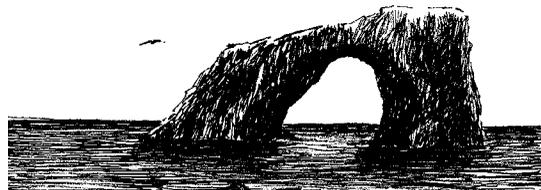


Junior ranger, please fill out in order to receive your badge:

Name _____
Address _____
State/Zip _____
Phone _____

Channel Islands National Park
Attention: Junior Ranger Program
1901 Spinnaker Drive
Ventura, California 93001
(805) 658-5730
www.nps.gov/chis/



Written and designed by Desiree M. Holzer.
Art contributions by Heather DeWitt. Edited
by the interpretive staff at Channel Islands
National Park.

National Park Service
U.S. Department of the Interior

Channel Islands National Park
Ventura, California



Junior Ranger Explorer Program



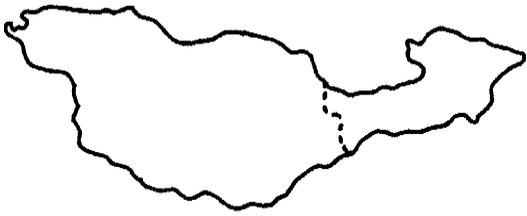
Meet The Islands



Santa Barbara Island
•about one square mile
•the smallest island



Anacapa Island
•five miles long
•three islets



Santa Cruz Island
•twenty miles long, up to six miles wide
•the largest island



Santa Rosa Island
•fifteen miles long, ten miles wide
•53,051 acres



San Miguel Island
•eight miles long, four miles wide
•the westernmost island



Place your left hand on this page.
Raise your right hand and recite
the following:

As a Channel Islands junior ranger
I pledge to...

help protect island plants, animals,
and cultural history
keep the air, water, and land clean
look for other opportunities to
become a junior ranger and friend
of the environment
learn more about parks, preserves,
and my community so that I can help
protect them for all the years to come

Congratulations! Junior Ranger _____ has successfully
completed the Channel Islands National Park Junior Ranger Explorer
Program. Signed by: _____ date: _____

A Special Place

Located off the coast of Southern California, Channel Islands National Park is made up of five islands and the waters that surround them. This park provides habitat (a home) for about 30 threatened and endangered species (a scientific name for plants and animals) and almost 150 species found nowhere else on earth. North America's oldest human bones were found on one of the park islands, suggesting that humans have been using these islands for the last 13,000 years.

Become a Channel Islands National Park Junior Ranger

Explore the wonders of the Channel Islands and help park rangers protect this unique place by completing this junior ranger booklet. To get started, please carefully read all of the instructions below.

- Find the animal on this page that matches your age group.
- To earn your junior ranger badge, you must complete your required activity pages and the pages of your choice.
- Animal boxes on each activity page of this booklet identify the questions you must answer. For example, the animal box on page 2 explains that Blue Whales answer questions one and two, Brown Pelicans answer questions one through four, and Island Foxes answer questions one through six.
- Enjoy the take-home activities later. They are not required.
- Turn your booklet in to the Robert J. Lagomarsino Visitor Center in Ventura any day, except Thanksgiving and December 25, between 8:30 a.m. and 5:00 p.m., or mail your booklet to the address on the back page. **Fill out the section with your name and address.**

.....



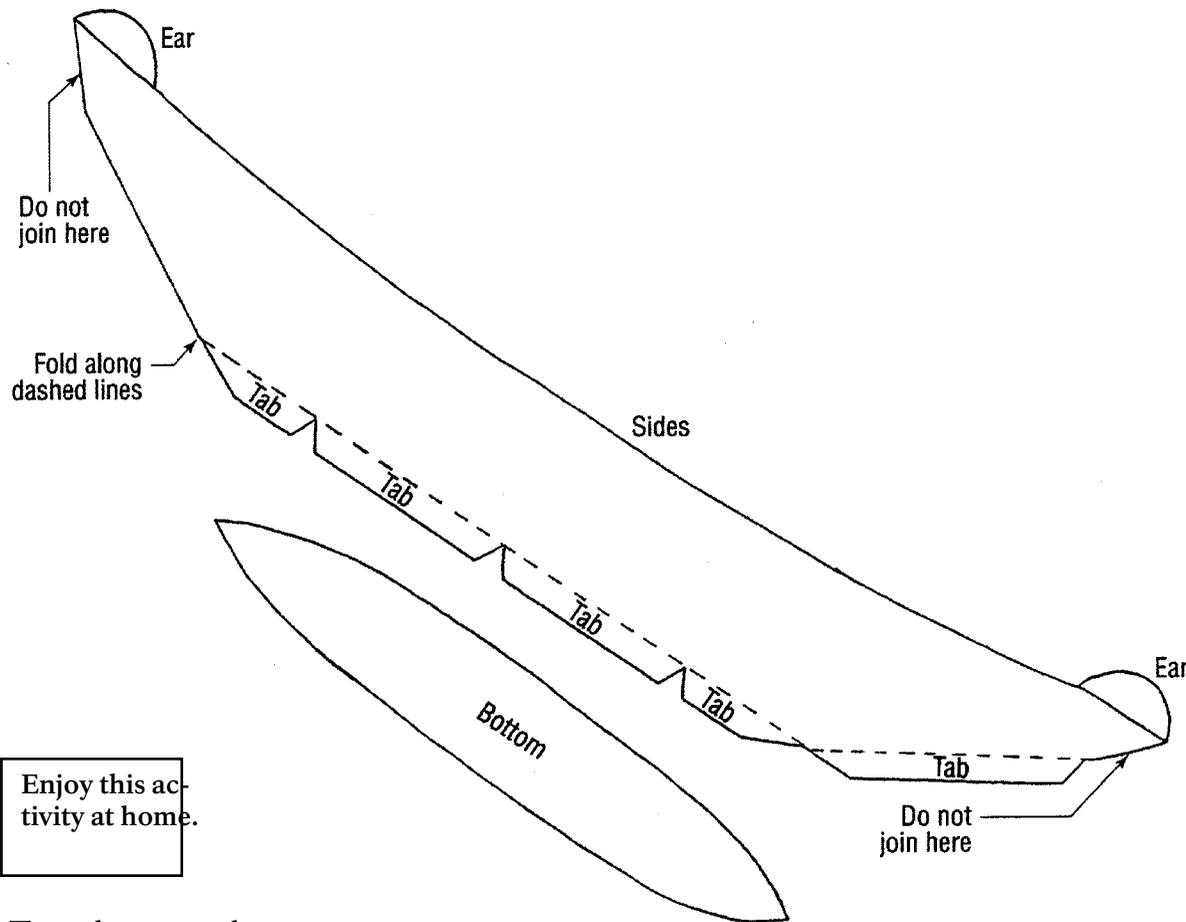
Blue Whale—ages 5 and 6
Complete activities on pages 2, 3, and 5 plus three pages of your choice



Brown Pelican—ages 7 to 9
Complete activities on pages 2, 3, 5, and 6 plus four pages of your own choice



Island Fox—ages 10 and up
Complete activities on pages 2, 3, 5, 6, and 7 and five pages of your choice

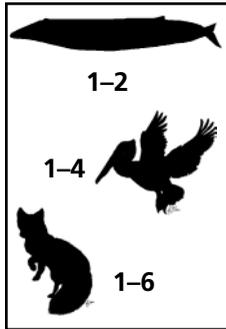


Enjoy this activity at home.

To make a tomol follow these directions

1. Cut out two side pieces and one bottom piece for each canoe.
2. Color the pieces before assembling. Draw the outlines of the planks in black on the sides of the canoe. Color the canoe red.
3. Arrange the side pieces so there is one tab at each end of the canoe. Fold along the dotted lines to make tabs.
4. Tape, glue, or staple the two side pieces together at each end. Do not attach the "ears" to each other; there should be V-shaped spaces between them.
5. Set the bottom in place between the sides and bend the sides gently to fit. Tape or glue the bottom in place with the tabs underneath.

Pattern published with permission from JASON Foundation for Education.



Interview a Park Naturalist

Locate a park ranger, volunteer, or crewperson. Introduce yourself and ask the following questions. Record the answer for each question in the space below.

1. What is your name?
2. Name your favorite animal that lives in Channel Islands National Park.
3. How long have you worked here?
4. What do you like about this job? List one thing.
5. Name one reason the Channel Islands are protected as a national park.
6. Think of your own question and write it below. Then write the person's answer.



Crossing the Channel

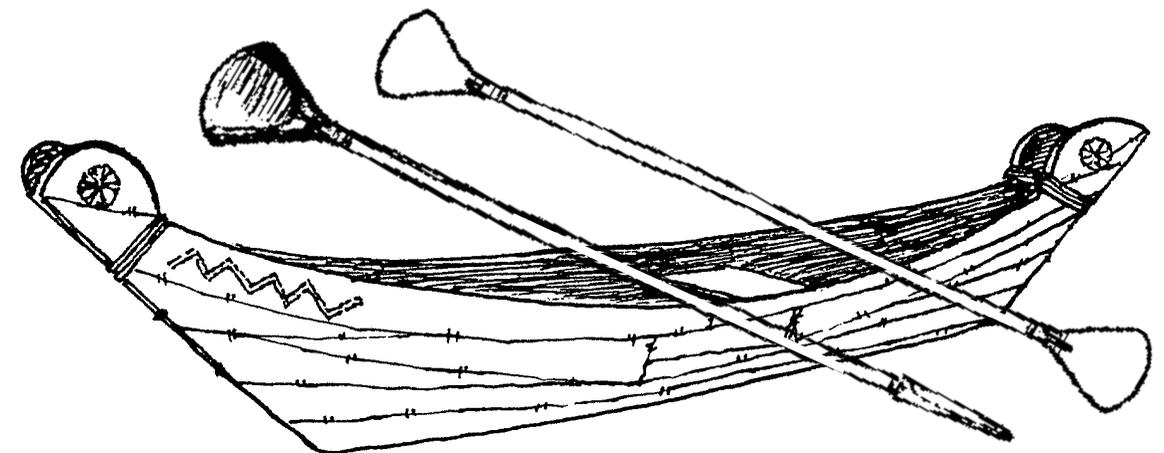
Enjoy this activity at home.

Imagine you have stepped back in time, 1,000 years before present. You would like to visit the Channel Islands. Motorized boats have not been invented yet, and the Santa Barbara Channel is too wide to swim. How will you reach the islands?

The Chumash used tomols for travel to and from the islands and to fish from. Tomols are plank canoes made of redwood (collected as driftwood) or pine. Planks were carefully cut to fit, joined with twine, and sealed with asphaltum (tar). Tomols might be painted red and decorated with shells.

Only certain people knew how to build tomols. Tomol carpenters guarded their secret skills from everyone but other members of the canoe brotherhood. Altomolich, or makers of canoes, were also fisherman. Their important contributions to the Chumash economy were highly respected and rewarded.

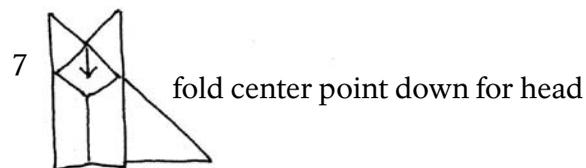
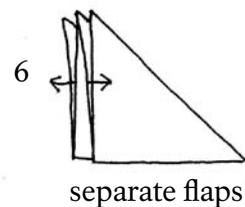
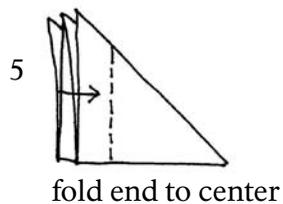
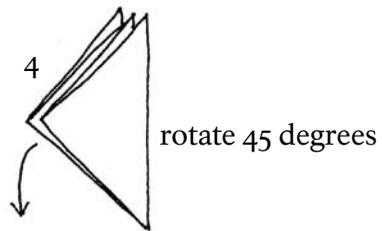
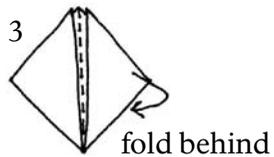
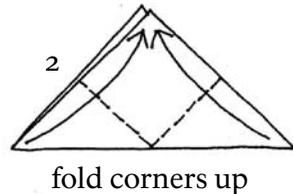
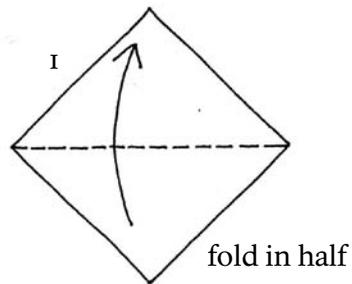
Make your own tomol with the pattern on the back of this page.



Enjoy this activity at home.

Fox Fun

Follow the pattern below to make an island fox. To make a fox family, begin the first step with different sizes of square-shaped paper.



Pattern published with permission from Dover Publications.

Island Bingo

Play bingo with island style—use all of your senses as you discover this remarkable place. Fill in the spaces below as you walk around the island. Please help take care of this special, living place. Island manners include: no plant picking, treading lightly (avoid stepping on plants and harming animals), and asking an adult before you touch anything.*

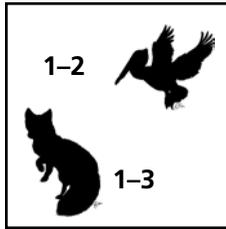
find any five

find five in a row, any direction

find five in a row, any direction and sketch article in box

smell a plant	touch a rock	something the size of your hand	trail marker or sign	spines (cactus)
leaves with prickly edges	see a bird	building	something beautiful	low-growing plant
hear a bird	grass	free space!	restroom	something old
fuzzy leaves (might look silvery)	bark	something as tall as you	flowers	see an insect
something green	feathery leaves	sign of an animal	hear the ocean	shiny or waxy leaves

For more fun find as many of these as you can.



Ten Essentials

When venturing into the wilderness, it is a good idea to be prepared. Unexpected events may change your route or keep you out longer than you had planned. Taking a little extra time to pack the essentials may guarantee a safer, more pleasurable outdoor experience.

1. Circle the ten most useful items for a day hike.
2. Cross out the ten least useful items for a day hike.
3. Name something else (not listed here) that would be useful for a day hike.

-
- | | | |
|---------------|----------------|-------------------|
| your pet | food | notebook |
| ice cream | electronic toy | snorkel |
| map | chapstick | first aid kit |
| skateboard | pencil | sunglasses |
| basketball | stereo | dress shoes |
| compass | swimsuit | perfume |
| binoculars | flashlight | water |
| walking shoes | extra clothing | hula hoop |
| hairspray | camera | pocket knife |
| laptop | sunscreen | hat |
| ski boots | backpack | emergency blanket |

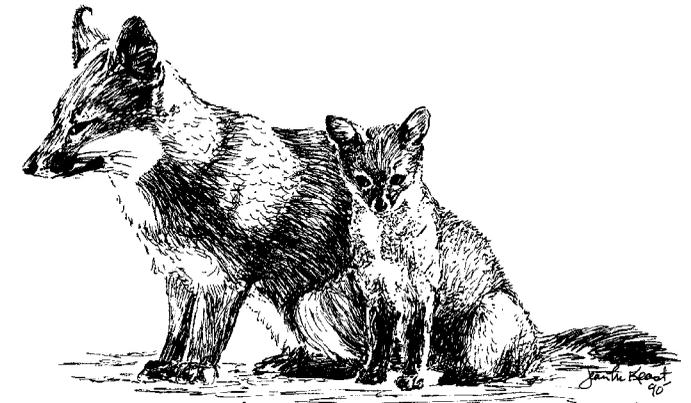


Creature Feature

Enjoy this activity at home.

The island fox lives on six of the eight Channel Islands and nowhere else in the world—San Miguel, Santa Rosa, Santa Cruz, Santa Catalina, San Nicolas, and San Clemente. *Do you recognize the names of the islands within Channel Islands National Park?* Island foxes are the largest native mammals on the Channel Islands, but one of the smallest foxes in the world. It averages about 12 inches in height, 25 inches in length, and four pounds in weight. This housecat-sized fox is 20 percent smaller than its closest relative, the mainland gray fox.

Geologists believe the northern Channel Islands were never connected to the mainland, yet the fossil record shows the arrival of foxes at least 16,000 years ago. How did they cross this water barrier? During the last ice age, 10–20,000 years ago, ocean levels were 400 feet lower than today. The channel between the islands and mainland was considerably smaller, perhaps just five miles across at its closest point. Gray foxes could have “rafted” over on driftwood, propelled by a storm or ocean currents.

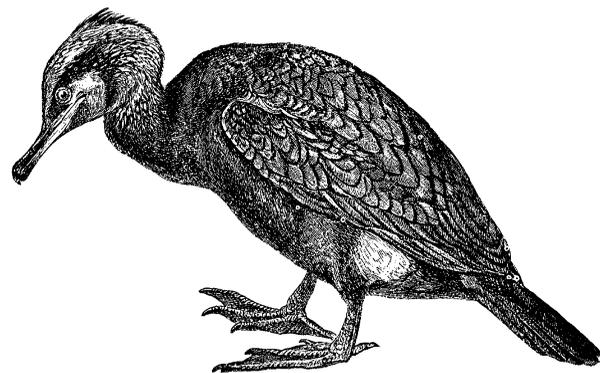


The foxes adapted to their new island home, evolving into a dwarf, or smaller, form of the gray fox. Environmental and ecological factors such as overcrowding, reduction in predators, food limitations, and genetic variations could have contributed to the natural selection for a smaller size. To learn more about the island fox visit the park website listed on the back page of this book.

Turn the page to find origami fox instructions.

Free Page!

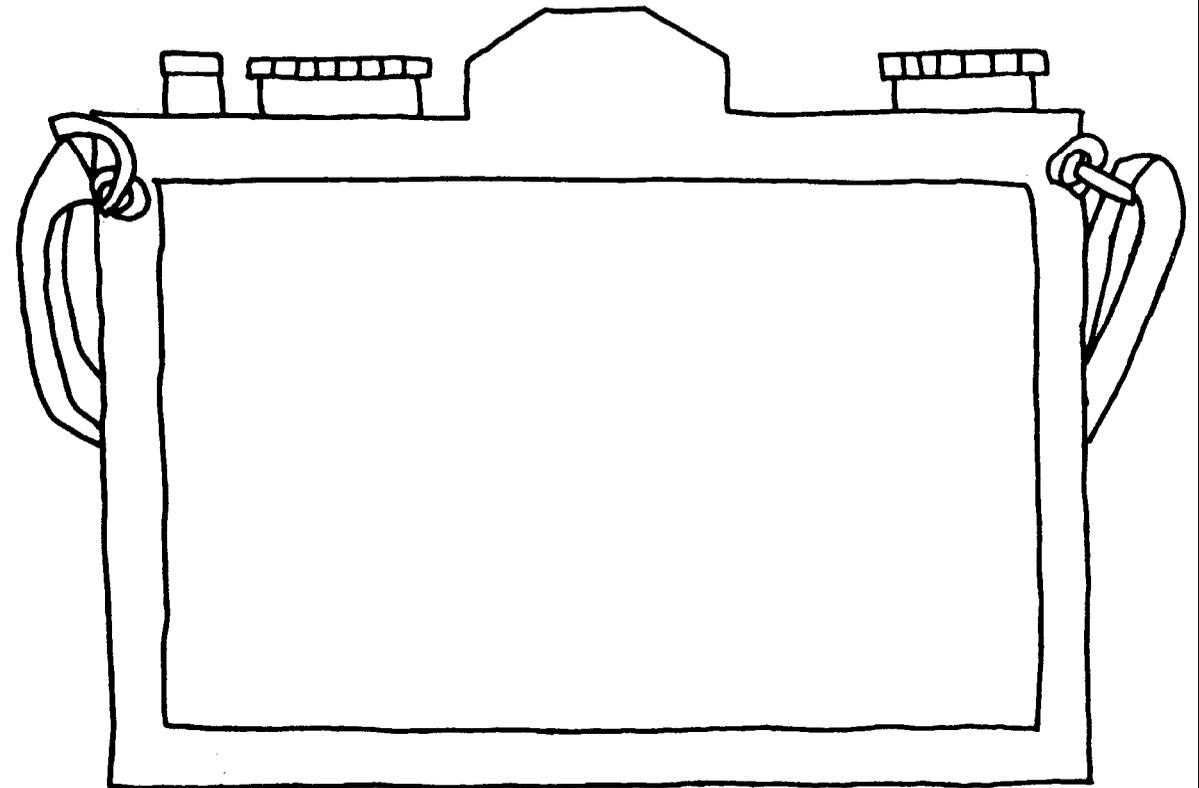
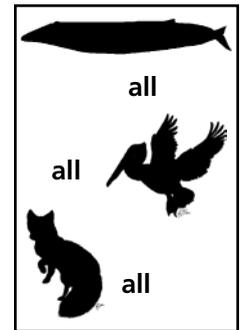
Use this page to write, sketch, collect autographs, and anything else you can think of.

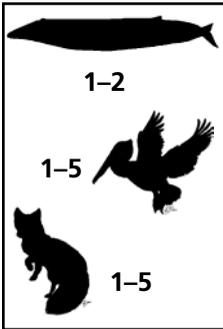


Take Only Photographs

The mission of the National Park Service requires the preservation of natural and cultural resources. One way to preserve something is to protect it. Visitors are welcome to gently observe animals, plants, historic buildings, artifacts, rocks, shells, sticks, and feathers. However, nothing may be impaired or taken home. Help keep the Channel Islands pristine by memorizing and practicing the following motto: Take only photographs and leave only footprints.

Use the space inside the camera to draw a "photograph" of something you saw or a special place you visited on the island.





It's Up to You

Junior rangers have many opportunities to care for the environment, animals, and cultural history. The following scenarios could take place in a neighborhood or a national park. Demonstrate your knowledge about resource protection by circling the best answer for each question.

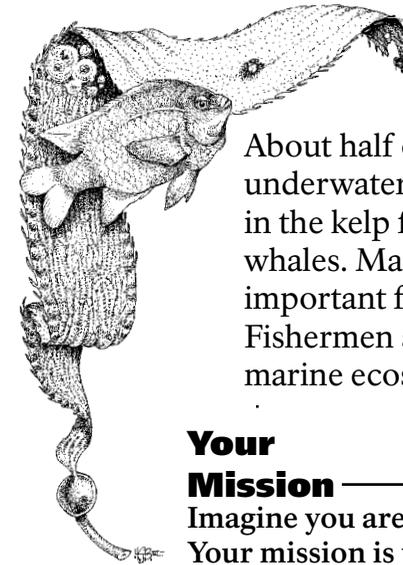
1. You have just finished lunch. The best place for your sandwich wrapper is:
 - a) underneath a stone
 - b) in the ocean
 - c) in your pack until you find a trash can
 - d) in the branches of a tree

2. A raven approaches you as you are eating a snack. The bird is interested in your food. You:
 - a) feed the bird from your hand
 - b) throw bits of food to the bird
 - c) leave food behind for the bird
 - d) keep wildlife wild by not sharing any of your food

3. You find an ancient arrowhead. You:
 - a) put it in your pocket
 - b) leave it exactly where you found it and alert an adult
 - c) smash it
 - d) see how far you can throw it

4. You see a living tree. How will you care for it?
 - a) carve your name in its trunk
 - b) admire it gently
 - c) chop it up for firewood
 - d) break off branches to take home

5. You find an injured animal. After you have checked to make sure you are not in any danger you:
 - a) write down a description of the animal including its appearance, location, and activity—
give this to an adult
 - b) throw rocks at the animal
 - c) try to fix the animal's injury yourself
 - d) take the animal home



Take Charge

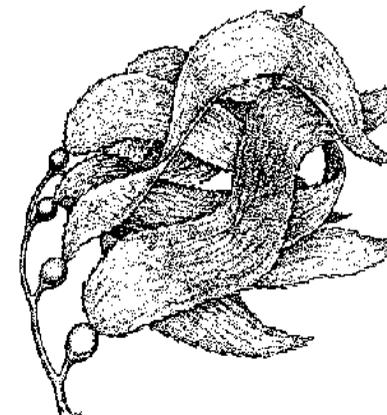


About half of Channel Islands National Park is underwater. People come from all over the world to swim in the kelp forest, kayak along the rugged shore, and watch whales. Marine resources around the islands are also important for people who make a living from the sea. Fishermen and women depend on the health of the marine ecosystems in the Santa Barbara Channel.

Your Mission

Imagine you are in charge of Channel Islands National Park. Your mission is to describe one way you will protect wildlife.

1. I would protect marine wildlife (sea lions, seals, whales, birds) from human disturbance by...



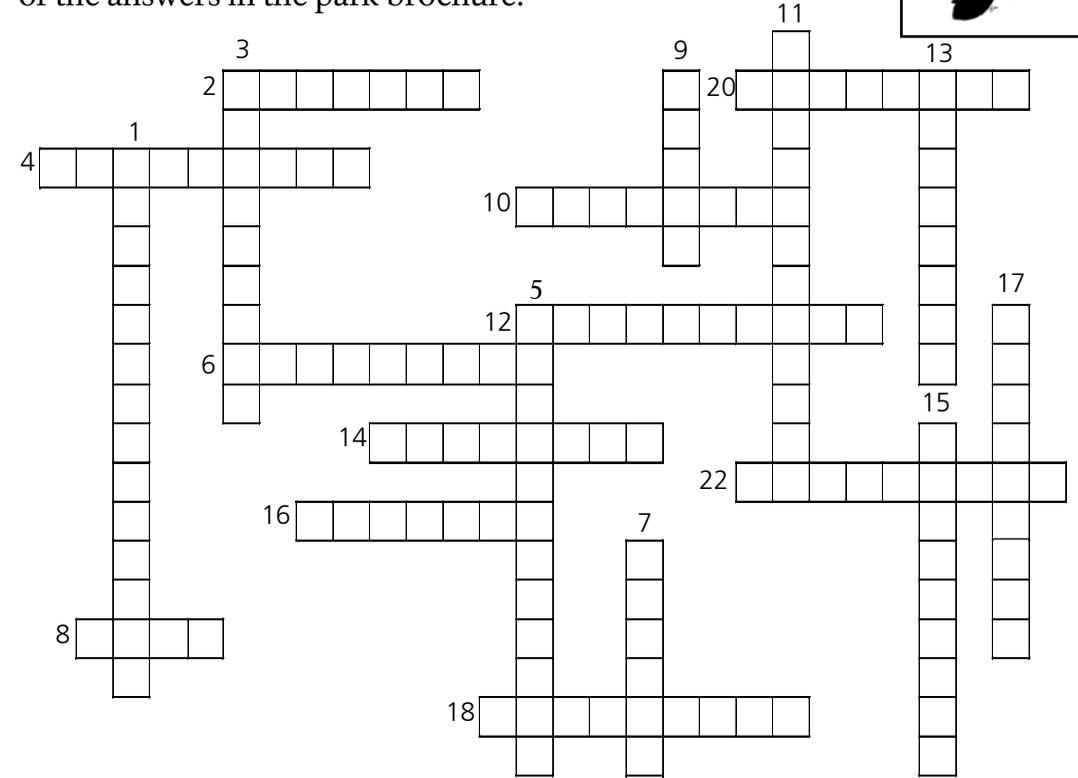
2. I would protect fish and other species in the kelp forest by...

cut out here

cut out here

Park Puzzle

Use the list of words on the next page. You can also find most of the answers in the park brochure.



Across

- 2. a way to see the park underwater
- 4. plant that may give you a skin rash
- 6. island features a monument to explorer Juan Rodriguez Cabrillo
- 8. when you spend the night at the park
- 10. shell used to make Chumash money
- 12. species in danger of extinction
- 14. small pool left behind by tide
- 16. island has a light station
- 18. name of largest Channel Island
- 20. island way of life that depended on cows, horses, sheep, and pigs
- 22. name of captain who gave islands their present names

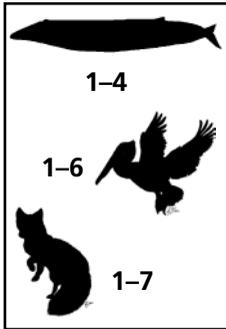
Down

- 1. bird only occurs on Santa Cruz Island
- 3. island home of Torrey pines
- 5. name of a large seal
- 7. early human island residents
- 9. all of the park islands were home for this non-native species at some point
- 11. home of the island night lizard
- 13. non-native plant species
- 15. five types of this plant occur on the park islands (can you find it in the garden?)
- 17. president who created Channel Islands National Monument in 1938 (national park status awarded in 1980 by President Carter)

fold in half
your name and address

place stamp here
or turn
in to the
visitor center

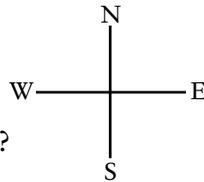
Superintendent
Channel Islands National Park
1901 Spinnaker Drive
Ventura, California 93001



Weather

Find a place where you can easily observe the sky, the wind, and the view across the Santa Barbara Channel. Complete the following activities from your observation station.

1. Can you see the mainland? yes no
2. Can you feel any wind? yes no



3. What does the sky look like? clear partly cloudy cloudy
4. Is there anything interesting you notice about the weather today?
Share your answer with someone in your group.
5. In what direction is north? Hint: If you are looking in the direction of the mainland you are looking north. Now find east and west.

6. Complete the following weather report.

What is the date? _____ What is the time? _____

Where is the sun in the sky? rising midpoint falling

Which direction is the wind blowing from? _____

7. From this place find something that interests you. Fill each space below with one word about your subject to create your very own cinquain (five-line poem).

_____ Name your subject in one word.

_____ Write two words to describe it.

_____ Write three action words about it.

_____ Write a four word phrase about it.

_____ Write one new word to name the subject or describe your feelings about it.

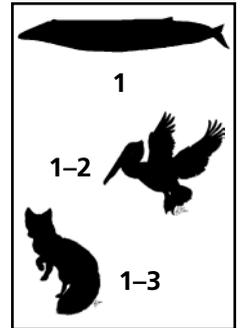
- Puzzle words for page 7
- | | | |
|---------------|------------------|------------|
| Anacapa | island scrub jay | Santa Cruz |
| buckwheat | olivella | Santa Rosa |
| camp | poison oak | sheep |
| Chumash | ranching | snorkel |
| elephant seal | Roosevelt | hidepool |
| endangered | San Miguel | Vancouver |
| iceplant | Santa Barbara | |

cut here

cut here

What Do You Think?

Your opinions are very important. Ideas from people like you help the park staff make decisions about the park. Take a moment to consider the following questions.

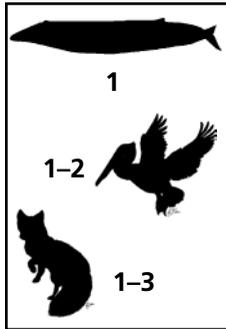


1. Describe something you like or find interesting on the island you are visiting. What do you like about it?

2. Do you think setting places aside as national parks is a good idea? Why or why not?

3. What resources do you think are important to protect at Channel Islands National Park?

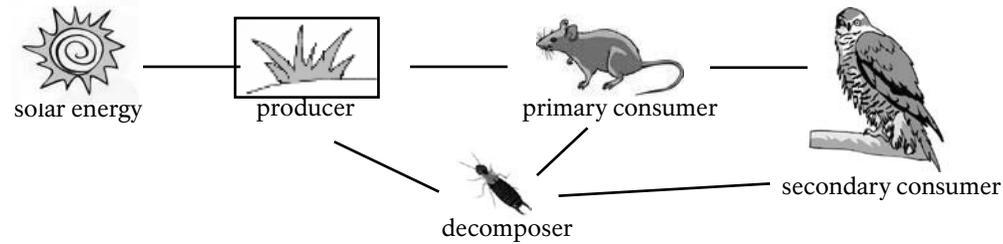
Cut this page out of your book and hand it to a ranger or mail it.



Food Chain

There is no waste in nature. All plants and animals, dead or alive, are potential sources of food for other organisms (forms of life). A food chain is a series of organisms that eat or decompose each other. Study the simplified food chain below.

1. Circle the herbivore in this food chain (animal that eats plants). Draw a box around the carnivore (animal that eats other animals).



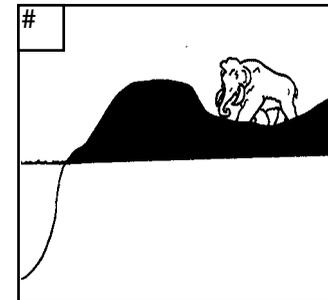
2. Draw and label a food chain that includes the sun, phytoplankton, zooplankton (plankton are small organisms in water ecosystems) and a fish.
3. Think of something you like to eat. Draw and label a food chain that includes you.

Mammuthus (Latin for mammoth)



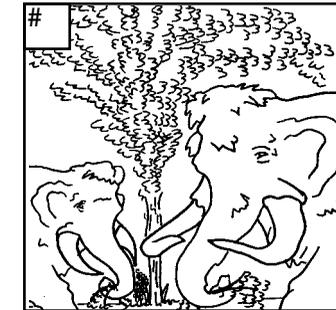
Did you know that mammoths have a role in the history of the Channel Islands? Decode the mammoth story by numbering the following events in order from 1 to 6. Use the clues below to solve the puzzle.

- During the last ice age sea levels were considerably lower.
- The northern Channel Islands were a single large island.
- This super-island is referred to as "Santarosae."
- At that time the Santa Barbara Channel was, at its closest point, about five miles across.
- Today it is twice as wide.

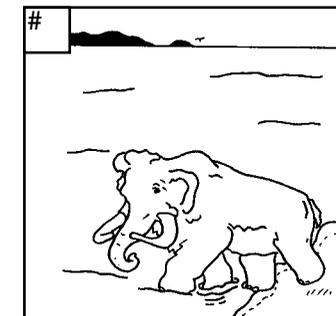
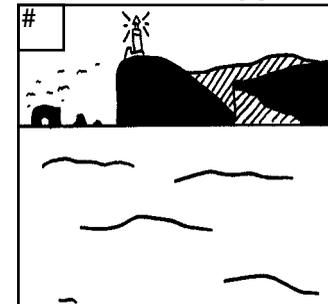


Only pygmy mammoths persist. The sea level rises, separating the peaks of Santarosae, forming the northern Channel Islands.

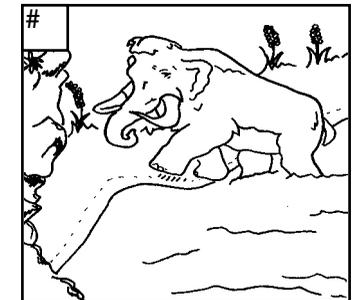
Columbian mammoths adapt to limited resources—the pygmy mammoth appears.



The islands today. Pygmy mammoths are long gone.

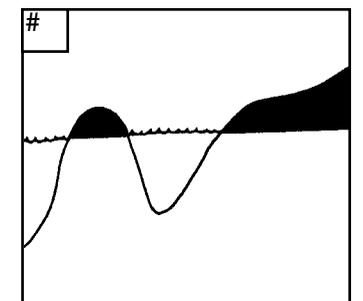


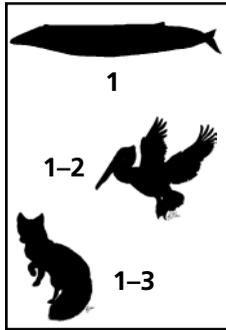
Columbian mammoths swim to Santarosae from the mainland.



Columbian mammoths live on Santarosae.

Volcanic land mass rises from the sea.





The First Inhabitants

The Island Chumash used and occupied the northern Channel Islands for thousands of years. We learn about what life was like for them by studying archeological sites, reading accounts from early anthropologists, and consulting contemporary Chumash people. Today many people of Chumash descent live in Ventura, Santa Barbara, and San Luis Obispo counties.

1. One way to pass along information and record history is to tell a story. The Island Chumash shared many stories including daily activities, important events, religion, and love. Can you think of a story someone has shared with you? *Share this story with someone in your family or group.*



2. The Island Chumash may have relied on rock art to pass along information as well. While some rock art tells a story, other images may be purely decorative. After you have examined the art on this page create your own design below.



3. The Island Chumash manufactured money using chert drills and olivella shells. Shell bead money was traded for goods not available on the northern Channel Islands. Imagine you have enough shell money to purchase two of the following. Circle your choices and list two ways you could use each item.

- dogbane
(fibrous plant)
- obsidian
(volcanic glass)
- rabbit
- steatite bowl
(stone)
- hematite
(red mineral)
- deer



The Islands' Ranching Past

About 150 years ago people began ranching and farming on the Channel Islands. If you lived on one of the islands back then, life would be different than it is today. To find out how, draw a line from each modern day item to its historic island equivalent.

