

Become a Junior Ranger

Located off the coast of Southern California, Channel Islands National Park is made up of five islands and the waters that surround them. The park is home to about 30 threatened and endangered plants and animals and almost 150 endemic species which are found nowhere else on Earth.

The islands are also important to people. The northern Channel Islands are the homeland of the

Island Chumash. They and their ancestors lived on the islands for at least 600 generations. Ranchers called the islands home for six generations.

Today, this national park protects the natural ecosystems and their cultural significance. You can learn, explore, and play on the islands.

Step 1: Learn

Learn about the plants, animals, and history of the Channel Islands by completing the activities in this booklet.

To earn your badge, complete at least _____ activities. (Your Age)

If you are 10 or older, complete at least 10 activities.

Activities in this book are marked with symbols that show the pages suggested for your age group, but you may complete any of the activities.



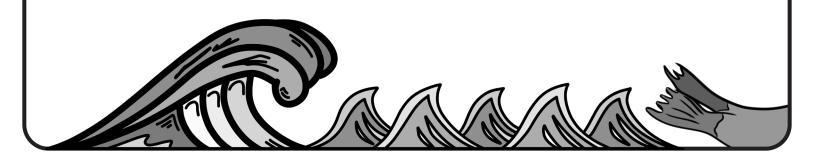
Blue Whale Age 7 or younger



Brown Pelican Ages 8 to 11



Island Fox Ages 12 and older



Step 2: Explore Take a boat to the islands, explo

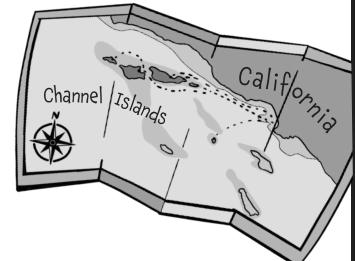
Take a boat to the islands, explore the visitor center, or enjoy an adventure near your home.

TO DO:

Interview a park ranger or volunteer using the questions inside the back cover.

Complete two of the following adventures. Use the activity space on page 27 to record your observations by drawing a picture or completing the sentences.

- Take a hike or a walk on the islands, through the native plant garden at the visitor center, or near your home.
- Watch the park film at the visitor center or at www.nps.gov/chis.



- Attend a park program or hike.
- Explore the tidepool in the visitor center, a beach on the islands, or the live ocean webcam at www.nps.gov/chis/learn/photosmultimedia/ocean-webcam.htm.

CHANNEL ISLANDS

Step 3: Protect

Help protect your national parks by taking a pledge and earning your official Junior Ranger badge.

- Share this book with a Channel Islands National Park ranger or volunteer or mail or email it to the address on the back cover.
- Sign your pledge on the inside of the back cover and receive your official Junior Ranger Badge.



Scan this
QR code with a
smartphone camera to
dive deeper into park
information and
videos.



Arrowhead Adventures







There are over 400 national park sites in the United States. These places include parks, battlefields, monuments, seashores, historic sites, and recreation areas. The National Park Service preserves and protects these places because of their importance to our nation.

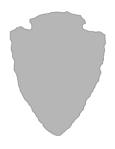
How do you know you are in a place that is cared for by the National Park Service?

Look for the Arrowhead!

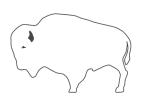
You can find it on signs, buildings, or park rangers. This symbol is a promise to protect and preserve special places like the Channel Islands. Each symbol inside the arrowhead represents something the National Park Service protects.



Look at the arrowhead and the symbols below. Match the symbol to the word(s) it represents.











Trees and Plants Culture and History

Landscape

Water and Recreation

Animals

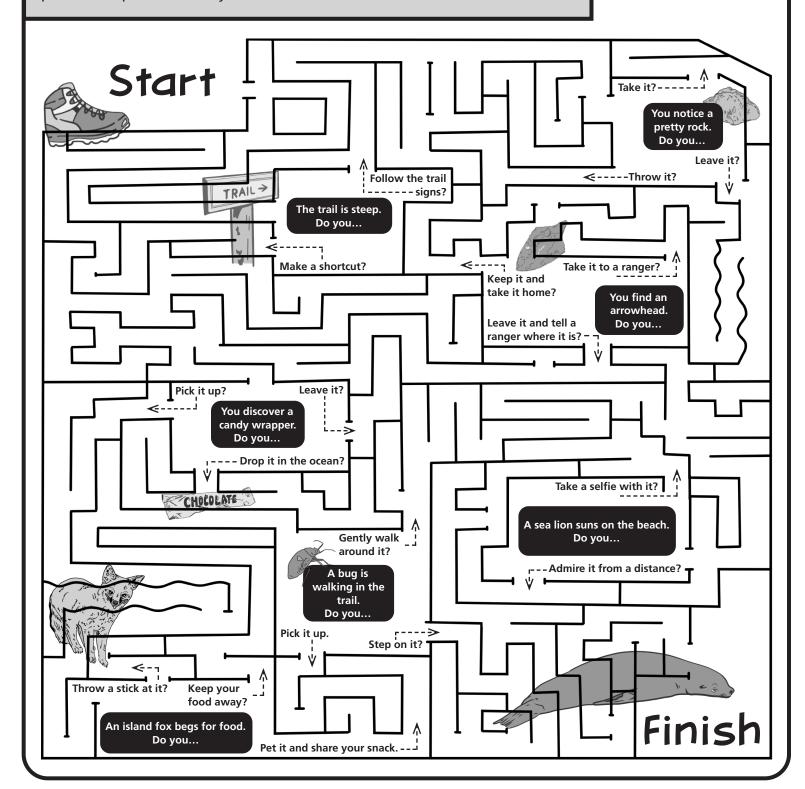
A-Mazing Choices



Did you know that each choice you make while exploring national parks gives you the opportunity to take care of the natural world around you and protect important historical sites?

Everything in national parks, including artifacts, fossils, plants, animals, shells, and rocks, are protected by law, and cannot be collected. What other good choices can you make while visiting?

Trace your way through the maze, but be careful, only the choices that protect the park will lead you to the finish!



Navigating the Islands



Channel Islands National Park is made up of five islands off the coast of southern California. Explore the islands in person, using the topographic maps

at the Ventura visitor center, or on the website at www.nps.gov/chis/planyourvisit/maps.htm.

On this map:

- How many islands are in the park?_____
- Mark an **X** where you have visited or would like to visit.
- Circle the highest point in the park.
- Draw a marine animal you might see in the Santa Barbara Channel.

Choose an island and complete the following:

- Draw the path that a boat could take to get to the island from Ventura.
- What direction would you be traveling on the boat to get to the island?
- Estimate the total miles from Ventura to the island.

San Miguel Island • tuquan

- Chumash name (tuquan) meaning is unkown
- Eight miles long, four miles wide

Point Bennett San Miguel Hill 831 feet hiking maps here! Note to the same of the same



Santa Rosa Island • wima

- Chumash name (wima) means "red pine"
- Fifteen miles long, ten miles wide

Santa Barbara

Santa Barbara Channel

Ventura

Santa Cruz Island • limuw

- Chumash name (limuw) means "in the sea"
- Twenty miles long, up to six miles wide

Anacapa Island • 'anyapax

- Chumash name ('anyapax) means "mirage"





Signal Peak 634 feet

Santa Barbara Island • siwoth

- Chumash name (siwoth) means "captain"
- About one square mile
- Located about 40 miles SE of Anacapa Island

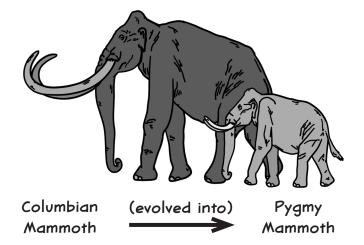


Exotic Endemics



An endemic (en' demik) species is a one-of-a-kind creature that only lives in a certain part of the world and nowhere else. Over generations, endemic species on the Channel Islands have evolved and adapted (changed to fit in) to help them survive.

Island animals have adaptations like becoming smaller or larger than their mainland relatives. Isolated from their mainland relations and exposed to a unique environment, the Channel Islands have almost 150 endemic species.

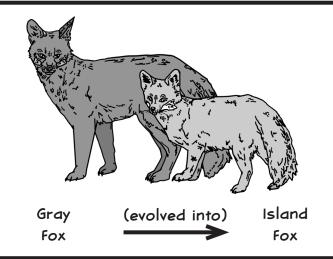


The Channel Islands Pygmy Mammoth

- * evolved to be much smaller to survive with less food and water.
- * was about as tall as a refrigerator and half as heavy as a car.
- ★ went extinct about 10,000 years ago.

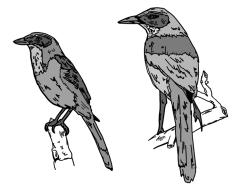
The Island Fox

- ★ is smaller! It is about the size of a small house cat.
- ★ is the top land predator, eating beetles, plants, berries and small animals like deer mice and lizards.
- ★ hunts during the day and night.



The Island Scrub Jay

- ★ only lives on Santa Cruz Island and nowhere else in the world.
- \bigstar is larger and a brighter blue color.
- ★ can live as long as twenty years.



California Scrub Jay



Island Scrub Jay Explore the evolutions and adaptations of the island animals on page 5.

Imagine you are an animal that has arrived at the Channel Islands for the first time. To survive, you must adapt to your new home. Choose the characteristics your new island animal will have. Circle as many as you want from each section. Draw a picture or write a story about your unique island animal.

You have:

- feathers
- fur
- scales

You arrived to the islands by:

- flying
- swimming
- floating on a piece of wood or a boat

You choose to live on the island:

- in a tree
- on the ground
- in a burrow
- in the water and on land

To survive, you adapt by becoming:

- larger
- smaller
- brighter in color
- duller in color
- louder
- quieter
- camouflaged
- patterned
- a day hunter
- a night hunter
- a day and night hunter

My New Island Animal

You eat:

- seeds
- plants
- animals
- both plants and animals



BONUS!

Can you act out your story for a friend or ranger?

My Evolution Story
/

Outfoxing Extinction















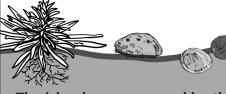
Youngest

1998 – Present

2,000 - 13,000

>13,000 BP (before present)

Clues to the Past



The islands are managed by the National Park Service today. Future scientists will learn how the islands were used by studying items left behind.

A new way of life begins in the 1800s. The islands are used for hunting, fishing, and sheep and cattle ranching.

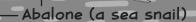
In the late 1700s, Spanish colonize the mainland and establish missions. Many Island Chumash are forcibly brought to missions, and all were removed from the islands by the 1820s.

Chumash societies develop seaworthy canoes called tomols to navigate between islands and the mainland. Chumash on Santa Cruz Island make shell bead money.

The Island Chumash live on the islands year-round. The earliest evidence of human habitation is about 13,000 BP, but scientists believe it could be even earlier.

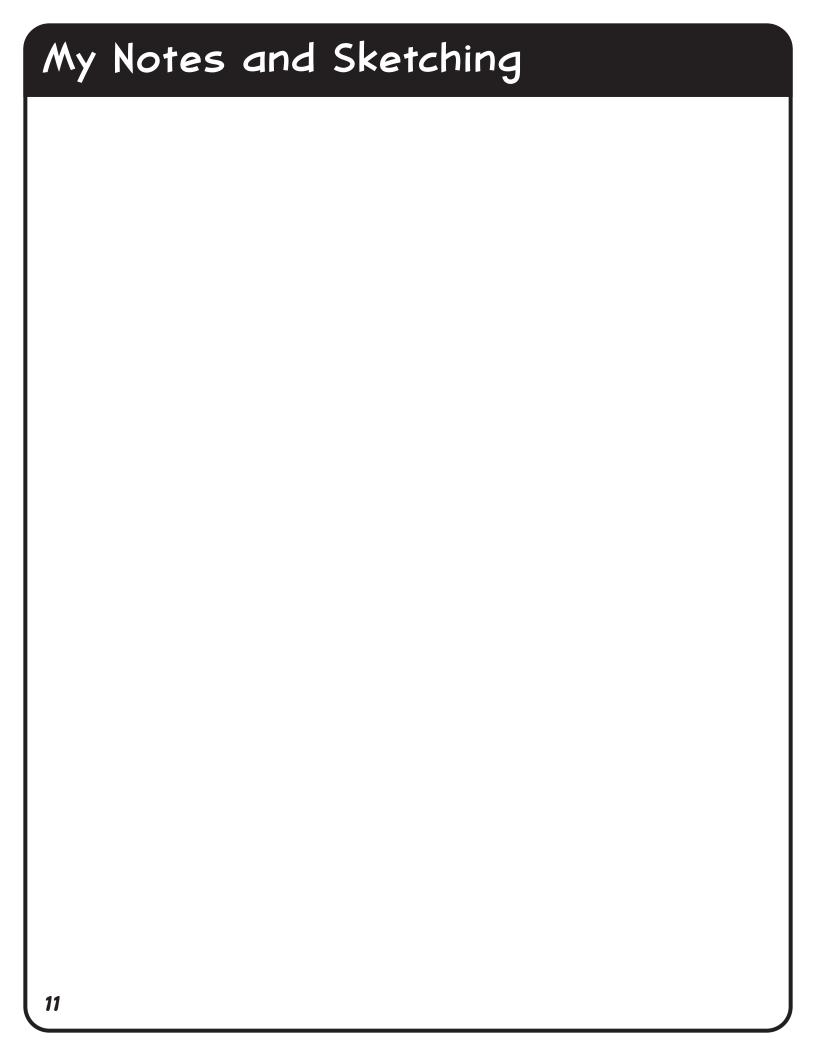
Pleistocene ice age animals live on the islands.

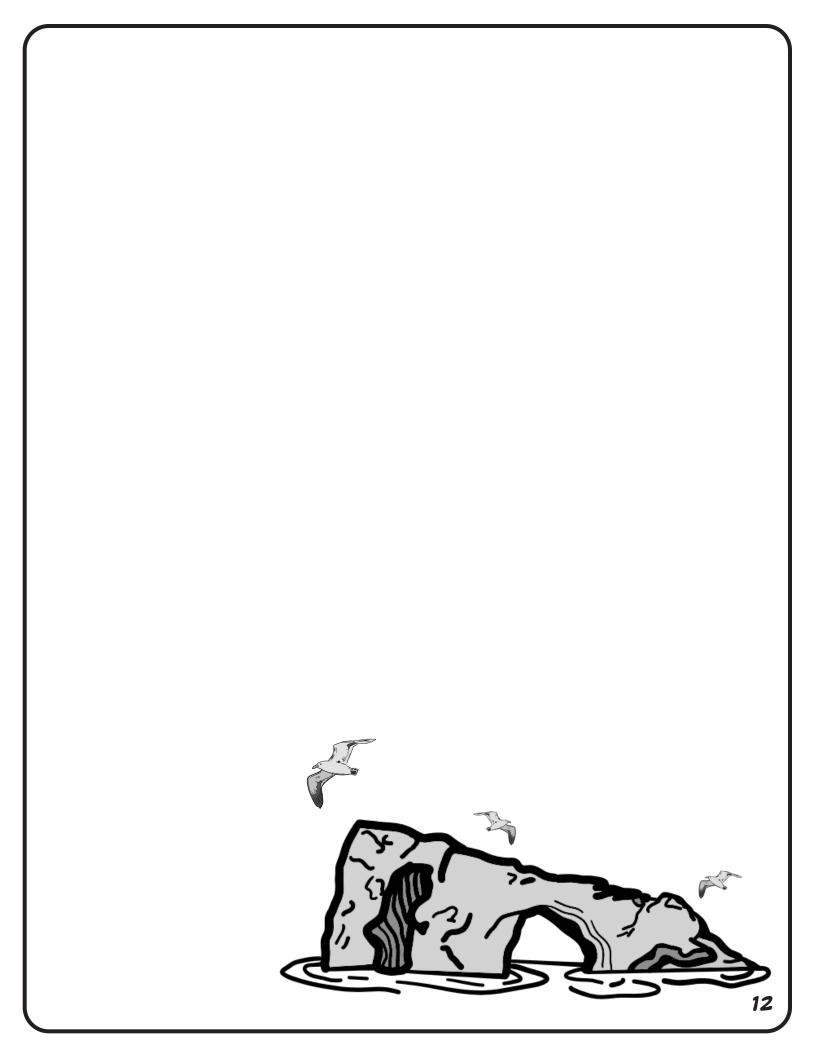






Science of the Past: Archeology and Paleontology			
Archeologists study stories and human-made objects called artifacts such as baskets and tools. These objects provide hints about what life was like for humans in the past.	Scientists find clues to the past in the ground. As they dig deeper, they discover older artifacts and fossils. This evidence can be examined to tell a story of past life.		
Paleontologists study the remains of ancient life. Fossils provide clues to what plants and animals lived in an area thousands, or even millions, of years ago. Fossil remains can range from tiny shells to skeletons of pygmy mammoths.	Can you be a scientist? Complete the questions or tasks below using the evidence you see in the layers on page 9.		
What item appears in every layer?	Draw a box around evidence that a paleontologist may study.		
Draw a line connecting them. In what ways do you think these were used?	The islands were never connected to the mainland. Paleontologists make educated guesses about how animals arrived on the islands. How do you think they got there? A. Swam B. Flew C. Floated on a piece of wood or canoe D. All of the above		
Draw a star on one item Island Chumash would have used to collect or prepare food. How do you think it was used?	Imagine an archeologist 100 years in the future finds a special item that you left behind. Draw your item below. What could they learn about you by studying this item? My Archeology Journal		
Draw a star on one item an island rancher would have used to collect or prepare food. How do you think it was used?			





Vaqueros de la Isla





Vaqueros de la Isla or Island Cowboys?

Vagueros (pronounced vah-kair-ohz) were the first people to herd cattle on horseback in North America. They introduced the ancient Spanish horse riding tradition to the Southwest, which eventually made its way to the Channel Islands. Their name is derived from vaca, the Spanish word for—you guessed it—cow.

Ranching began on the islands during the middle 1800s. Over the years, ranch workers on the islands included California Indians and immigrants from Italy, France, and Mexico. They brought their cultures and languages with them to the islands. Many English words come from the Spanish language.

> Can you think of other

words you use that have

a Spanish language

Explore the scene below.

- Say the cowboy words and then say the Spanish words they came from. Do you hear a connection?
- Try using the Spanish word in a sentence.

origin?

Bronco

potro bronco (poh-troh brohng-koh) wild horse

(pan-cho) English speakers use the Spanish word for a square wool covering.

Saddle

Silla (see-yah) a seat fastened on the back of a horse or other animal for riding

Poncho

Poncho

Spurs

Espuelas (ess-pway-las) metal object used to signal a horse to quick action

Ranch

Hint: think of

your favorite Mexican foods.

rancho (rrahn-choh) land for raising cattle

Lariat

la reata (la rreh-ah-tah) the rope

Chaps

chaparreras (chah-pah-rreh-rahs) leg armor for riding through chaparral (tangled shrubs and thorny bushes)

Island Innovation



Island ranching offered advantages over the mainland, including no predators and the world's best fence—the ocean! But there were many challenges as well, such as transporting supplies and livestock to and from the islands and living in an isolated environment.

The life of a cowboy, as shown in tales of the old west, was real on the islands, but without the saloons and shoot-outs! Island *vaqueros* had to adapt to the difficulties of island life by learning to make do with what they had.

Examples of innovation (to do something in a new way) and self-reliance are seen throughout the islands' ranching history.

On Santa Cruz Island, a worker made a sawmill out of an old tractor. On Santa Rosa Island, one *vaquero* was famous for making his own abalone jerky. On Santa Barbara Island, residents used a sled on wooden tracks to move supplies up a steep cliff from the ocean landing. On San Miguel Island, ranchers built homes with lumber from shipwrecks.

Have you innovated to solve a problem in your life?

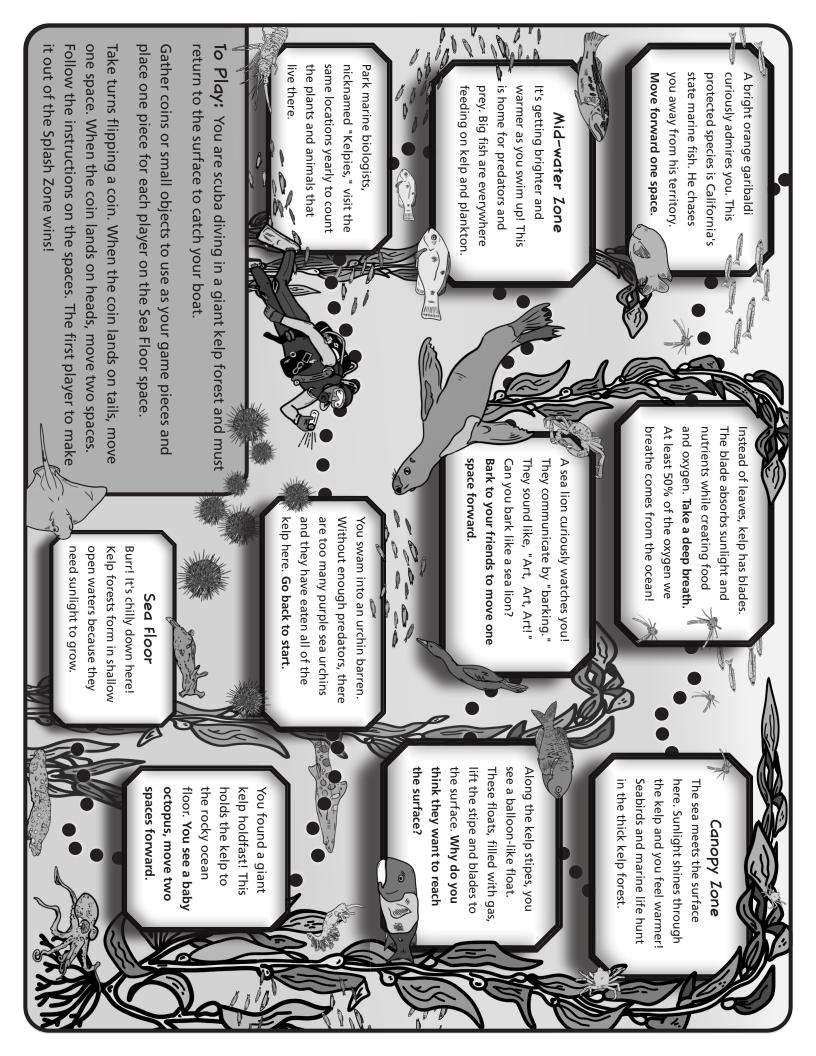
Look at the ranching items below. How can you combine some of them into one unique object that could be used by an island rancher? Draw your item below. Name your object and create a story about its purpose.



Vaquero Journal
Today, I invented the

My new invention

My object drawing!



Kelp Forest Quest



Over 1,000 species of marine plants and animals can be found within the Channel Islands' kelp forests. The kelp, a type of algae, provides fish and invertebrates with food and shelter from predators. Dive in to play the game and learn more! Start your quest at the sea floor.

Splash Zone

A black oystercatcher looks for food along the shoreline. Watch as it uses its sharp,

and intertidal zones as you explored!

Thank you for respecting the kelp forest

Congratulations!
You made it to your boat on time!

environments when you visit again?

How can you help to protect these

bright orange beak to pry open mussels for lunch! What is your favorite lunch food? **Tell**

a friend and move one space forward.

Shake the water off your feet.
Above the high tide, this area is only sprayed with water. The few species that live here must survive extreme weather and predators from land and water.

The rocks ahead are covered in barnacles! These crustaceans create a super strong cement to stick to rocks, boats, and even whales. You stepped on them, move back two spaces.

Intertidal Zone

endangered species!

You found an

Black abalone are disappearing due

to overfishing and

disease. You leave it undisturbed. **Move**

forward one space

Feel the sun on your face as you explore the mussel beds and rocky areas that provide plenty of food and shelter for animals.

High Tide Zone

Watch where you step! This mostly dry area is flooded at high tide. The creatures that live here are strong enough to survive pounding waves.

You spy a Bat Star! Sea stars have adaptations to survive, like spiny skin. To move, they use tube feet that only work underwater. How fast do you think they can move? Find the answer. Move like a sea star to move forward one space.

l can move about 3 inches per minute!

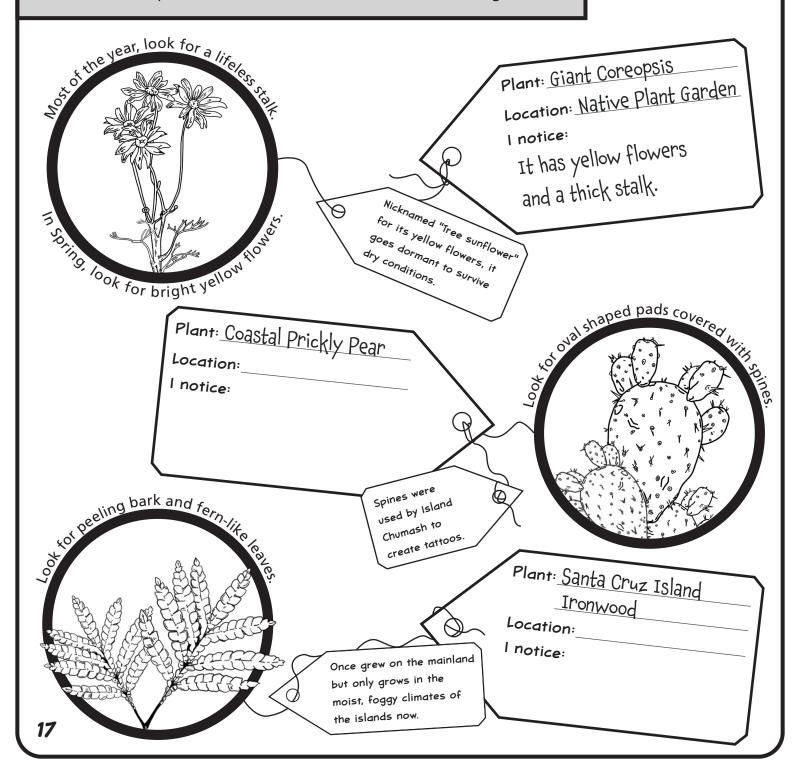
Plant Safari

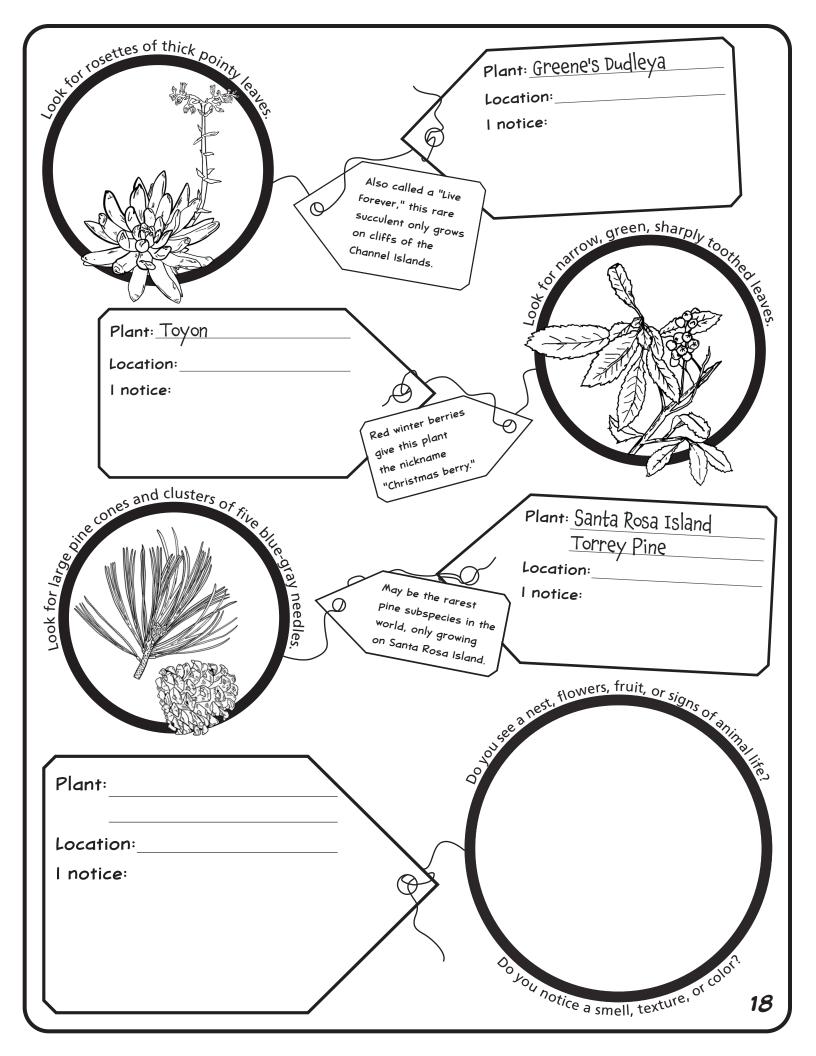


Plants on the Channel Islands provide food and homes for animals. Many of the plants on the islands are rare or only grow naturally on the Channel Islands.

Explore the plants on the islands, in the native plant garden at the visitor center, or on our website at www.nps.gov/chis/learn/nature/plants.htm.

- 1. Find at least two of the seven plants and fill in the tags completely.
- 2. Choose a new plant. Draw it in the blank circle and fill in the tag.





Birds



Channel Islands National Park is an important place for many landbirds, shorebirds, and seabirds. Landbirds found on the islands differ from year to year. They range from tiny hummingbirds to mighty bald eagles. Some have become new species that only live on the Channel Islands and nowhere else in the world, like the Island Scrub Jay.

For seabirds and shorebirds, the islands provide a place to rest and breed. They support the largest

breeding colonies of seabirds in Southern California and the only breeding colonies of California brown pelicans in the United States.

Have you ever been birding? Sometimes it is easier to hear a bird before you see it. Listening can give you clues to the types of birds near you. Some birders use a mnemonic (nyoo-mon-ik) to help them identify bird songs. A mnemonic is a phrase, words, or syllables that help you to remember something.

Read out loud the mnemonic sounds or phrases for the birds below.

Sit quietly in an outdoor space for a few minutes and listen to the bird songs around you. On page 20, create your own mnemonic for a bird you hear. Draw and write your bird's details if you see it. Use the bird count journal to record other bird sightings.

California Brown Pelican



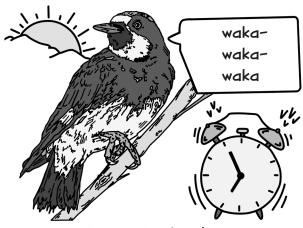
White-Crowned Sparrow



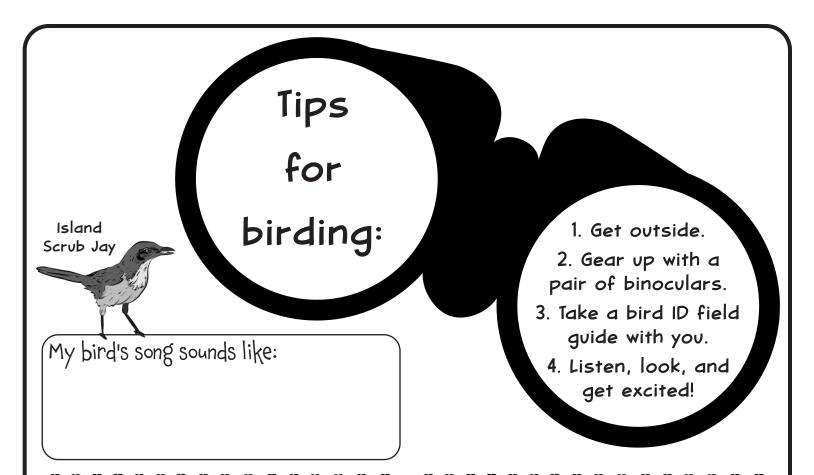
California Quail



Spotted Towhee



Acorn Woodpecker



My bird's sketch and n	otes
Size:	Nest:
Habitat:	Behavior:
Colors:	Food:

Bird Count Journal Date:			
Time:			
Location:			
Season: Fall	Winter	Spring	Summer
Weather:			
Species	Count	Total	Notes
Blue Heron	111	3 1	saw a nest.

Park After Dark

create your own park after dark island adventure story!				
 DO NOT LOOK at the story below yet! In the top section, fill in each blank with one word for each description. Using the words you wrote, fill in the matching blanks in the story. Read your story to a friend. 				
4. Read your story to a mend.	• An adjective			
	describes a person,			
1. Animal sound	place, or thing. Examples: fuzzy, silly,			
2. Type of tree	warm, slimy			
3. Color				
4. Something you find in the sky	10. Adjective			
5. Number	11. Verb ending in "ing"			
6. Adjective	12. A type of insect			
7. Body part	13. A bad smell			
8. An item you take camping	14. A size			
9. Verb	15. Adjective			
5 stars dot the night sky. The darkness heightens your other senses. You feel the6, ocean breeze on your7 There is a saltiness in the air and on your tongue.				
Digging through your 8, you finally find a flashlight. You turn it on and look around. There is no sign of your mystery animal, but you can easily see the trail now.				
As you9 down the	10 path towards the ocean,			
you spot a Townsend's big-eared bat swooping and 11 as it hunts (s).				
At the pier, a strong odor fills your nose. It smells like $\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$				
	line. The lapping of the waves calms you. As you dreams about the adventure you will ands.			

Fearless Field Sketching

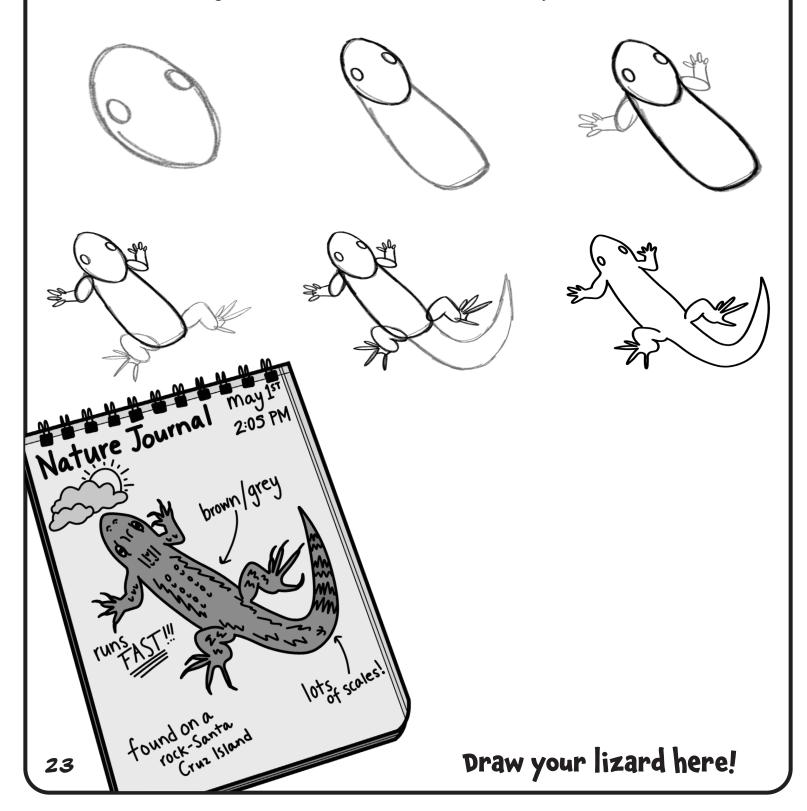






Sketch in a journal to record nature around you!

- 1. To start your sketch, ignore the details and begin with light, fast lines and simple shapes.
- 2. Loosely and lightly sketch the whole form capturing the basic shape, posture, and proportions.
- 3. Drawings don't need to be perfect. Do not erase your lines. Keep sketching until they look right to you.
- 4. Next, draw over the light lines and add details and notes about what you see.



Nature Detective



Naturalists investigate nature like a detective! As a naturalist, your job is to make observations, record them in a nature journal, ask questions, and share your results. When you record your journal entries, remember the word **WIN**:

Words

Record details or descriptions like
"rough, wet, green, tiny, slow."

Draw what you see! It doesn't have

to be perfect.

Numbers Record numbers like how big it is or

how many you see.

My drawing:

Shows simple shapes			ΟΔ	_
Shows texture		•	•~	
() Is labeled	hr	eah.	t hlua ta'	ç

I wrote about:

Where I found it	The texture
The weather	What I think it is
The sounds I heard	What I wonder

Find a space outside to observe a plant, animal, or insect. Record your observations using the checklist to guide your journal entry. Share with a ranger or a friend to help identify the species.



Ocean Advocate



Some threats to marine life include pollution, warming ocean temperatures, and invasive species. Sea birds can eat or get wrapped in trash that has flowed from rivers into the ocean. Plastic bags and balloons can look like jellyfish or squid which many marine animals eat. Wherever you live, you can help protect marine life.



To advocate means to speak up and support something that is important to you.

Write a letter, song, or poem to a friend or family member telling them why the ocean is important to you and how they can help protect it too. Check mark three things you choose to do starting today to help protect marine life:

Reduce my use of single use plastic
Recycle as much as possible
Carry a reusable water bottle
Store my food in reusable containers
Carry reusable utensils and straws
Bring my own shopping bags to the store
O Decorate for parties without using balloons
Reduce energy use by turning off lights
Participate in beach or land cleanups
Explore and enjoy the beach without

disturbing wildlife or removing rocks or shells

Dear	
Dear	

FROM:

Jr. Ranger_

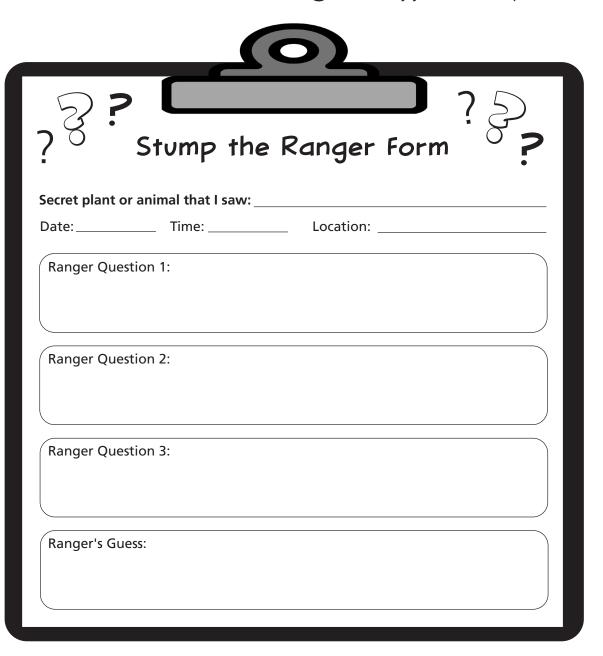


Stump the Ranger



Steps to stump the ranger:

- Choose a plant or animal that you see at the visitor center, native plant garden (hint: there are labeled plants here), on the islands, or at www.nps.gov/chis/learn/nature but keep it a secret!
- Fill out the form below. If you need help learning the name of the plant or animal you have chosen, ask a different ranger or volunteer.
- Find a ranger or volunteer at the visitor center, on the islands, or by emailing the address on the back cover. Share the date, time, and location but do not tell them what you saw!
- Allow them to ask you three questions.
- Allow the ranger or volunteer one guess!
- Share why you chose this plant or animal.



Activity Space

Use this page to finish Step 2: Explore. Complete two of the following adventures and record your observations below.

- Take a hike or a walk on the islands, through the native plant garden at the visitor center, or near your home.
- Watch the park film at the visitor center or at www.nps.gov/chis.
- Attend a park program or hike.
- Explore the tide pool in the visitor center, a beach on the islands, or the live ocean webcam at https://www.nps.gov/chis/learn/photosmultimedia/ocean-webcam.htm.

Find something that surprises you on your journey and draw a picture or finish these sentences:

I notice...

I wonder...

It reminds me of...

It makes me feel...



Become a Jr. Ranger

3	333333	3 3 3 3 3 3 3		
	My Park Ranger or Volunteer Interview			
	1. What is your name?	3. What is one reason the Channel Islands are		
	2. Wilde to Jose Figure.			
		protected as a national park?		
	2. What do you like about your job?			
		4. One more thing I'd like to know is		
		1. One more thing is nike to know is		

Channel Islands Junior Ranger Pledge

As a Channel Islands Junior Ranger, I promise:

- to help protect island plants, animals, and history,
- share with others what I have learned today,
- and learn more about parks and my community so I can help take care of them.



Park Stamp

Jr. Ranger Stamp

Park Ranger's Signature

Junior Ranger's Signature



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