai'i and then travel with their mothers to feeding grounds near Alaska.

**Pectoral Fins**  
At up to 15 feet long, humpbacks have the longest pectoral fins of all whales. The fins help the whale maneuver through the water and make them one of the most acrobatic of whales.

### Behaviors

A humpback whale calf lifts its head vertically out of the water. This behavior, called spyhopping, may represent curiosity and allow the animal to see what is going on above water.

By slapping its 15-foot-long pectoral flipper on the ocean surface, a humpback whale may be trying to communicate, show aggression, or be playful.

A humpback whale throws its peduncle or tail end out of the water. Like many surface active behaviors, it may serve a number of functions, or just be for play.

### Entanglement

A major human-caused threat to humpback whales is entanglement. Whales can get entangled in fishing gear, marine debris, and other items, resulting in potentially life-threatening situations. Hawaiian Islands Humpback Whale National Marine Sanctuary coordinates a large, community-based whale entanglement response network, which consists of state and federal agencies, whale researchers, tour boat operators, fishermen, and private citizens. Upon reports of an entangled whale, authorized teams led by NOAA and the national marine sanctuary spring into action.



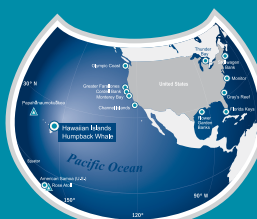
### Migration

The North Pacific population of humpback whales makes one of the longest migrations of any mammal in the world. Each year, they travel between their breeding areas in Hawai'i and their feeding grounds in Alaska. This trip is about 5,000 miles round-trip, or the equivalent of crossing the United States twice. They travel for approximately one month at three to seven miles per hour, using their massive tail fins to help them make the journey.

### Baleen

Humpback whales have baleen instead of teeth. Baleen is made of the same material that makes up human fingernails. Up to 400 fringed, overlapping baleen plates per side hang from the upper jaw to filter out food. When a humpback whale opens its mouth underwater, it takes in up to 5,000 gallons of water. Using its tongue, it pushes the water out of its mouth through the baleen. Small krill and fish are unable to fit through the baleen and are left inside for the whale to swallow.

## AMERICA'S UNDERWATER TREASURES



The Office of National Marine Sanctuaries serves as the trustee for a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 13 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. For more information on the National Marine Sanctuary System, visit <http://sanctuaries.noaa.gov>

○ National Marine Sanctuary △ Marine National Monument

Scale varies in this perspective. Adapted from National Geographic Maps.