

Nowhere Else On Earth

Something draws us to the sea and its islands. Maybe it is the thrill of traveling over water to an unfamiliar land. Or maybe it is the yearning for tranquility—to walk on a deserted beach with birds, salty breezes, and the rhythmic wash of waves as our companions. You don't have to go far to find such a place. Off the coast of southern California the Channel Islands seem to float on the horizon like ribbons of dark rock. Named for the deep troughs that separate them from the mainland, the eight islands and their encircling waters are home to more than 2,000 species of animals and plants—145 are found nowhere else on Earth. Isolation over thousands of years and the mingling of warm and cold ocean currents give rise to the rich biodiversity of these islands. Today, five of the islands, their submerged lands, and the waters within one nautical mile of each island are protected as Channel Islands National Park.

A Safe Haven for Brown Pelicans

Hundreds of varieties of plants, fish, invertebrates, and seabirds, such as brown pelicans, depend on the kelp forest ecosystem of Channel Islands. Giant kelp grows tall, fast, and thick in these nutrient-rich waters. Today, thousands of brown pelicans search the water for food. Not long ago, they faced extinction.

In 1970 only one chick on West Anacapa survived. Scientists pinpointed DDT flowing from mainland sewers

into the sea as the cause. When pelicans ate contaminated fish, DDT disrupted their reproductive systems: egg shells became so thin that they broke under the parent's weight. The Federal Government listed the brown pelican as an endangered species in 1970 and banned DDT in 1972. The fight to save these birds led to a remarkable recovery. Today on West Anacapa up to 6,000 nesting pairs of pelicans raise chicks each year.

The Channel Islands from the Ice Ages to Today

Living Alone Lower ocean levels during the ice ages narrowed the distance across the Santa Barbara Channel and exposed some of the sea floor. The land offshore, easier to reach then, allowed some species to venture into this new territory. Mammoths swam the channel. Mice and foxes drifted over on rafts of vegetation. Plants and seeds floated. Birds flew. Later, water from melting glaciers raised the sea level. This widened the channel again and increased the isolation of animals and plants from the mainland.

Many species evolved over time and adapted to their isolated environment. Mammoths evolved to become a new species of pygmy mammoth, and gray foxes shrank to the size of house cats, becoming today's island fox. Species of mice, scrub jays, and many plants grew larger. Isolation and evolution did more than alter their size or shape; it increased their vulnerability to outside forces.

Kinship of Islands and Sea A powerful bond between the land and sea controls everything here, from where plants grow to when seals breed. Together, water currents, winds, and weather create an ecosystem that supports a rich diversity of life. Among the 2,000 species you will find here are northern fur seals, bright orange garibaldi (California's state marine fish), some 28 species of whales and dolphins, intertidal dwellers such as sea stars and surfgrass, and squid, which serve as a major link in the food chain as predator and prey.

People on the Islands The islands attracted seafaring people long ago. About 13,000 years old, fragments from a woman's legbone found on Santa Rosa provide a record of the earliest known human presence on the islands. Over time Chumash Indians settled on the northern islands, and Gabrieliño/Tongva settled the southern islands. Prosperous and industrious, the tribes joined in a trading network that extended up and down the coast

and inland. The island Chumash used purple olivella shells to manufacture the main currency used for this commerce. Later, the region's temperate climate and bountiful natural resources attracted Spanish explorers, missionaries, and ranchers. In October 1542 Juan Rodríguez Cabrillo sailed into the Santa Barbara Channel. His expedition wintered on an island he called *Isla de Posesión*. On January 3, 1543, Cabrillo died from injuries and may have been buried on one of the islands, although his grave has never been found. In 1793 Capt. George Vancouver gave the islands their present names. Early in the 1800s fur traders searched the coves for sea otters, seals, and sea lions, nearly hunting them to extinction. By 1822 most Chumash had been moved to mainland missions. Except for fishing camps, ranching had become the economic mainstay by the late 1800s. In the 20th century the military established lookouts on Anacapa and Santa Barbara and prac-

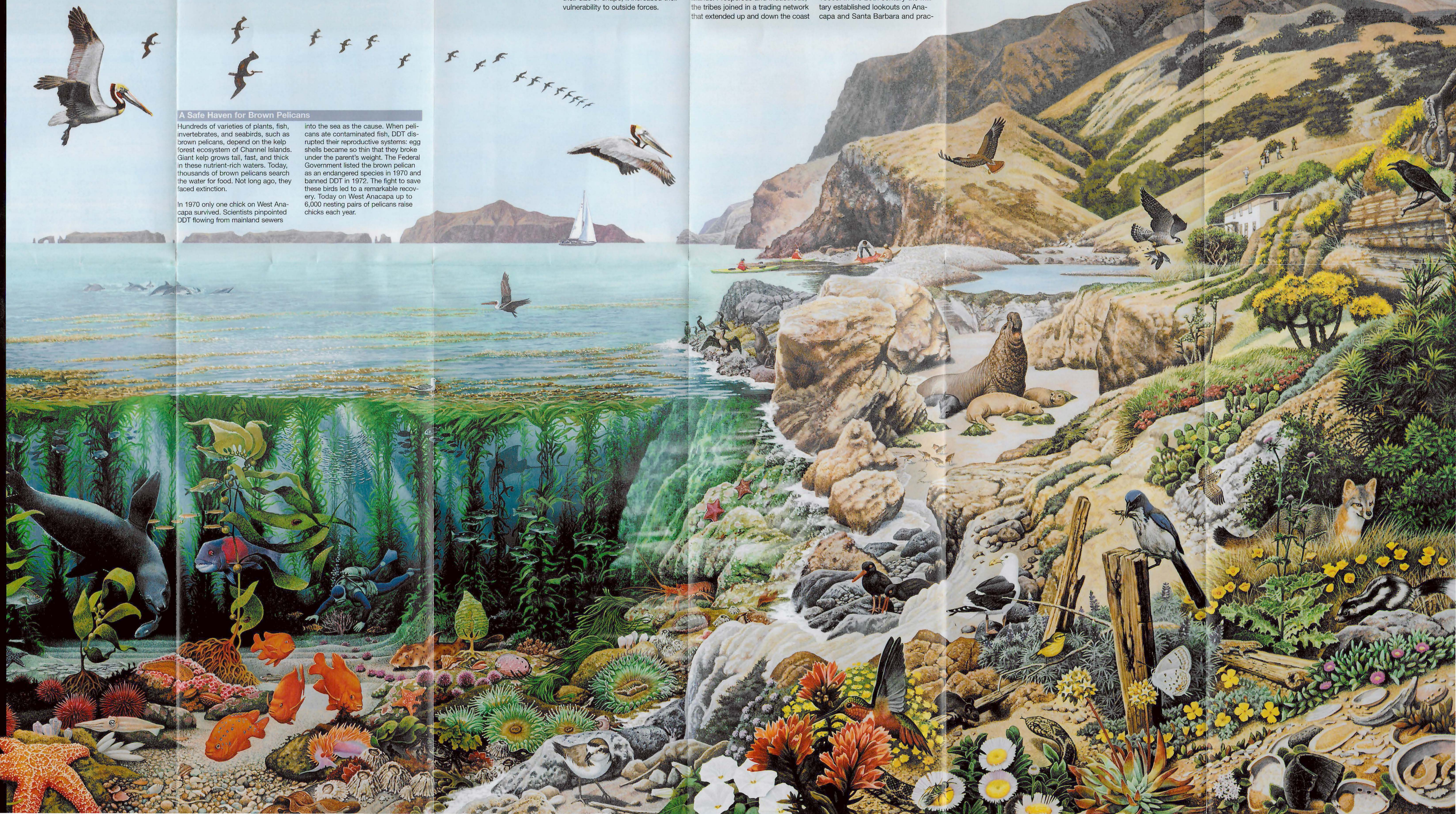
ticed bombing raids on San Miguel. Today, ranching and other commercial and military activities have ceased. The islands are regaining some of their natural diversity.

Alien Invasions Ranching and development in the late 1800s introduced animals and plants that had devastating effects on island ecology. Livestock overgrazed the hills. Bare soil blew away. Feral pigs uprooted plants. Rabbits brought for meat escaped and devoured the native plants. Iceplant, thistles, and range grasses choked out native vegetation. Alien species threatened to destroy the ecological dynamics of the islands.

Protection and Restoration Protection began in 1938 when Anacapa and Santa Barbara islands became Channel Islands National Monument. Cooperative agreements with the

National Park Service, private landowners, The Nature Conservancy, U.S. Navy, and other state and federal agencies led to more preservation. In 1980 Congress designated San Miguel, Santa Rosa, Santa Cruz, Anacapa, Santa Barbara, and the submerged lands and waters within one nautical mile of each island as Channel Islands National Park. The waters extending out six miles from each island are a National Marine Sanctuary. Channel Islands National Park monitors and protects threatened and endangered species, restores ecosystems, and preserves the natural and cultural resources for you and for generations to come.

This illustration by Michael Hampshire is a composite of the national park's five islands.



Visiting Channel Islands National Park



When was the last time you gazed at the ocean? Did you see the islands? Feel them call you? Savor the sea—its gulls, barking sea lions, and tiny creatures. Take time for a visit.

The eight Channel Islands span 160 miles off the coast of southern California (see map at left). There are four northern islands—San Miguel, Santa Rosa, Santa Cruz, and Anacapa, and four southern islands—San Nicolas, Santa Barbara, Santa Catalina, and San Clemente.

Visitor Centers The visitor center in Ventura has information, a film, an indoor marine life display, exhibits about the natural and cultural features of the islands, a native plant garden, and a bookstore. A small visitor center in Santa Barbara has information and exhibits. Both visitor centers are open daily, except Thanksgiving and December 25.

Planning Your Visit? Use the Park Newspaper Whether you go to the islands on your own boat or with a park concessioner you should use the free park newspaper, *Island Views*: A Visitor's Guide to Channel Islands National Park, to plan your visit. It describes the many tour options that are available and includes information about boat and airplane concessioners that can take you to the islands. It has detailed information about activities on the islands and in the water, boating safety, weather, park regulations, and more. Park staff can help you plan your visit. Contact the visitor center for information and to get the park newspaper.

Accessibility The visitor center in Ventura is accessible for visitors with special needs, but getting onto the islands can be difficult. Ask for details.

Things to See and Do Visitors to the islands may swim, snorkel, hike, camp, watch wildlife, kayak, sail, and explore

tidepools, beaches, and rugged canyons. Naturalists lead hikes. The kelp forests, caves, clear water, and rich diversity of animals and plants place the Channel Islands among the top scuba diving sites in the world.

Protecting the Islands The islands' natural and cultural resources, including all seabirds, marine mammals and other wildlife, plants and wildflowers, artifacts, structures, rocks, fossils, shells, and shipwrecks are protected by federal law—all collecting is illegal. Keep at least 100 yards away from marine mammals and seabirds. Fish and wildlife laws are strictly enforced. Staying on trails helps prevent erosion and protects fragile vegetation.

For Your Safety Be sure to check the park newspaper for details about safety and regulations. •Weather conditions change rapidly; dress in layers. •There are no supplies on the islands. Take water, food, and other necessities. •Watch your step—ladders, railings,

and stairs may be wet. •Stay back from cliff edges; they may be crumbly or undercut—a fall could be fatal. •Do not approach marine mammals, such as whales, seals, and sea lions. •Pets are prohibited on the islands. •Check yourself for ticks and watch out for poison oak.

WARNING Deer mice on the islands may carry diseases, including deadly hantavirus. Avoid all contact with mice and other wild animals. Keep food in rodent-proof containers.

In an emergency: On the islands contact a ranger. On the water use marine radio VHF channel 16.

For More Information Channel Islands National Park 1901 Spinnaker Drive Ventura, CA 93001-4354 805-658-5730 www.nps.gov/chis

National Park Service: www.nps.gov

Outdoors Santa Barbara Visitor Center 113 Harbor Way, 4th floor Santa Barbara, CA 93109 805-884-1475

Commercial Service to the Islands Channel Islands Aviation 305 Durley Avenue Camarillo, CA 93010 805-987-1301 www.flycia.com

Island Packers, Inc. 1867 Spinnaker Drive Ventura, CA 93001 805-642-1393 www.islandpackers.com

Truth Aquatics Inc. 301 W. Cabrillo Blvd. Santa Barbara, CA 93101 805-962-1127 www.truthaquatics.com

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The National Park Islands at a Glance



Each year more than 100,000 seals and sea lions breed and haul out on San Miguel.



Rare Torrey pines grow only near San Diego and at Bechers Bay.



From the hills above Smuggler's Ranch you can see Anacapa in the distance.



Sunrise lights up Inspiration Point and Middle and West Anacapa.



Giant corocopsis (tree sunflower) make a showy display at Arch Point.

Chumash artifacts (right): serpentine bowl, rim inlaid with abalone shell. Fish hooks of abalone and deer bone.

Santa Barbara Museum of Natural History Photos: George H.H. Hays

San Miguel Island

This westernmost island receives the brunt of the north-westerly winds, fog, and severe weather from the open ocean. The cold, nutrient-rich water surrounding the 9,491-acre, eight-mile-long and four-mile-wide island is home for a diversity of sea life. Submerged rocks make the nearly 28-mile coastline a mariner's nightmare. Rough seas and risky landings did not daunt the Chumash who lived here, nor did they deter the first European explorer, Juan Rodríguez Cabrillo, in 1542. Ranchers raised sheep from 1850 to 1948. Later, the Navy used the island for a bombing range. Today, native species are making a recovery in this sanctuary. **Island Features:** Chumash sites; Cabrillo monument; caliche forest; seabird, seal, and sea lion rookeries.

Santa Rosa Island

The second-largest island, with 53,051 acres—15 miles long and 10 miles wide—beckons you with rolling hills, deep canyons, a coastal lagoon, and beaches adorned with sand dunes and driftwood. The Chumash called it *Wima* or "driftwood" because channel currents brought ashore logs from which they built *tomols*, plank canoes. For thousands of years unusual animals and plants made the island their home. Flightless geese, giant mice, and pygmy mammoths are extinct, while the island fox, spotted skunk, and munchkin dudleya (one of six plant species found only on this island) still live here. **Island Features:** Chumash and ranching history; Torrey pines; snowy plover; Lobo Canyon; sand dunes; beaches.

Santa Cruz Island

Here are pristine beaches, rugged mountains, lonely canyons, grass-covered hills, and some animals and plants that you have never seen before. This paradise is Santa Cruz Island, a miniature of what southern California looked like more than 100 years ago. The largest island in the national park, with 61,972 acres, Santa Cruz is 22 miles long and from two to six miles wide. A central valley splits the island along the Santa Cruz Island fault, with volcanic rock on the north and older sedimentary rock on the south. Today, The Nature Conservancy and National Park Service preserve and protect the island. **Island Features:** historic ranches; island fox; island scrub jay; Painted Cave, one of the world's largest sea caves.

Anacapa Island

Twelve miles from the mainland a five-mile-long spine of rock emerges from the ocean, breaks into three islets, and offers itself as home to 265 species of plants and a bevy of seabirds—with the largest brown pelican rookery in the United States. On charts the island of 737 acres appears as East, Middle, and West Anacapa. The Chumash called it *Anypakh* or "mirage." It was anything but a mirage on the night of December 2, 1853, when the sidewheel steamer *Winfield Scott* running at full speed crashed into rocks off Middle Anacapa and sank. The Coast Guard built a light beacon in 1912 and a light station in 1932. **Island Features:** bird rookeries; Chumash middens; giant coreopsis; tidepools; kelp forests; sea caves; arches.

Santa Barbara Island

Steep cliffs of this smallest island—644 acres or about one square mile—rise above rocky shores to a grassy mesa flanked by twin peaks. Gabrieliño/Tongva Indians fished here. Explorers, seal and abalone hunters, ranchers, and the military took their toll. Today, after years of species and habitat loss, animals and native vegetation are making a remarkable recovery. Among those found here are Xantus' murrelets, a seabird that nests in crevices in the cliffs, and the Santa Barbara Island live-forever, a rare plant found only on this island. **Island Features:** seabird, seal, and sea lion rookeries; island night lizard; wildflowers; kelp forests.



Islands on the Edge

The Channel Islands lie in a region between the mainland coast and the deep ocean called the Continental Shelf. The sea floor is comprised of canyons, banks (underwater plateaus), escarpments, sea mounts, and deep basins (Santa Cruz Basin is deeper than Arizona's Grand Canyon). This topography—shallow and deep, smooth and rugged, sunlit and dark—creates habitats for a diversity of species.

The islands rose from the ocean millions of years ago and were born of plate tectonics, volcanic activity, and fluctuating sea levels. These islands on the edge of the continent were never connected to the mainland. During the ice ages ocean levels dropped as the polar caps expanded. What are now San Miguel, Santa Rosa, Santa Cruz, and Anacapa islands were once joined as a single island called Santarosae. When the sea rose again it created the four islands we see today.

Ocean currents also play an important role in the biodiversity of the islands. A cold current traveling south along the North Pacific coast meets at the Channel Islands with a warm current moving up from the tropics. Upwelling nutrients from the ocean floor mingle with these currents, mixing fish and other sea life into a rich living soup. Giant kelp forests encircle the islands and host a wealth of ocean visitors, from tiny plankton and sponges to giant blue whales.

Authorized park boundary
The Channel Islands National Park boundary extends 1.8km (1 nautical mile) from the shore of each island.

Authorized marine sanctuary boundary
The Channel Islands National Marine Sanctuary boundary extends 10.8km (6 nautical miles) from the shore of each island. For information on Marine Protected Areas see California Fish and Game website at www.dfg.ca.gov.

Ranger station **Restrooms**
Self-guiding trail **Campground**

Data Sources
Depth tints and terrestrial relief derives from Digital Elevation Models (DEM) produced by NOAA and the USGS. Bathymetric relief shading was manually produced.

North
0 5 10 Kilometers
0 5 10 Miles