

# Island Views

## A Visitor's Guide to Channel Islands National Park

Volume 2, 2001-2002

### PRESERVING THE PAST

BY ANN HUSTON, Chief of Cultural Resources, Channel Islands National Park and DON MORRIS, Archeologist, Channel Islands National Park

The human femur is easily identifiable, and the archeologist trudging up Arlington Canyon on Santa Rosa Island on a summer day in 1959 readily spotted it. It was like hundreds of other thigh bones he had already seen on an island thickly covered with cemeteries and archeological sites. What was unusual about this one was that it was more than thirty feet below the surface, exposed by erosion along the stream bank.

Forty-one years later, archeologists continue to study this partial skeleton and its setting. "Arlington Woman," as she is called, is the oldest human skeleton now known from North America, dating from the end of the last Ice Age, about 13,000 years ago. This extremely significant find is just one of the many historical treasures of Channel Islands National Park.

Channel Islands National Park preserves a record of more



Tim Hauf  
Chumash midden site, Cuyler Harbor, San Miguel Island

than 10,000 years of human use and occupation of the five northern islands. This record is contained in more than 1,700 archeological sites both on the islands and beneath park waters, and in the historic structures and landscape features associated with European exploration and settlement of the islands. Although the largest Chumash populations lived along the mainland coast, most of these sites have been destroyed or covered over by recent development, leaving the island resources as the best preserved for new and innovative research techniques.

Park cultural resource specialists continually seek to expand their knowledge of the islands' resources and the people who used and lived on the islands. Researchers locate and record archeological sites, undertake historical and archeological investigations of sites and structures, and preserve and record artifacts and records associated with the islands.

Archeologists from UCLA, UC Santa Barbara, and California State University at Long Beach are conducting research into the long-term development and changes in Chumash culture on the islands, sampling deposits that date back to more than 9,000 years. The picture emerging from this research shows resourceful people coping with an abundant, but capricious and changing environment. The Chumash clearly learned to utilize their environment with increasing effectiveness over the centuries, developing watercraft to fish offshore and carry out more trade between the islands and the mainland. Their efforts cul-

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### FORWARD TO THE PAST Restoring the Ecosystems of Channel Islands National Park

BY KATE FAULKNER, Chief of Resource Management, Channel Islands National Park

Congress established Channel Islands National Park "in order to protect the nationally significant natural, scenic, wildlife, marine, ecological, archaeological, cultural, and scientific values of the Channel Islands." These islands are extremely important in conserving the biological diversity that is our natural heritage in southern California.

Worldwide, islands are particularly important to the conservation of biological diversity. Islands tend to have a high percentage of endemic (unique) species and subspecies because of their isolation from the mainland. The Channel Islands, sometimes called the North American Galapagos, are no exception. Fully 10% of the terrestrial plants and 30% of the terrestrial animals on the park islands are endemic. Species such as the island fox, island scrub-jay, and the Santa Barbara Island live-forever occur nowhere else in the world.

Additionally, islands are extremely important breeding areas for seabirds and pinnipeds that forage over thousands of square miles of ocean but are dependent on these islands for breeding and nesting. Wildlife that frequent the mainland coast, such as California brown pelicans, California sea lions, and western gulls, are almost entirely dependent on the islands for breeding and raising young. Our mainland beaches would be much more barren without the wildlife produced on the Channel Islands.

The isolation of the islands has protected them from much of the development and human impacts that have drastically reduced habitat for natural ecosystems on the mainland. Although the Channel Islands are within a day's travel for over 12 million people, the islands themselves are relatively unaltered because of the isolation provided by the surrounding ocean.

#### Change Comes to the Islands

The Channel Islands have not been immune to ecological impacts, however. Substantial changes to the island and marine ecosystems have occurred during the last two hundred years. A number of species were hunted to near extinction. Non-native animals, such as sheep, pigs, and rabbits, were introduced to the islands for hunting or ranching. There were also accidental introductions, such as rats on Anacapa and San Miguel Islands and the invasive weeds that now cover large areas of the islands.

The reasons we value the Channel Islands have changed over the years. For many years the islands were valued primarily for the production of food and materials for human consumption. However, the establishment of the park in 1980 highlighted the national significance of the natural and cultural resources of these islands. Since then, substantial progress has been made in conservation of these resources.

#### Successes in Conservation

Four species of pinnipeds currently breed on the park islands and two additional species bred there historically. However, it has been a rough road for these animals. For example, commercial hunters decimated northern elephant

Please see FORWARD TO THE PAST, 5



Tim Hauf  
Santa Barbara Island live-forever

### The Nature Conservancy Donates 8,500-Acre Gift to Park

On August 23, 2000, The Nature Conservancy (TNC) of California transferred 8,500 acres of its holdings on Santa Cruz Island to the National Park Service (NPS). The purpose of the gift was to ensure the effective cooperative management by the two organizations of the entire island in restoring the natural habitat, to protect natural and cultural resources, and to provide for increased visitor access.

"This generous donation of land from TNC allows us to go forward as a team with efforts to save the Santa Cruz Island fox from possible extinction, actions to remove non-native feral animals that damage natural habitats and cultural resources, and control invasive weeds," Channel Islands National Park Superintendent Tim J. Setnicka stated. "The public will benefit greatly from a restored, healthy ecosystem on the island. Under NPS management the public can come ashore at Prisoners' Harbor, hike on NPS-owned land, explore the beach, and in the near future, have backcountry camping. We look forward to a long and successful partnership with TNC on Santa Cruz Island."

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### Things To Do

(Camping, Hiking, Water Sports, Tidepooling, Whale Watching)

### Island Descriptions and Maps

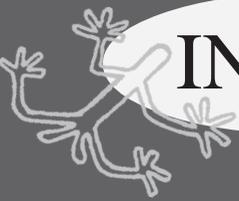
### How To Get There

### Limiting Your Impact

### Focus on Park Resources

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- Ocean Protection
- Whales
- Parks in Classrooms
- Understanding Island Ecosystems
- Measuring Ecological Health
- The Wreck of the Comet
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- Island Chumash

ON THE NET? Visit us at: [www.nps.gov/chis/](http://www.nps.gov/chis/)



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### CREDITS

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## WELCOME FROM THE SUPERINTENDENT

The park staff and I wish to welcome you to Channel Islands National Park, one of North America's magnificent treasures. Close to the California mainland, yet worlds apart, the park encompasses five of the eight California Channel Islands (Anacapa, Santa Cruz, Santa Rosa, San Miguel and Santa Barbara) and their ocean environment, preserving and protecting a wealth of natural and cultural resources. The park bridges two biogeographical provinces, and in

a remarkably small place, harbors the biologic diversity of nearly 2,500 miles of the North American coast. The Channel Islands are home to over 2,000 terrestrial plants and animals, of which 145 are found nowhere else in the world. Like the Galapagos Islands of South America, isolation has allowed evolution to proceed independently on the islands. Marine life ranges from microscopic plankton to the blue whale, the largest animal to live on earth. Archeological and cultural resources span a period of more than 10,000 years of human habitation.

The protection of these fragile island resources was ensured when Congress, in the act that created Channel Islands National Park in 1980, established a long-term ecological monitoring program to gather information on the current health of resources and predict future conditions. This information provides park and natural resource managers with useful products for recreation planning, conservation programs and early identification of critical issues.

The islands were set aside by Congress not only to preserve these resources, but also to provide for your enjoyment. If you visit the park, you will be one of a very select group. Few people actually see this park because it is not easy to get to—you can't drive to the islands. A short, but exciting, ocean voyage or a commercial flight in a small airplane is required. The park is one of the least visited of all of America's national parks, with less than 620,000 visitors (includes visitors to mainland visitor center) in the busiest year. The relatively light visitation enhances the islands' feeling of solitude and assists in the protection of fragile resources. In establishing the park, Congress recognized the value of solitude by allowing only controlled, low-impact visitation. So a visit to this national park will always provide a marked contrast to the bustle of the Southern California most people experience.

We are delighted you are interested in this marvelous place. Thanks for making the effort! We hope this visitor guide encourages you to safely explore and discover Channel Islands National Park while taking care to protect and keep these beautiful and fragile islands unimpaired for future generations.

*Tim Setnicka, Superintendent*



## GENERAL INFORMATION

**Visitor Center:** The Channel Islands National Park Visitor Center features a bookstore, a display of marine aquatic life, and exhibits featuring the unique character of each park island. Visitors also will enjoy the 25-minute park movie, "A Treasure in the Sea," in the auditorium.

Channel Islands National Park  
1901 Spinnaker Drive (805) 658-5730  
Ventura, CA 93001 [www.nps.gov/chis/](http://www.nps.gov/chis/)

·Hours: 8:30 a.m. to 5 p.m., daily  
·Holidays: Visitor Center is closed 2 days a year—Thanksgiving and December 25

**Outdoors Santa Barbara Visitor Center:** This visitor center not only has one of the best views of Santa Barbara, but also offers visitors exhibits and information about Channel Islands National Park, Los Padres National Forest and Channel Islands National Marine Sanctuary. Open daily; call for hours.

113 Harbor Way (805) 884-1475  
Santa Barbara, CA 93001

**Interpretive Information:** Books and materials about the park are available for sale through the Southwest Parks and Monuments Association either in the park visitor center or by mail order. This nonprofit organization supports the educational and research programs of the park. For information contact:

Southwest Parks and Monuments Association  
Channel Islands National Park  
1901 Spinnaker Dr., Ventura, CA 93001  
(805) 658-5730



*Interpretive walk, Anacapa Island*

**Interpretive Programs:** Weekends and holidays, rangers offer a variety of **free public programs** concerning the resources of the park: 11:00 a.m.—*Tidepool Talk*; and 3:00 p.m.—*Interpreting the Language of the Park* (in-depth, interpretive programs on a variety of topics). For information about specific program dates and to learn more about the park, call, write or visit the park's visitor center. On the islands, rangers and volunteer naturalists offer guided hikes throughout the year.

**Where to Stay—Accommodations and Services:** There are no accommodations or services available on the islands. Visitors must bring all their own food, water and other supplies. Public phones are not available. Primitive camping is available on every island. Please refer to the camping section on page 10 for more information. For accommodations in Ventura or Santa Barbara contact:

Ventura Visitor and Convention Bureau  
89C South California St. (805) 648-2075  
Ventura, CA 93001

Santa Barbara City Visitor Center  
1 Santa Barbara St. (805) 965-3021  
Santa Barbara, CA 93103

# WHEN TO VISIT—THROUGH THE YEAR

Visitors often ask what time of year they should visit Channel Islands National Park. Since the park is located in “sunny” Southern California, it may seem that the obvious answer is “any time of year.” And, true, you can visit throughout the entire year. But, believe it or not, we do have seasons here in Southern California. While the seasonal changes are nothing like one would find in Minnesota, there are differences that visitors should take into consideration when visiting the park. Each season has its own character and casts a unique mood over the islands.

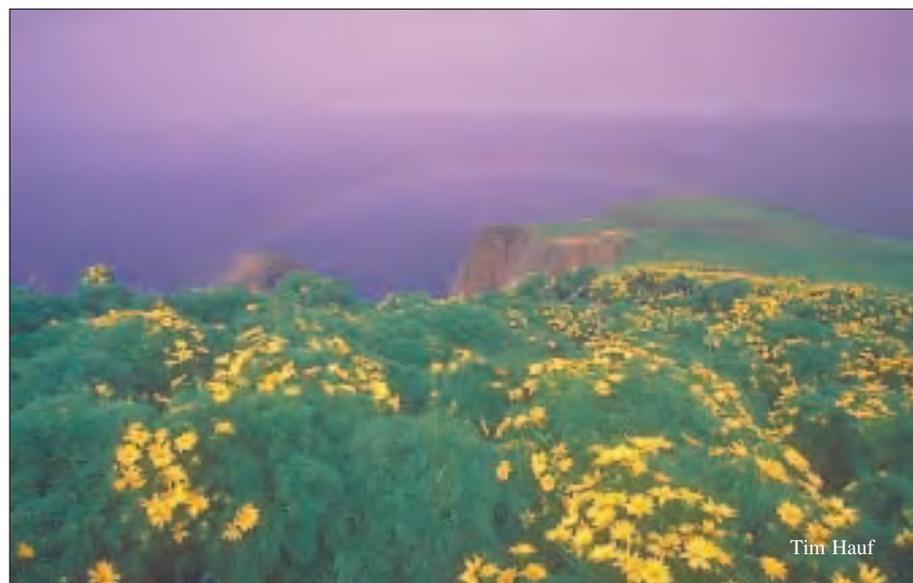
In addition, visitors also should be aware that ocean and weather conditions vary considerably from day-to-day and island-to-island. Although this makes planning your visit a little difficult, we must remember that this unpredictable and, at times, unforgiving weather is one of the main reasons that the islands have been afforded so much isolation and protection from the rapid changes seen on the mainland. It is, in part, what makes the Channel Islands such a unique and wonderful place.

We encourage you to take the opportunity to fully enjoy the islands throughout the entire year. For Channel Islands National Park is truly a place for all seasons.

## Climate

In general, the islands have a Mediterranean climate year-round. Temperatures are relatively stable, with highs averaging in the mid-60s (°F) and lows in the low-50s. The islands receive most of their precipitation between December and March. Spring starts the warming trend toward summer when temperatures average in the low-70s.

**However, visitors must be prepared for high winds, fog, rough seas and sea spray at any time.** Winds are often calm in the early morning and increase during the afternoon. High winds may occur regardless of the forecast, especially on the outer islands, Santa Rosa and San Miguel (40-knot winds are not unusual). Anacapa, eastern Santa Cruz and Santa Barbara Islands have more moderate winds. The calmest winds and sea conditions often occur August through October. Dense fog is common during the late spring and early summer months, but may occur at any time. Ocean water temperatures range from the lower 50s (°F) in the winter to the upper 60s in the fall.



Arch Point, Santa Barbara Island

Tim Hauf



## Spring

- Although temperatures are becoming warmer, strong winds often occur during this season. Dense fog is common during the late spring.
- The islands are green and wildflowers reach peak bloom, especially the brilliant yellow coreopsis flowers. During a normal year of rainfall, this occurs by late January through March.
- Western gulls and other seabirds begin nesting.
- Island fox pups are born.
- Spring bird migration is underway.
- Whale watching for gray whales comes to an end.
- California sea lions and northern fur seals start to gather at their rookery sites.
- Peregrine falcons and other landbirds begin nesting.



Tim Hauf

Campground, San Miguel Island

## Fall

- The best chance for warm weather, calm winds and seas continues. However, beginning around October, strong east or Santa Ana winds are possible.
- Many consider the fall as the best time of year for snorkeling, diving, kayaking and swimming. Ocean temperatures may reach 70° (F) in early fall and visibility may reach 100 feet.
- Blue and humpback whale watching comes to an end in early fall.
- Fall bird migration is underway.
- Northern elephant seals begin to gather at their rookery sites in late fall.

## Winter

- Temperatures begin to cool. Winter storms start to appear, with most rain falling between December and March. Nevertheless, beautiful, sunny, clear winter days occur between storms.
- Some of the best sunsets of the year occur during this time of year.
- Gray whale watching begins at the end of December and lasts until April.
- Northern elephant seals begin pupping in early winter.
- Harbor seals begin pupping in late winter.
- Islands begin to turn green and wildflowers start blooming during the late winter months.
- California brown pelicans begin nesting.



Gray whale watching

NPS



Poppies, lupine, and locoweed, San Miguel Island

Tim Hauf

## Summer

- Afternoon winds are common. Fog diminishes near midsummer. Calm winds and seas become more frequent near the end of summer.
- Ocean temperature begins to warm, reaching the high 60s (°F) by end of summer. Underwater visibility increases.
- Summer is the ideal time for sailing, snorkeling, diving, kayaking and swimming.
- The park’s underwater video program begins on Anacapa with live broadcasts at mainland visitor center.
- Seabird and landbird chicks fledge (leave the nest and fly).
- Although the vegetation begins to dry out, some plants like gumplant, buckwheat, poppies and verbena continue to bloom.
- Whale watching begins for blue and humpback whales.
- California sea lions and northern fur seals begin pupping.
- Backcountry beach camping season begins on Santa Rosa Island.
- Most people visit during the June through August period.

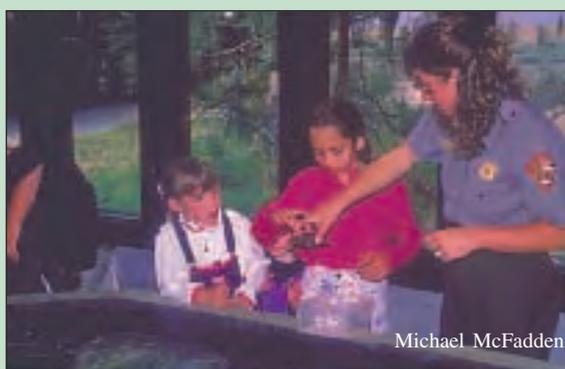


BY CAROL PETERSON, Education Specialist, Channel Islands National Park

Who would like to take a close look at a sea star, examine a pygmy mammoth bone, learn more about “The Island of the Blue Dolphins,” or set foot on one of the Channel Islands? Then the park’s education program is for you.

Parks as Classrooms is the education program of the National Park Service in partnership with the National Park Foundation. It encompasses many different kinds of experiential education programs at national parks throughout the country. Each year park rangers at Channel Islands National Park share the park resources with over 10,000 students in classrooms and nearly again that many at the park visitor center.

A specially-equipped van can take tidepool creatures



Michael McFadden

Tidepool program, mainland visitor center

right to the classroom. Other in-class programs for local schools cover a variety of natural and cultural history topics for grades 2–5. Programs at the visitor center meet the needs of classes from preschool through university level. All programs are tied to the curriculum students are studying.

There is no charge for these programs. For more information contact the park’s education coordinator at (805) 658-5735.

Island Packers, an official park concessionaire, has been transporting passengers to the Channel Islands for 30 years. Seven different hands-on programs are offered for students. They range from half-day whale watching to full-day Anacapa and Santa Cruz Island trips to the new Two-Day Floating Classroom Excursion. For more information call (805) 642-1393 or visit the web site at <http://www.islandpackers.com>.

# HOW TO GET THERE

## Boat Transportation

**Public boat transportation** is available year-round to all five islands by the park concessionaires, Island Packers and Truth Aquatics. In addition, Island Packers offers whale watching trips while Truth Aquatics also offers scuba diving trips.



For departures out of Santa Barbara Harbor contact:

Truth Aquatics at Sea Landing  
301 West Cabrillo Blvd. (805) 963-3564  
Santa Barbara, CA 93101 www.truthaquatics.com

**Private boaters** may land on all five islands within the park throughout the year. Please see "Private Boat Landing" section for more information.



## Air Transportation

**Public air transportation** for day visits and camping trips is available year-round to Santa Rosa Island by park concessionaire Channel Islands Aviation. Flights depart from Camarillo Airport and take approximately 45 minutes to reach the dirt airstrip on the island. For departures contact:



Channel Islands Aviation  
305 Durley Avenue. (805) 987-1301  
Camarillo, CA 93010 www.flycia.com

**\*Private aircraft may not land within park boundaries. All aircraft must maintain a minimum 1000-foot altitude above land and sea surfaces within the park.**

For departures out of Ventura and Channel Islands (Oxnard) Harbors contact:

Island Packers, Inc. Information: (805) 642-7688  
1867 Spinnaker Dr. Reservations: (805) 642-1393  
Ventura, CA 93001 www.islandpackers.com

Island	Frequency of Trips	Travel Time (one way) -from Ventura -from Santa Barbara	Landing Conditions
Anacapa	Year-round: 7 days/week	1 hour 2 hours	Visitors must climb from the boat up a steel-rung ladder to a dock. Once ashore, visitors must climb 154 stairs to the top of the island. Non-landing trips are available.
eastern Santa Cruz (NPS property)	Year-round: 5-7 days/week	1 hour 2 hours	Visitors must climb from the boat up a steel-rung ladder to a pier.
western Santa Cruz (TNC property)	Year-round: 2-5 days/week	1-2 hours 2 hours	Visitors must be prepared for skiff landings. Contact The Nature Conservancy for more information: 213 Stearns Wharf, Santa Barbara, CA 93101 (805) 962-9111
Santa Rosa	Spring to fall: 12 days/month Winter: 3 days/month Flights: 7 days/week, year-round	3 to 3 1/2 hours 3 hours Flights: 45 minutes	Visitors must climb from the boat up a 20-foot, steel-rung ladder to a pier or be prepared for beach landings by skiff. Strong winds and rough seas are possible. Plane lands on a graded dirt airstrip. Turbulence is possible.
San Miguel	Spring to fall: 12 days/month Winter: 3 days/month	4 1/2 to 5 hours 4 to 4 1/2 hours	Skiff landings on the beach--be prepared to waterproof gear and possibly to get wet. Strong winds and rough seas are possible.
Santa Barbara	Spring to fall: 4 days/month Winter: 2 days/month	3 hours 6 hours	Visitors must climb a 10-foot, steel-rung ladder to the top of the pier from a skiff. Once ashore, visitors must walk uphill 1/4 mile with 131 long steps to the top of the island.
Multi-island trips	Year-round: 3 trips/month	Varies depending on destination	Trips include visits to at least two islands. These trips include meals and shipboard lodging.

## PARTNERS IN PRESERVATION

Both Channel Islands National Marine Sanctuary and The Nature Conservancy are partners with the National Park Service in preserving and protecting the Channel Islands. The sanctuary, designated in 1980, includes 1,252 nautical miles of ocean from mean high tide to six nautical miles offshore of the five islands within the park. The Nature Conservancy, a private, nonprofit organization dedicated to the preservation of natural diversity, owns and manages the western 75% of Santa Cruz Island. Together, the park, the sanctuary, and The Nature Conservancy are a bulwark for cultural and biological diversity, preserving the islands' history and prehistory, and protecting vital habitat for scores of marine and terrestrial plant and animal species.

Channel Islands National Marine Sanctuary  
13 Harbor Way  
Santa Barbara, CA 93109  
(805) 966-7107

The Nature Conservancy  
213 Stearns Wharf  
Santa Barbara, CA 93101  
(805) 962-9111



## HANTAVIRUS ON THE CHANNEL ISLANDS

Hantavirus has recently been found in deer mouse populations at Channel Islands National Park. This mouse-carried virus also has been found in many locations on the mainland. This is a potentially fatal disease, and some basic precautions should be taken.

- **Avoid contact with rodents.** Rodents are hosts for a variety of diseases and parasites, including ticks and fleas, which may carry plague and rabies. Hantavirus is transmitted through the body fluids of the deer mouse, and can become aerosolized when large masses of feces and dried urine are disturbed. People hiking and camping on the islands are considered to be at low risk; rather, most cases of hantavirus infection have occurred when people have cleaned out or lived in buildings that have been inhabited by large numbers of rodents for many years. The precautions for avoiding infection by hantavirus are the same as those for the avoidance of any illness that may be contracted from rodents. When camping or hiking on the islands, the basic practices of cleanliness will reduce your chance of rodent contact.
- **Do not feed any wild animals.** Viruses and diseases are often passed through saliva. To reduce your chances of being bitten, avoid contact with wild animals.

- **Keep food and drink in rodent-proof containers.** On the islands, the mice are mostly active at night, but will also come out during the day while you are away from your site. It is best to keep food and dishes in plastic coolers or other containers that mice cannot chew through. This also applies to trash. It is not recommended to store food within tents, backpacks or clothing since mice have been known to chew through these items.
- **Prevent entry of mice into your tent.** Mice will go everywhere in their search for food, so keep your tent screen zipped even when you are nearby. Keep your clothing and footwear inside your sealed tent especially at night.
- **Symptoms of Hantavirus infection**  
Infection by hantavirus causes flu-like symptoms followed by acute respiratory distress. If you experience fever, aches, and/or stomach cramps and believe you may have had contact with rodents within the last 30 days, contact your physician immediately and inform your physician that you have had contact with rodents and possibly hantavirus.

*Jean M. Keast*

seals during the 1800s. By 1900, only a remnant population of approximately 50 animals remained on little Guadalupe Island off Baja California. This species, which is now such a common component of the island's marine ecosystem, was almost extinct. The decline of hunting and the isolation of the islands allowed the population of elephant seals to grow and expand throughout this century to occupy their former range. Currently, elephant seals are



Tim Hauf

Elephant seals, Point Bennett, San Miguel Island

The decline and recovery of California sea otters is a very similar story to that of elephant seals. Hunting caused the near extinction of California sea otters. Protection from hunting has allowed substantial recovery during this century. However, sea otters are still listed as a threatened species and do not occupy their historic range at the park islands.

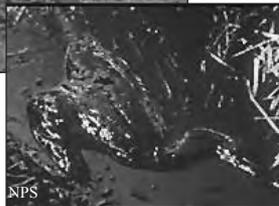
**The Canary in the Mine**

Natural areas, such as Channel Islands National Park, play an important role in indicating when critical changes are happening on the earth, our life support system. Parks can play the role of "the canary in the mine." Just as the miner's canary alerted mine workers to poison gases in a shaft, natural areas can alert us to biological, chemical, and environmental changes that will affect our quality of life and the survival of species.

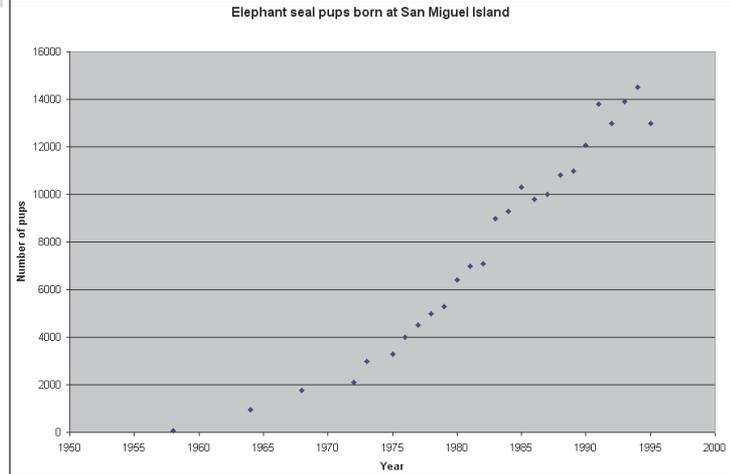
The Channel Islands played a role in two events in 1969 that galvanized our nation to take seriously the growing warning signs of our deteriorating environment. In January 1969, an environmental disaster occurred in the Santa Barbara Channel. An offshore oil platform suffered a blowout. 200,000 gallons of crude oil escaped into the ocean over a period of eleven days. The oil created an 800-square-mile slick that impacted all of the northern Channel Islands and nearby mainland beaches. Thou-



The clean-up and aftermath of the 1969 Santa Barbara oil spill.



NPS



nest. For several years, the pelicans suffered nearly total reproductive failure. In 1970, only one chick was successfully raised on Anacapa Island, an island that had historically been the largest breeding colony for California brown pelicans on the west coast of the U.S.

The cause of the failed pelican breeding was DDT, an organochlorine pesticide. In the late 1960s and early 1970s the mean eggshell thickness was found to be approximately 50% thinner than normal. High levels of DDT residues were correlated with the eggshell thinning--the higher the DDT levels the thinner the eggshells. Later analysis of museum eggshells collected before 1943 and the notes of biologists showed that the eggshells of California brown pelicans were substantially thinner by 1962.

Also, a long-term decline of brown pelicans had started along the California coast as early as the mid-1950s. DDT similarly affected bald eagles and peregrine falcons. However, because there was no standardized biological monitoring of pelicans (or any other wildlife), the problem wasn't identified until the populations had nearly collapsed.

Pollutants have hit other species hard on the Channel Islands. Bald

eagles were once an important component of the island ecosystem. It is estimated that at least twenty nesting pairs of bald eagles occurred on the park islands in the early 1900s. Hunting, egg collection, and DDT all took their toll and resulted in the total elimination of bald eagles by the 1950s.

Fortunately, the American public and government reacted strongly to the loss of wildlife and the growing pollution of the environment. Many consider the publicity surrounding the Santa Barbara oil spill and the fate of the California brown pelican a major impetus to the environmental movement. Just one year later, in the spring of 1970, Earth Day was born.

**Everything is Connected**

John Muir said, "When you try to pick out anything by itself, you find it hitched to everything else in the universe." We have found this to be true as we attempt to restore healthy natural ecosystems to the Channel Islands.

A prime example of the "connectedness" of ecosystems and the unintended consequences of non-native species introductions is the plight of the island fox. The direct cause of the decline of island foxes is predation by golden eagles (see article in side bar). However, the true cause of island fox decline was put in place by a combination of changes that have occurred over a period of 150 years. The combination of the introduction of non-native pigs, the removal of native shrublands by grazing animals, and the extirpation of bald eagles created an unnatural situation in which golden eagles could flourish. The feral pigs provide a year-round food supply for the golden eagles. The grasslands that have replaced the native shrublands do not provide adequate cover for the foxes. The fish-eating bald

eagles no longer competitively excluded their cousins, the golden eagle. The result--predation by non-native golden eagles has driven three subspecies of island foxes near to extinction. The park has had some success in the capture and removal of golden eagles. However, until the feral pigs are removed from Santa Cruz Island and the bald eagles are re-established on the islands, the long-term survival of the foxes cannot be assured. The National Park Service and The Nature Conservancy are working together to eliminate feral pigs from Santa Cruz Island.

Please see FORWARD TO THE PAST, 12

**Park Begins Aggressive Recovery Actions for Island Foxes**

BY TIM COONAN, Wildlife Biologist, Channel Islands National Park

Faced with the imminent extinction of three subspecies of rare island fox, Channel Islands National Park began an aggressive recovery program in 1999 to bring island fox populations back to viable levels. After convening a meeting of fox and eagle experts in 1999, the park acted on their recommendations and began implementing emergency actions to arrest the decline. The actions focus on removing the primary mortality factor (golden eagles) and increasing the wild fox populations through captive breeding.

To remove eagles, the park is working cooperatively with raptor biologists from the Predatory Bird Research Group at University of California, Santa Cruz. Eagles are trapped on the islands using pig carcasses or live rabbits for bait. Within 24 hours of capture, they arrive at their release sites in northeastern California, equipped with satellite transmitters to track their post-release movements. Thirteen eagles were removed from Santa Cruz Island in 1999-2000, and none have returned to the islands, or even attempted to cross the Sierra Nevada. Raptor biologists will remove the remaining handful of eagles in winter 2000-2001. But until feral pigs are removed from Santa Cruz Island, they may attract golden eagles from the mainland



Dan Richards

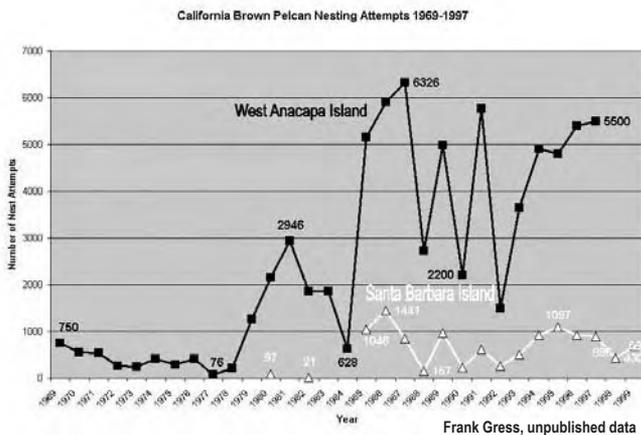
to the islands. Island fox populations on several islands are so low that only captive breeding will bring them back to self-sustaining levels. To com-

ound the problem, very little is known about the reproductive cycle of island foxes, and they have never been bred in captivity before. Nevertheless, the park built a captive breeding facility on San Miguel in 1999 and brought 14 foxes into captivity. Only one fox, a radio-collared female, remains in the wild on San Miguel. Only four of the 14 foxes were male, so they were paired up with four females for the 1999-2000 breeding season. One of those pairs produced a litter of two pups, a male and a female, in April 2000. Biologists were encouraged by the one successful mating, but at this rate, it may take a number of years to recover the population.

Captive breeding was initiated on Santa Rosa Island in spring 2000, when twelve foxes were brought into captivity. Perhaps as few as 10 foxes remain in the wild on Santa Rosa. Three of the six captive females were pregnant and gave birth in captivity, producing litters of four, three and one pup, respectively. Most of those pups will be paired up with wild-caught foxes for breeding in 2000-2001. None can be released until all eagles are removed from the northern Channel Islands.

What's next for the island fox recovery effort? Biologists are currently preparing a long-range plan for preservation of the species. Both eagle removal and island fox captive breeding will continue until it is safe to release foxes back into the wild, and until wild populations have been restored to self-sustaining levels.

For more information on the island fox, please visit us at [www.nps.gov/chis](http://www.nps.gov/chis).



Brown pelican chick

sands of seabirds and marine mammals died.

At the same time, scientists were becoming aware of a serious decline in the breeding success of California brown pelicans. Adult brown pelicans appeared to still be numerous, providing a deceptive façade that things were all right. However, when the scientists looked more closely, they realized with horror that the pelicans were unable to nest successfully because the eggshells were too thin to withstand incubation and thus were crushed in the

## TIDEPOOLING

Due to their relative isolation and protection, the tidepools in Channel Islands National Park are some of the best within Southern California. Anemones, sea stars, urchins, limpets, periwinkles, chitons, barnacles, mussels and many other beautiful species can be seen at numerous pristine tidepool sites, including Frenchys Cove on Anacapa. Check with the park's boat concessionaires for trips to these tidepooling areas.



Tim Hauf

Tidepooling, Frenchys Cove, Anacapa Island

The area between the land and the sea is not distinct, but is a zone of transition. This area may be covered with water during high tide or exposed to sunlight during low tide. Life in this intertidal region must be the hardest within the marine environment—able to withstand hours of exposure and the incessant pounding of the energy-filled surf.

Intertidal life has adapted to the sea and the land. When looking at a tidepool area, notice how plants and animals may be found in certain areas and not in others. Those living in the upper splash zone are tolerant to sunlight, heat and water loss, and have either a means to “shelter” themselves or the ability to move into an area of greater moisture. An animal with a tightly closed shell or a shell firmly attached to rock will hold water within, so that it does not require water surrounding it at all times. Animals found in rock crevices and submerged pools usually require more moisture to prevent them from drying out.

How an animal feeds often depends on its ability to move. An animal that moves about is able to search for its food. Some graze the rocks for algae, while others feed on settled debris. An animal that remains stationary feeds on food particles suspended within water.

Because space is a limiting factor, there is competition between organisms. Many animals and plants are found in a small area, some may live on each other, or use an old shell as a surface on which to live. This is one important reason why collecting is not permitted—you may be taking away a home.

Please see TIDEPOOLS, 7



Jeff Foot

Nesting California brown pelican

## ANACAPA ISLAND

Crossing the channel to Anacapa Island, one begins to understand why the island's name was derived from its Chumash Native American Indian name, “Ennepah.” Seeming to change shape in the summer fog or afternoon heat, the three small islets of Anacapa look like an “island of deception or a mirage.” Almost five miles long, these islets, appropriately named East, Middle and West Islands and inaccessible from each other except by boat, have a total land area of about one square mile (700 acres). Waves have eroded the volcanic island, creating steep, towering sea cliffs, sea caves and natural bridges, such as forty-foot-high Arch Rock—the symbol of Anacapa and Channel Islands National Park.

Exploring East Anacapa's 1 1/2-mile trail system allows visitors to experience the island's native vegetation, wildlife and cultural history. Although for much of the year the island vegetation looks brown and lifeless, the winter rains transform the landscape. Emerging from dormancy, the native plants come alive with color. The strange tree sunflower, or coreopsis, blossoms with bright yellow bouquets that are so vivid and numerous they can sometimes be seen from the mainland. Vibrant red paintbrush, island morning glories and pale buckwheat add touches of color to the island's palette.



Tim Hauf

Western gull with chick

Seabirds are probably the most conspicuous wildlife on Anacapa Island. Thousands of birds use Anacapa as a nesting area because of the relative lack of predators on the island. While the steep cliffs of West Anacapa are home to the largest breeding colony of endangered California brown pelicans, all the islets of Anacapa host the largest breeding colony of Western gulls in the world. Western gulls begin their nesting efforts at the end of April, sometimes making their shallow nests just inches from island trails. Fluffy chicks hatch in May and June and fly away from the nest in July.



Tim Hauf

Western gull chicks

The rocky shores of Anacapa are perfect resting and breeding areas for California sea lions and harbor seals. Raucous barking of sea lions can be heard from most areas of the island. Several overlooks (Cathedral Cove and Pinniped Point) provide excellent spots to look down on seals and sea lions in the island coves.

### Anacapa Island Facts

- Anacapa Island is located in Ventura County.
- Anacapa is five miles long and 1/4 mile wide.
- The average rainfall on Anacapa is between eight and thirteen inches per year.
- The Anacapa deer mouse is only found on Anacapa Island.
- Frenchy LeDreau lived at Frenchys Cove from 1928 to 1956.
- Twenty-nine Chumash archeological sites have been identified on Anacapa Island.
- There are one hundred and thirty sea caves on Anacapa.



Michael McFadden

Inspiration Point, Anacapa Island

Anacapa's rich kelp forests (ideal for kayaking, snorkeling and diving) and tidepool areas provide visitors with the opportunity to meet some of the resident ocean animals upclose. Visitors may also catch a glimpse of the fascinating undersea world of the kelp forest without getting wet. During the summer, park rangers dive into the Landing Cove on East Anacapa with a video camera. Visitors can see, through the eye of the camera, what the diver is seeing—bright sea stars, spiny sea urchins and brilliant orange garibaldi—by watching video monitors located on the dock or in the mainland visitor center auditorium. Divers answer questions from visitors while they are underwater with a voice communication system and some help from a park interpreter on the dock. This program is simultaneously transmitted to the mainland visitor center.

Anacapa Island has a rich human history as well. Shell midden sites indicate where Chumash people camped on the islands thousands of years ago. In addition visitors can view the 1937 light station whose Mission Revival style buildings include the lighthouse, fog signal building, one of four original keeper's quarters, a water tank building and several other service buildings. The original lead-crystal Fresnel lens, which served as a beacon to ships until an automated light replaced it in 1990, is now on exhibit in the East Anacapa Visitor Center.

### Anacapa Island: “Things To Do”

- The perfect place for a half-day, one-day or short overnight camping trip. If you have time to visit just one island, this may be the place.
- Almost all trips to Anacapa are to East Anacapa Island. A limited number of trips are offered throughout the year to Frenchys Cove on West Anacapa Island.
- Although hiking options are limited with only 2 miles of trails, the scenery is unmatched. Except for the staircase to the top of the island, the trails are relatively flat and easy. Access to West Anacapa is from the water only and is limited to Frenchys Cove.
- Ideal place for swimming, snorkeling, diving and kayaking. Since Anacapa is a cliff island, access to the water is only at the landing cove on East Anacapa Island (no beaches) and at Frenchys Cove on West Anacapa.
- Underwater video program during the summer.
- Excellent wildlife viewing—seabirds (gull chicks in early summer), seals and sea lions.

(Please refer to related articles for more information.)

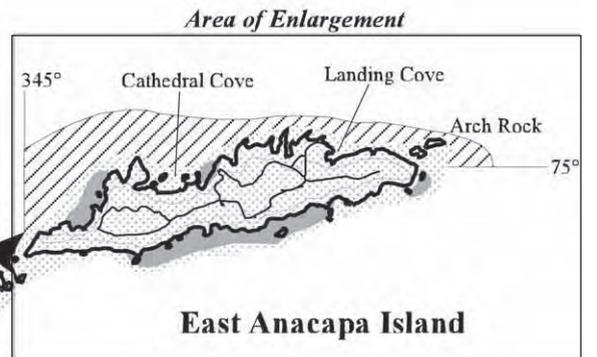
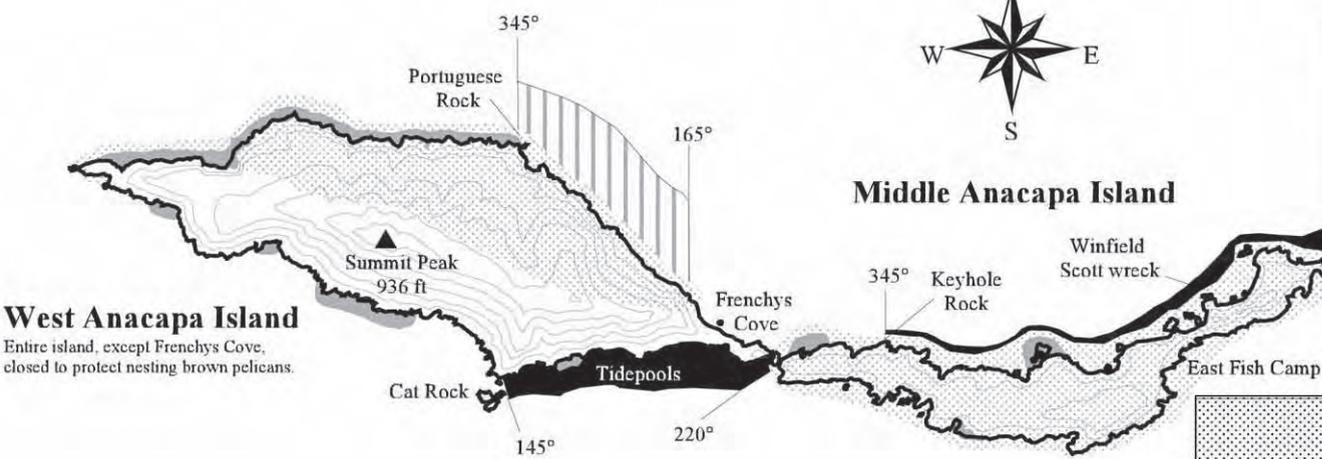


Tim Hauf

Lighthouse, coreopsis and Indian paintbrush, Anacapa Island



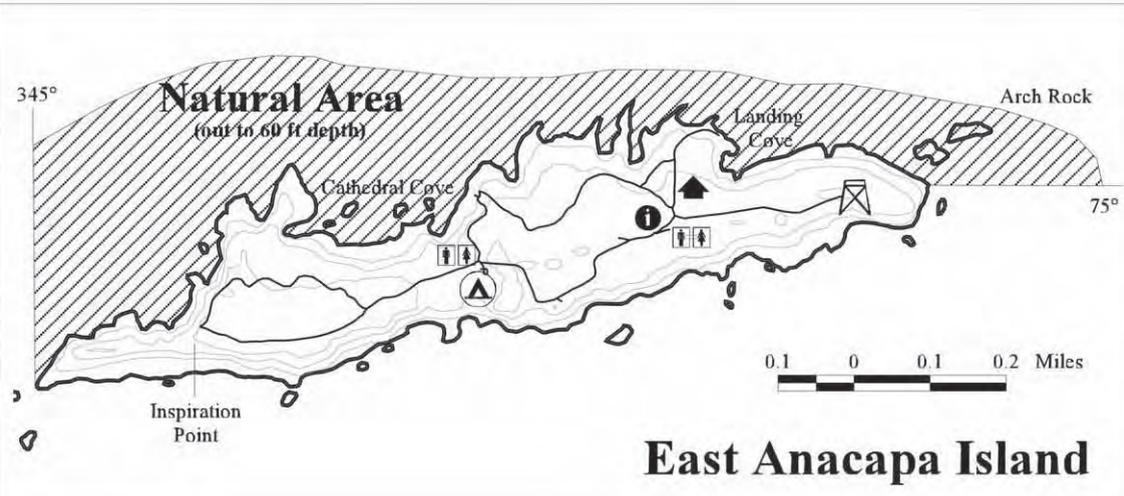
### Middle Anacapa Island



### East Anacapa Island

#### Legend

- Trail
- 40 meter (130 ft) contour (inset: 20 meters or 65 ft)
- Pinniped haul-out and rookery sites  
AVOID DISTURBANCE. These sensitive areas are not limited to those marked on this map. They may be found throughout the island and should be avoided.
- Sea bird roosting and nesting sites  
AVOID DISTURBANCE. These sensitive areas are not limited to those marked on this map. They may be found throughout the island and should be avoided.
- No invertebrates may be taken in the designated area from mean high tide out to depths of 20 feet.
- No take or possession of any type native plant, fish, wildlife or other aquatic organism within a designated area from mean high tide to depths of 60 feet on the north side of East Anacapa Island.
- No entry from January 1 to October 31 in the area designated as the California brown pelican fledgling area. This area extends out to depths of 120 feet.
- Ranger station
- Restrooms
- Lighthouse
- Campground
- Visitor center



### East Anacapa Island

Destination (from visitor center)	Distance (miles, round trip)	Difficulty	Description
Inspiration Point	1 1/2	Easy	Extraordinary views throughout the entire hike. Not to be missed.
Lighthouse	1/2	Easy	A chance for a close look at the last permanent lighthouse built on the west coast.

\*Hikers must stay on island trails to protect fragile vegetation, nesting seabirds and for visitor safety.  
 \*Access to Middle (ranger-guided only) and West Anacapa (Frenchys Cove only) Islands is from the water only. A limited number of trips are offered throughout the year to Frenchys Cove.



Tim Hauf  
 Tall ship, Arch Rock, Anacapa Island

### TIDEPOOLS , continued from page 6

Although hardy against the forces of nature, the plants and animals of the intertidal zone cannot entirely endure the impact of humans. Since individuals interact with one another, minute changes in the area could disrupt the entire community.

- While exploring, keep in mind these tidepool tips:
- Watch your step! The rocks can be very slippery and there may be small animals on the rocks.
  - Keep an eye on the waves. The surge can sneak up on you.



Dan Richards  
 Navanax nudibranch

- Take your time and look carefully. Tidepool organisms are often very small and camouflaged.
- Do not collect anything! Not only is it unlawful, but if animals

and shells are taken, there may be nothing left for others to enjoy.

- If you pick up an animal to observe, please place it back where it was found. That particular spot is its home territory.



NPS  
 Nudibranch and purple urchins



Dan Richards  
 Giant green sea anemone

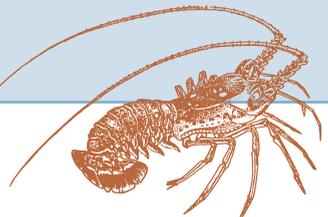
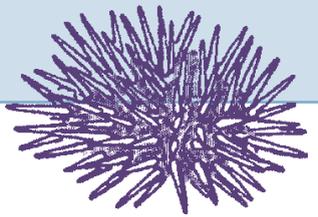


Tim Hauf



Dan Richards  
 Spanish shawl nudibranch

- Although you may not know the animals by name, through simple observation a great deal of information can be learned. Consider, for example, what keeps it from drying out? Why doesn't it get swept out to sea? Does it search for food or wait for food to come to it?



# SANTA CRUZ ISLAND

According to legend, Santa Cruz Island was named for a priest's staff accidentally left on the island during the Portola expedition of 1769. A Chumash Indian found the cross-tipped staff and returned it to the priest. The Spaniards were so impressed that they called this island of friendly people "La Isla de Santa Cruz," the Island of the Sacred Cross. Today, the protection and preservation of Santa Cruz Island is divided between The Nature Conservancy and the National Park Service. The Nature Conservancy owns and manages the western 75% of the island, while the eastern 25% is owned and managed by the National Park Service.

In its vastness and variety of flora, fauna and geology, Santa Cruz Island resembles a miniature California. At over 96 square miles in size and the largest of all the Channel Islands, Santa Cruz contains two rugged mountain ranges, the highest peaks on the islands (rising above 2,000 feet), a large central valley/fault system, deep canyons with year-round springs and streams and 77 miles of craggy coastline cliffs, giant sea caves, pristine tidepools and expansive beaches. One of the largest and deepest sea caves in the world, Painted Cave, is found on the northwest coastline of Santa Cruz. Named because of its colorful rock types, lichens and algae, Painted Cave is nearly a quarter-mile long and 100 feet wide, with an entrance ceiling of 160 feet and a waterfall over this entrance in the spring.

Continued on next page

## Santa Cruz Island Facts

- Santa Cruz Island is located in Santa Barbara County. Santa Cruz is California's largest island, almost three times the size of Manhattan. It is approximately 24 miles long and up to 6 miles wide (32 km by 9 km); 96 square miles (249 sq. km.); 62,000 acres (25,100 hectares).
- Average rainfall—20 inches. Temperature range—20° F to 100° F.
- Painted Cave is one of the largest known sea caves in the world.
- Diablo Peak (Devil's Peak) is the tallest peak on the Channel Islands at 2,450 ft. (730 meters).
- Santa Cruz has the greatest number of plant and animal species of all the Channel Islands.

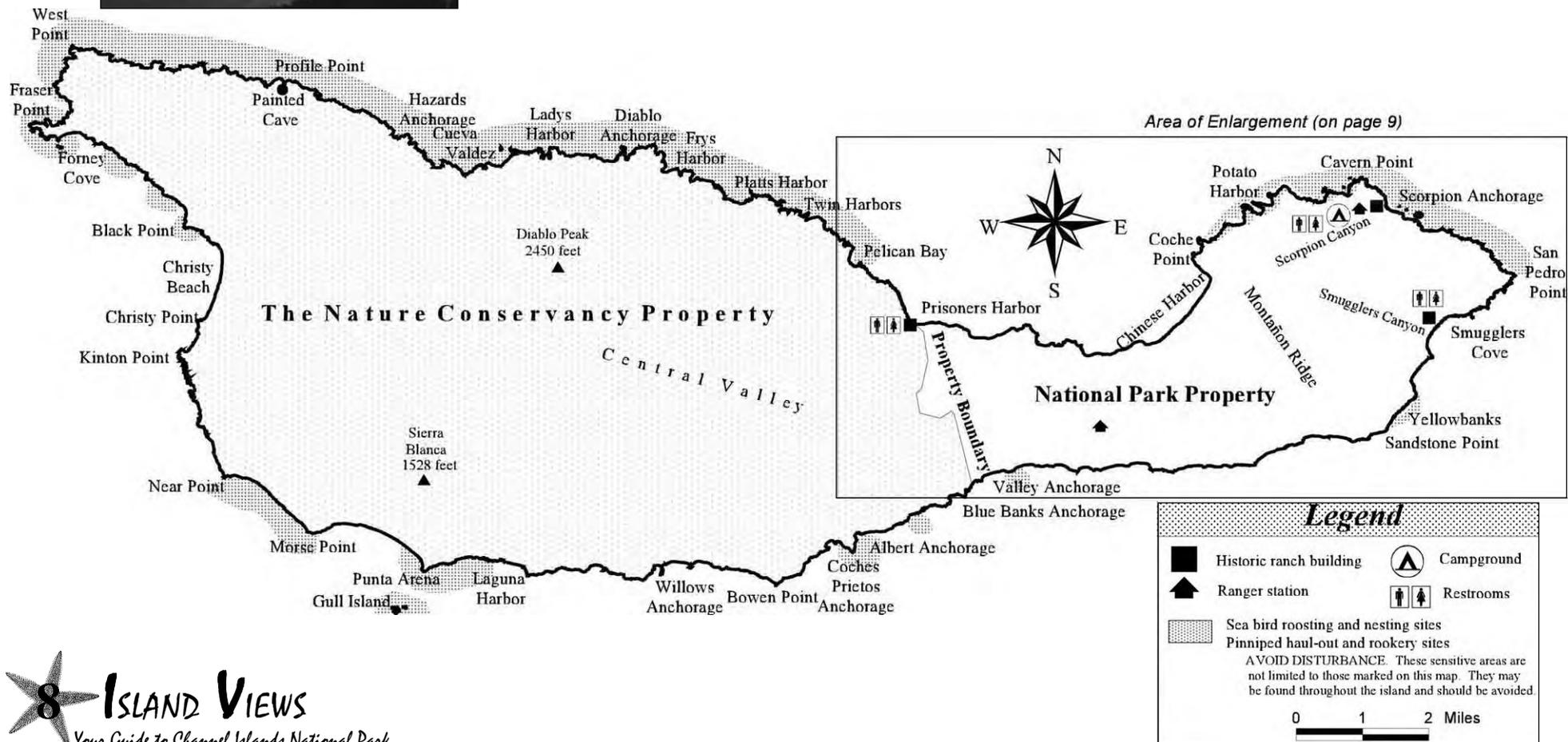


Prisoners Harbor, Santa Cruz Island  
Tim Hauf

Destination (from Scorpion beach)	Distance (miles, roundtrip)	Difficulty	Brief Description*
Historic Ranch	1/2	Easy	View the historic Scorpion Ranch complex dating to the late 1800s.
Cavern Point	2	Moderate	Magnificent coastal vistas. Gray whale viewing during season. Avoid cliff edges.
Potato Harbor Overlook	4	Moderate	Spectacular coastal views. Avoid cliff edges.
Scorpion Canyon Island Jay Hike	3 (direct to canyon for jay) 4.5 (loop hike)	Moderate to strenuous	Hike the loop clockwise to avoid a steep climb. To see the jay, go directly up Scorpion Canyon eventually leaving the trail for the rocky stream bed and follow it until you reach the first oak trees.
Scorpion Bluffs	2	Moderate	Great coastal views. Avoid cliff edges.
Smugglers Cove	7	Strenuous	Due to time constraints, this hike is not recommended for day-visitors who travel with concessionaires. Beach access at Smugglers Cove.
From Smugglers Cove:			
Smugglers Canyon	2	Moderate to strenuous	Opportunities to view native island vegetation. Be prepared for uneven terrain and loose rock. Water is present seasonally.
Yellowbanks	3	Moderate	This hike leads to an overlook. No beach access.
San Pedro Point	4	Moderate	Experienced hikers can hike off-trail through grasslands to this overlook.
El Montañon	8	Strenuous	Off-trail hike for experienced hikers. Incredible views from the ridge.
From Prisoners Harbor:			
Prisoners Harbor	1/4-1/2	Easy	View historic Prisoners Harbor area and search for the island jay.
Del Norte Trail Turn-off	2.2 (via Navy Road)	Moderate	A steep climb up the Navy Road to the turn-off for the <i>unmaintained</i> Del Norte Trail. Good views.
Navy Road-Del Norte Loop	8.5	Strenuous	Route includes <i>unmaintained</i> trails. For experienced hikers.
Navy Road-Del Norte Road Junction	7.6	Strenuous	Avoid <i>unmaintained</i> Del Norte Trail by following Navy Road and still get great coastal views of both the north and south side of the island.
Chinese Harbor	14.4 (via Del Norte Trail) 16.6 (via Navy Road)	Strenuous	A long hike that ends at the only beach accessible by land on the isthmus.
China Pines/Loma Pelona Road Junction	17.4 (via Del Norte Trail) 18.2 (via Navy Road)	Strenuous	From this junction, follow the road/trail northwest to explore the pines or head south along the Loma Pelona Road.
Montañon Ridge	20 (via Del Norte Trail) 20.8 (via Navy Road)	Strenuous	For experienced off-trail hikers. Must be able to read topographic maps.
Pelican Bay	4	Moderate to strenuous	This trail may only be traveled by those that have obtained a permit in advance from The Nature Conservancy or are accompanied by an Island Packer (a boat concessionaire) employee.

\*No hiking is allowed beyond the National Park boundary onto The Nature Conservancy property (Private boaters--please see page 23 for landing information). The boundary is the property line (marked by a fenceline) between Prisoners Harbor and Valley Anchorage.

**\*Before hiking, please refer to more detailed descriptions in the hiking guides available at island bulletin boards or mainland visitor center.**



These varied landforms support more than 600 plant species in ten different plant communities (from marshes and grasslands to chaparral and pine forests), 140 landbird and 11 land mammal species, three amphibian and five reptile species, and large colonies of nesting sea birds, breeding seals and sea lions, and other diverse marine animals and plants. Owing to millions of years of isolation, many distinctive plant and animals species have adapted to the island's unique environment, including the island scrub jay and eight plant species which are found only on Santa Cruz and nowhere else in the world.



Smugglers Canyon, Santa Cruz Island

The island also is rich in cultural history with 8,000 years of Chumash Native American Indian habitation and over 150 years of European exploration and ranching. Santa Cruz was once known as "Limuw" to the resident Chumash Indians. A dozen villages housed over 1,000 people, many of them mining extensive chert deposits for tools or producing "shell-bead money" used as a major trade item by tribes throughout California. The largest village on the island as well as on the northern Channel Islands, "Swaxil," occupied the area of Scorpion Ranch at the time of Spanish contact (1542). Large plank canoes, called "tomols," provided transportation between the islands and mainland. Remnants of their civilization can still be seen in thousands of "shell middens" on the island.



Cavern Point, Santa Cruz Island



Smugglers Cove, Santa Cruz Island



Island tree poppy

Remnants of the ranching era also can be seen throughout the landscape of the island. Adobe ranch houses, barns, blacksmith and saddle shops, wineries, and a chapel all attest to the many uses of Santa Cruz in the 1800s and 1900s. At the Scorpion Ranch adobe, the massive oven that produced bread for the entire island is still intact.

**Santa Cruz Island: "Things To Do"**

- One-day trips, and short or long overnight camping trips. (Only one-day trips are offered to The Nature Conservancy property.)
- Multi-day boat trips may visit Santa Cruz.
- Hiking options are unlimited with over 14,500 acres to explore on Eastern Santa Cruz Island.
- A one-day trip to The Nature Conservancy property offers one of the best hikes in the park—along the coast from Prisoners Harbor to Pelican Harbor.
- Great place for swimming, snorkeling, diving and kayaking. Beach access is available at Scorpion Anchorage and Smugglers Cove.
- Shade is available in the campground.
- Birdwatchers will not want to miss the endemic island scrub-jay—only found on Santa Cruz Island and no other place in the world.



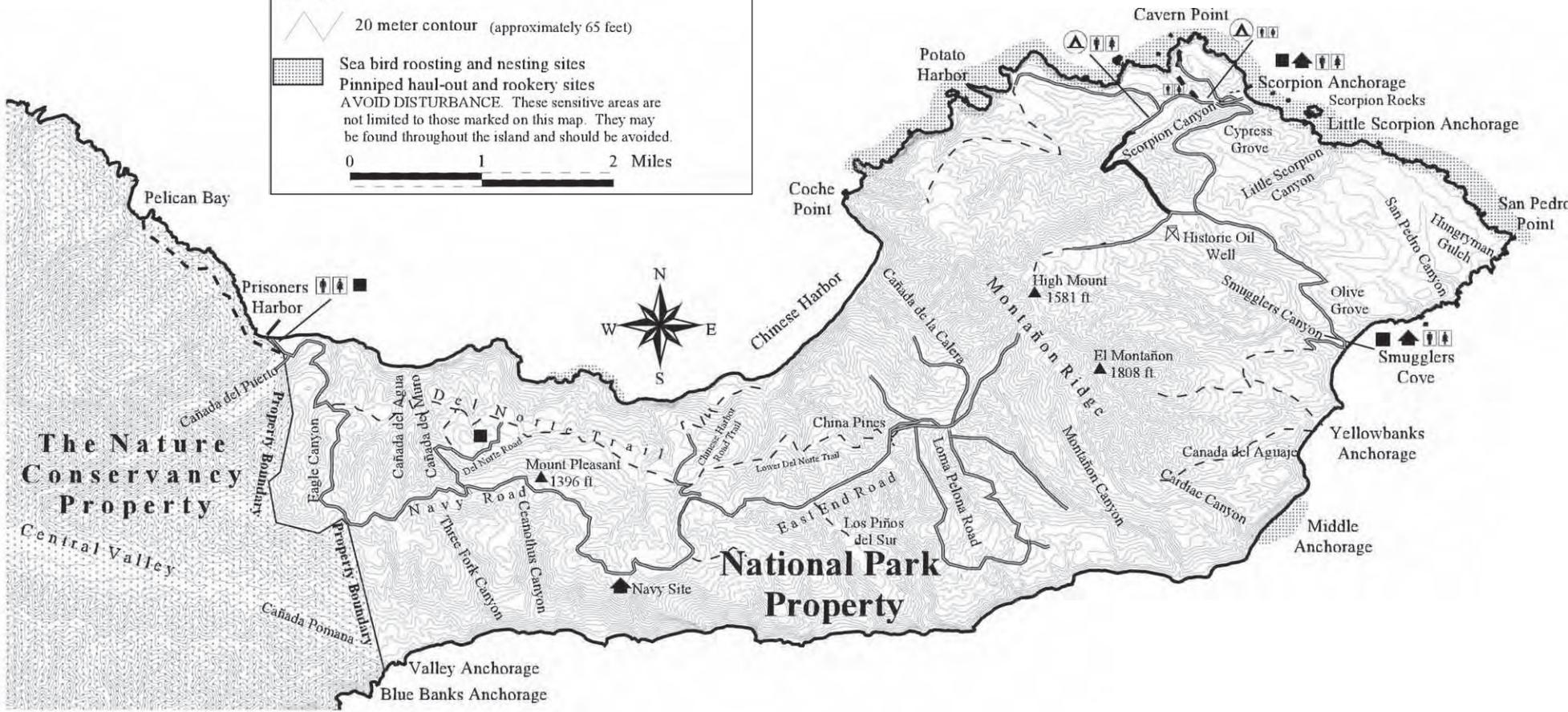
Island Scrub-Jay

(please refer to related articles for more information)

**Legend**

	Campground		Historic ranch building
	Restrooms		Ranger station
	Unmaintained Trail		Unimproved Road
	Maintained Trail		
	20 meter contour (approximately 65 feet)		
	Sea bird roosting and nesting sites Pinniped haul-out and rookery sites AVOID DISTURBANCE. These sensitive areas are not limited to those marked on this map. They may be found throughout the island and should be avoided.		

0 1 2 Miles



**Isthmus and Eastern Santa Cruz Island**

Before hiking, please refer to more detailed maps in the hiking guides available at island bulletin boards or mainland visitor center.

## CAMPING INFORMATION

Camping is available year-round on all five islands in Channel Islands National Park in National Park Service-managed campgrounds. There is currently one established campground on each island: above the landing cove on Santa Barbara; on the east islet of Anacapa; at Scorpion Ranch on Santa Cruz; at Water Canyon on Santa Rosa; and above Cuyler Harbor on San Miguel. No camping is allowed on The Nature Conservancy's western 75% of Santa Cruz Island. During certain times of year, backcountry beach camping is allowed only on Santa Rosa Island. Please refer to the "Backcountry Beach Camping Section" below.

### Camping Transportation

Because concession boats fill to capacity much faster than campground limits are met, campers must first secure transportation for an overnight trip to Channel Islands National Park. For transportation information, please refer to the "How To Get There" section.

### Camping Reservations

Camping reservations are required for all of the campgrounds. There are no entrance fees to visit the park, however, campground fees are \$10.00 per night per site. Reservations can be made no more than five months in advance. Information required for the reservations includes:

camping dates, transportation information and number of campers. Reservations can be made by calling 1 (800) 365-CAMP (2267) or through the Internet at <http://reservations.nps.gov>. A confirmation notice will be mailed to campers. Please refer to the "Backcountry Beach Camping" section for special permit information.

### Campground Facilities

Camping conditions are primitive and users must camp within designated areas. All campgrounds are equipped with picnic tables and pit toilets. **Water is not available at campgrounds and must be brought with you except at the Santa Rosa Island (Scorpion Ranch) campgrounds. No fires are permitted** except in designated fire rings on the beach near Scorpion Ranch campground on eastern Santa Cruz Island from Dec. 1st through May 15th. Only dead or downed non-native eucalyptus and Monterey cypress may be gathered on the island. Only Duroflame-type logs may be brought onto the island—no wood may be imported due to insects and disease. Enclosed camp stoves are permitted. Outer island campgrounds (San Miguel and Santa Rosa) have windbreaks for each campsite. Campsites are generally located close to one another. No trash containers are provided; campers must pack out their own trash. **Camping gear must be carried from landing areas to the campgrounds.**

Due to scavenging animals, including birds such as ravens, **campers are required to store all food and trash in animal- and bird-proof containers** (coolers, plastic, Rubber Maid- type boxes or other types of containers with sealing lids). Please use National Park Service (NPS) food storage boxes when provided. Call the Visitor Center to check on the availability of these boxes before

departing for the park islands. At Santa Cruz Island campgrounds (Scorpion Ranch and Del Norte), further precautions are needed due to scavenging pigs: do not store any food or trash in tents; secure pig proof containers to picnic tables or trees with straps or rope; or place food and trash in duffel bags and/or backpacks and hang from trees.

### Weather

Campers should be prepared for a variety of weather conditions, especially on the outer islands. Thirty-knot winds are not uncommon on Santa Rosa and San Miguel Islands. Sturdy, low-profile tents, stakes, and line for securing tents to ground, table, or wind shelters are recommended. Fog can occur on the islands during any season producing cool, damp conditions. All of the campgrounds, except eastern Santa Cruz, are located away from trees and shade. Overexposure to the wind and sun can be a serious

Island	Required Reservation	Distance From Landing to Campground	Number of Campsites	Campground Capacity
Anacapa	Yes	154 stairs, 1/2 mile	7	30
eastern Santa Cruz (Scorpion Ranch)	Yes	1/2 mile, flat	40	240
western Santa Cruz (The Nature Conservancy)	<b>NO CAMPING ALLOWED</b>			
Santa Rosa	Yes	1 1/2 miles, flat; backcountry beach camping is available	15	50
San Miguel	Yes	1 mile; steep uphill	9	30
Santa Barbara	Yes	1/2 mile, steep uphill	8	30

problem. Visitors are advised to bring supplies for an extra day in case boats are unable to pick up campers due to sea conditions.

### Suggested Camping Gear

Campers must be prepared for the primitive campground facilities and weather conditions. **Supplies and gear are not available on the islands. Gear must be transported up ladders at most landing areas, and carried some distance to the campgrounds.** Packing your gear in backpacks, duffel bags and

Needed	Suggested	Needed	Suggested
hat/visor/cap	bathing suit	food	seasick pills
sunglasses	gloves	sturdy tent	first aid kit
windbreaker/light jacket	poncho/rain jacket	campstove/cooking gear	garbage bags
shirts/pants that can be layered	sneakers/light footwear	water (1 gallon per person/ per day)	camera/film/binoculars
hiking boots	towel	sunscreen/flashlight	toiletries
normal clothing needs		sleeping bag/matches	sleeping pads

containers with handles makes transportation easier. The boat concessionaire requires that items weigh no more than 45 lbs. each. Visitors may get wet during loading and off-loading, so waterproof your gear. An extra pair of shoes packed in waterproof material is recommended. Campers should plan to layer clothing, as weather conditions tend to change from cool and damp in the mornings to bright, warm, and windy during the afternoons. Clothing that protects against wind is advisable year-round. Hiking boots are recommended for most island trails.

### Guided Camping Trips to Santa Rosa Island

Horizon West Adventures offers guided camping to Santa Rosa Island. Trips include round-trip air transportation from Camarillo airport, experienced camping guides/hosts, tents, plus meal provisioning and all necessary cooking gear. Call (562)799-3880 or visit [www.horizonwestadventures.com](http://www.horizonwestadventures.com) for more information.

## BACKCOUNTRY BEACH CAMPING

Close to the mainland yet worlds apart, Santa Rosa Island's extensive, beautiful and undeveloped 55-mile coastline is reminiscent of a California in days gone by. The intertidal pools and sandy beaches are much the same as the ones the Chumash Indians, early explorers and early ranchers may have known. They represent an important interface between land and sea. Many species of birds, marine mammals and plant communities use these fragile areas to mate, breed and forage in the undisturbed serenity found here. The National Park Service opened the island to backcountry beach camping in recognition of its rare wilderness values. This is the only area within the park that is currently open to backcountry camping. As you explore this wild area by kayak or on foot, please take the responsibility to help us protect and preserve these delicate natural resources for future generations. The following information will help you enjoy your visit while leaving the smallest impact on the island.

**While backcountry beach camping on Santa Rosa Island is an incredible experience, it is not for the unexperienced backpacker or kayaker. Due to difficult weather, rugged terrain and off-trail hiking, backcountry beach camping is an arduous endeavor and should be undertaken only by experienced, well-conditioned backpackers and kayakers.**

### Destinations and Distances

The concessionaire boats of Island Packers and Truth Aquatics usually drop off and pick up all kayakers and backpackers at the pier near the ranch area in Bechers Bay. Channel Islands Aviation drops hikers at the end of the airstrip near Water Canyon, approximately 1 mile from the pier. Hiking is along the beach, dirt roads or unmaintained paths created by island animals. **These roads and paths are rugged and mountainous with no signs.** All distances that follow are approximate and measured from the pier, unless stated. Please refer to topographical maps for more accurate mileage and to help with the following descriptions. It is recommended that all backpackers purchase topographic maps (USGS 7.5 minute maps or the Trails Illustrated map of all the islands) and kayakers purchase nautical charts before departing on their journey.

**In order to protect pupping harbor seals and nesting seabirds, all beaches are closed for camping between January 1 and May 31. Day-use is permitted.**

**For kayakers and backpackers, the closest beach that is open to camping between June 1 and September 15 is just south of East Point,** approximately 7 hiking miles and 8 kayaking miles from the pier. This beach is a small pocket beach and may be washed-out at higher tides. In addition, pounding surf and strong winds constantly reshape this beach. If hiking beyond East Point to Ford Point, it is recommended that you follow the ridge line or road until you reach San Augustin Canyon and then follow this canyon down to the Ford Point area. Hiking along the beach from East Point to Ford Point is impossible due to sections of vertical cliffs that drop directly into the ocean. However, kayakers can access beaches throughout this area. Once hikers reach Ford Point, they may follow the low terrace

**continued on next page**



Anacapa Island campground

Tim Hauf

or higher ridge (both eventually run into a coastal road) down to the Johnsons Lee area. Refer to topographical maps for more details. Direct access to beaches between Johnsons Lee and Ford Point (including La Jolla Vieja) is also possible via the main or south road. Both of these routes are long hikes (see mileage below) with a considerable amount of climbing and, once again, like all hiking or kayaking on the island, is recommended only for the experienced, well-conditioned traveler.

**Beginning September 16th, the closest beach camping is Lobo Canyon**, approximately 4.5 miles hiking and 6 miles kayaking from the pier. Areas of steep cliffs are found throughout the northwest side of the island (Carrington Point to Sandy Point) that make some beaches inaccessible to hikers. Hikers will find themselves climbing up and down ridges and canyons along parts of this coast. Steep cliffs and only a few small beaches are also present from South Point to China Camp. West of China Camp, hikers can walk along the beach until the Sandy Point closure. Refer to topographical maps for more details.

Destination (from pier unless stated)	Approximate distance in miles	
	Hiking	Kayaking
Beaches just south of East Point	7	8
East Point to Ford Point	8	5
Ford Point to Johnsons Lee	4	3.5
Johnsons Lee (around East Point)	18	16
Johnsons Lee via main road	14	--
Johnsons Lee via south road	13.5	--
La Jolla Vieja Beach via south road	11.2	--
Lobo Canyon	4.5	6

### Water

Since the water in the streams is contaminated with coliform bacteria and giardia, it is recommended that you boil, filter and/or add iodine to the water (potable water is available in the Water Canyon campground). Water is generally available in the island's canyons during the winter and early spring. Although nine canyons carry some degree of water throughout the year (except during dry years), water is not always available at the mouth of the canyons near the beach. These nine canyons include: Water, Old Ranch House (intermittent), San Augustin, Wreck, Jolla Vieja, Arlington, Soledad, Cow (intermittent), and Lobo (intermittent). Clapp Spring, near the top of San Augustin Canyon, also has water year-round. (Look for the spigot just down the road from the actual spring).

### Weather

Backpackers and kayakers should be prepared for strong northwest winds throughout the year, with the possibility of strong east or Santa Ana winds from October through January. The average wind speed is 15 knots, although speeds of 40 to 50 knots are not uncommon. Occasionally, the south side of the island (South Point to East Point) offers protection from these strong winds.

Dense fog is common during the summer months, but may occur at any time, making chart and compass navigation mandatory. Weather conditions are generally best from August through October, with relatively calm wind and sea conditions and virtually no rain. Ocean water temperatures range from the lower 50s (°F) in the winter to the upper 60s (°F) in the fall.

Kayakers may encounter strong ocean currents around the islands. Intense wave and surf conditions exist around the Carrington Point area. Sheer cliffs rise out of the ocean, reflecting incoming waves back out to sea, creating a washing machine effect. In this turbulent area there are no places to land, even in an emergency. The first landable beach is Lobo Canyon, five miles west of the ranch area pier. Rounding Skunk Point may be tricky as well because of merging currents. The wind often increases in the afternoon and the prevailing northwesterlies can make paddling back to Water Canyon difficult. During the summer months, large swells often pound the south side of the island, making landing and launching from the beaches extremely challenging, requiring advanced skills.

### Regulations and Guidelines

The protection and preservation of your park's biological and cultural resources is the mission of the National Park Service. By following the regulations and guidelines in "Limiting Your Impact" on pages 20-21 and below, you can help protect these rare and unique treasures for future generations to enjoy. For a more complete description of "Leave No Trace" principles, ask the visitor center for a "Leave No Trace" brochure or visit the website at <http://www.Int.org/>.

### Regulations

- **Camping is prohibited year-round between Carrington and East Point**, except in the Water Canyon campground.
  - **From March 1 to September 15, the coastline from and including Skunk Point to just before East Point is closed to landing or hiking** to protect the nesting area for the snowy plover, a federally listed, threatened shorebird.
  - **The beaches around Sandy Point are closed to all access year-round.**
  - **Bury human waste in individual catholes 6-8 inches deep in the moist, sandy, intertidal area and 200 feet from fresh water source. Do not deposit in dry sand on beach or in archeological sites. Toilet paper must be packed out.** Waste can also be deposited 100 yards offshore.
- **No fires are allowed.**



Snowy plovers

### Guidelines

- **Utilize sandy areas that are free of dune vegetation when hiking, landing water craft and camping.** Keep tents, kitchen areas and traffic in "hardened" areas that are already bare from previous use.
- **Strain or separate food particles from cooking water and pack them out. Scatter the gray water 200 ft. from water sources and camps.**
- **Minimize soap use** to keep the backcountry free of chemicals. If washing with soap, rinse 200 ft. from water sources.
- **Do not damage live trees, plants, and other living things.** It is not permitted to chop or nail trees, harvest or trample plants.

### Safety

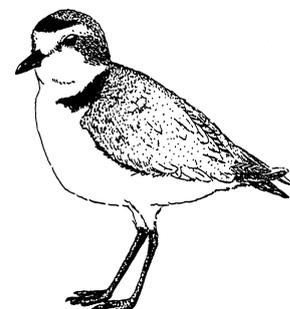
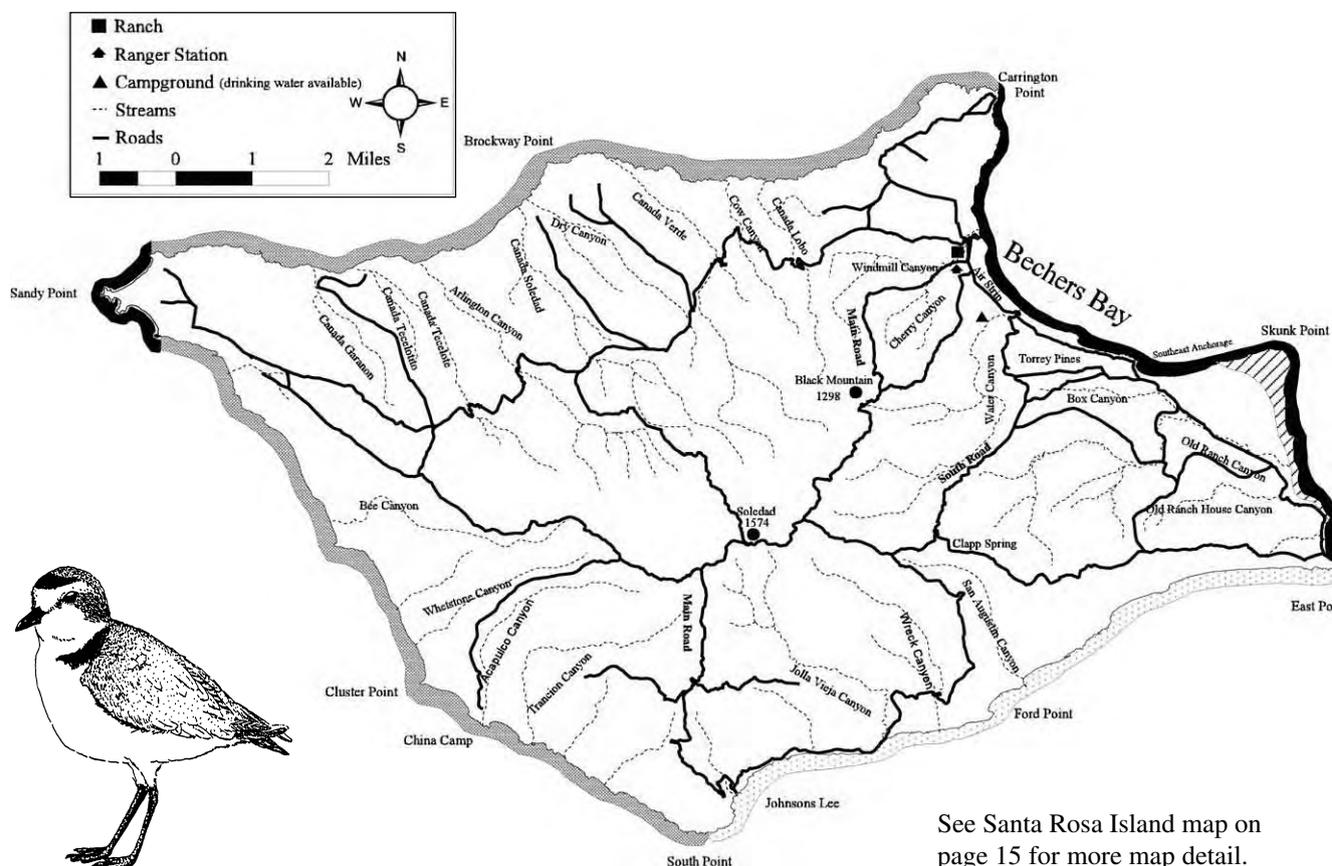
Please refer to the safety sections in "Hiking" on page 14 and "Boating and Sea Kayaking" on page 21 for information.

### Backcountry Beach Camping Reservations

Camping reservations are required for beach camping. Reservations are free and must be obtained in advance by calling Channel Islands National Park at (805) 658-5730. Separate camping reservations are needed for the established campground at Water Canyon and must be obtained in advance by calling (800) 365-CAMP (2267) or through the Internet at <http://reservations.nps.gov>. Information required for the reservations includes: name, address, phone number, emergency information, camping dates, camping areas, transportation information and number of campers.



Water Canyon Beach, Santa Rosa Island



- \* **All beaches are closed to camping from Jan. 1 to May 31 in order to protect pupping harbor seals and nesting seabirds.**
- Open to beach camping June 1 to Dec. 31  
This is the only area (East Point to South Point) open to beach camping during June, July and Aug.
- Open to beach camping Sept. 16 to Dec. 31  
The coastline from Carrington Point to Sandy Point and Sandy Point to South Point is closed to camping the rest of the year to protect the nesting area for the snowy plover, a federally listed, threatened shorebird.
- Closed to beach camping year-round  
To protect seals and sea lions, the beaches around Sandy Point are CLOSED TO ALL ACCESS YEAR-ROUND.
- Closed to all access from March 1 to Sept. 15  
The coastline from and including Skunk Point to just before East Point is closed to landing and hiking during this period to protect the nesting area for the snowy plover, a federally listed, threatened shorebird.
- \* Under a special use permit the Vail & Vickers Company operates a private hunt for introduced deer and elk. During these hunting periods, hiking is restricted in certain areas. Please check with a ranger before hiking or kayaking and be aware of hunting operations.

See Santa Rosa Bay map on page 15 for more map detail.

**Putting our Finger on the Pulse of the Park Ecosystems**

As Albert Einstein observed, “The significant problems we face cannot be solved at the same level of thinking we were at when we created them.” Clearly, we must improve our understanding of how the natural world functions if we are to ensure the conservation of our island resources. We must answer the questions: How healthy are ecosystems in Channel Islands National Park? Can they cope with accelerated invasions of alien species, elimination of native species, human consumption of “renewable” resources, and air pollution? How do ecosystems change as non-native species are removed and native species are restored?

The park staff, in conjunction with scientists from other agencies, universities, and museums, began to develop a long-term ecological monitoring program in 1982. Every year park staff and cooperators have gathered information on the health of kelp forests, rocky intertidal communities, seabirds, landbirds, terrestrial animals, and vegetation. Information gathered through this program has been critical to identifying resource declines and improving our understanding of how the ecosystems work (see inset article on Santa Barbara Island). The declines of brown pelicans, island foxes, and marine resources illustrate the importance of keeping our finger on the pulse of the island ecosystems and identifying problems early enough to take corrective action.

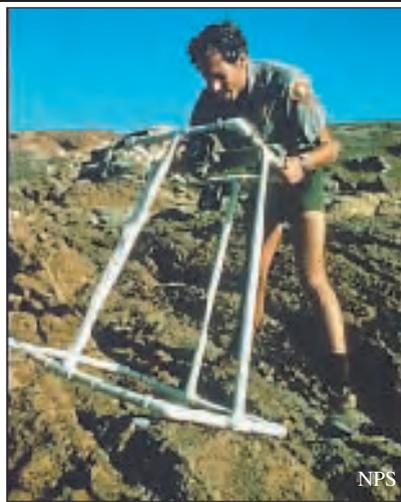
**TNC DONATION, continued from page 1**

TNC has been involved with the island since 1978. Before the land transfer, TNC owned 54,500 acres (90%) of the island’s 95 square miles. The remaining land, all on the eastern end of the island, was owned by the NPS. The 8,500 acres donated by TNC to the NPS adjoin the park’s western boundary; the area comprises the five-mile-long narrow portion of the island, referred to as the Isthmus. After the transfer, TNC owns 46,000 acres, or 76 percent of the island, and the National Park Service owns 14,733 acres, or 24 percent.

“While much of California’s coast continues to be threatened by our expanding population, Santa Cruz Island stands as a reminder of the beauty and intrinsic value of the state’s natural coastal areas,” stated Lynn Lozier, TNC’s Santa Cruz Island Project Director. “Santa Cruz Island represents California as it used to be – and its unique ecosystems must be preserved for future generations. We collaborate with other organizations and share responsibilities with them in order to carry out our mission of protecting and enhancing natural habitats and the native species. The significance of our partnership with the NPS has direct value for all Californians past, present, and future.”

In the last two decades, TNC has successfully applied its science-based conservation methods to the long-term tasks of protecting and restoring native plant and animal populations on the island. Since 1978, TNC and collaborating universities and institutions have carried out extensive research to determine the best method to control the invasive weed fennel. They have also undertaken several restoration projects, such as efforts to increase the populations of rare native plants and the first prescribed burns in the Channel Islands to reduce weeds and restore native pine forests and grasslands. TNC has also eliminated thousands of feral sheep that were causing severe erosion and destroying rare native plants.

In spite of these notable success stories, Santa Cruz Island continues to face complex problems, many due to non-native animals and plants introduced to the island in the nineteenth century. “These challenges call for collaboration,” said Ms. Lozier. “For the first time, all of the island is in conservation ownership. Our relationship with the Park Service enables the two organizations to manage the island as a single ecological unit.”



Rocky intertidal monitoring within the park. NPS

**The Challenges Ahead**

The task in front of us is large. We are fortunate to have many partners—universities, private non-profits, volunteers, conservation organizations, and others—that share our goal of protecting and restoring the natural ecosystems of the Channel Islands. Additionally, many species require habitat outside of the park for their long-term survival.

With the northern five Channel Islands now entirely in conservation ownership, many of the species in the park are clearly more “healthy” than they were in the past. Elephant seals have reoccupied island beaches, California brown pelicans are nesting on Anacapa and Santa Barbara Islands, peregrine falcons are flying over the islands, and the vegetation of the islands is recovering.

We have had significant conservation successes on the islands. However, the park is not an “island”. The long-term health of park resources will depend not just on what we do within park boundaries, but also on the decisions that are made outside of park boundaries (see inset article on Marine Protected Areas). Pollutants, overharvest of marine resources, and ultimately, global warming all have the potential to unravel the balance of life on the Channel Islands.

**Please see FORWARD TO THE PAST, 16**

**OCEAN PROTECTION**

BY KATE FAULKNER and GARY DAVIS, Science Advisor, Channel Islands National Park

People relate very differently to the sea than they do to the land. There is broad consensus that some land should be set aside and protected in order to preserve living ecosystems. Intuitively, it makes sense that land protected from timber harvest, mining, and hunting will better preserve old growth forests, grizzly bears, and bunny rabbits. Also, not surprisingly, people prefer to visit, hike, and recreate in protected areas that provide diverse natural experiences

However, we have not extended a similar protective philosophy to the ocean. It is not that we don’t designate sanctuaries, parks, reserves, areas of special biological concern, etc. in the marine environment. We do. We just don’t protect the resources in them. In the State of California, 46 percent of marine waters are under some type of conservation designation. However, contrary to what a common understanding of language might indicate, these conservation designations do not necessarily limit taking marine resources. In fact, fish are legally taken from 99.98% of the state’s marine waters.

Human endeavors on public lands are presumed to have environmental impacts that must be mitigated before the actions are sanctioned as being in the common interest. In the sea, human activities are presumed harmless, so only after environmental damage is apparent are they curtailed, and then only partially. We have placed the burden of proof on ocean resources to show us irreparable damage before we will afford protection.



Dan Richards

**UNDERSTANDING ISLAND ECOSYSTEMS**

BY CATHY SCHWEMM, GIS Specialist, Channel Islands National Park

On Santa Barbara Island, resource managers are working to learn how all the plants and animals live together and how changes in one species might affect another. Because Santa Barbara is the smallest island, in Southern California, biologists have attempted to understand this island as a whole ecosystem, instead of just a combination of different parts. To do this they are monitoring deer mice, lizards, vegetation, seabirds, and landbirds.

Deer mice are the only mammals on Santa Barbara Island, and are possibly more common here than anywhere else in the world. By counting deer mice, biologists have found that in many years there are so many mice that more than 1300 of them would live in an area the size of a football field. All of these mice certainly have many impacts on the plants that they eat and the places where they live, so biologists have worked to compare the number of mice with measures of vegetation. They are also looking at whether mice eat certain kinds of plants more than others, and whether or not they eat enough seabird eggs to impact seabird survival.

By combining all of this data, resource managers are putting together a picture of the island as it changes from year to year and as it recovers from the impacts of non-native animals. Eventually they will be able to use the information collected from Santa Barbara Island to understand and help protect all of the Channel Islands long into the future.



Island deer mouse NPS

Dramatic declines in many fish populations have caused considerable concern about the health of the ocean. Abalone populations, for example, have collapsed, resulting in closed fisheries everywhere south of San Francisco. White abalone, which numbered in the millions when they were first discovered in the 1940s, are today on the brink of extinction. Bocaccio and cow rockfish populations that flourished off the coast of California 30 years ago have declined nearly 90% since the early 1960’s, and the stocks of 50 other rockfish species are faring little better.

Many people know that new management strategies are needed to ensure that marine resources can be restored and sustained. For the past two years, Channel Islands National Park has been engaged with the California Department of Fish & Game, Channel Islands National Marine Sanctuary, tour operators, fishing industries, and many others in a process to find better ways to protect marine resources at the Channel Islands. This group is exploring how a system of marine reserves around the Channel Islands, where no take would be allowed, can be used to rebuild depleted resources, sustain fisheries, and preserve unimpaired ecosystems for the enjoyment of this and future generations.

Experience from marine reserves around the world, analyzed by a panel of eminent marine scientists, indicates “that the minimum area set aside should be no lower than 30%, and perhaps at 50% of the [Channel Islands Marine Sanctuary], to protect representative and unique marine habitats, ecological processes, and populations of interest.” The scientists further indicated that up to 70% of the area needs to be free of fishing to protect natural biodiversity and the integrity of marine ecosystems.

We are all connected to the sea. We all have a stake in what happens to the sea. The sea is our common heritage. We will decide how much of that heritage will be left to pass on to future generations in the next few years. If we act wisely, future generations will have many options to exercise with ocean resources. If we choose to continue exploiting the sea as we have been for the last century, few options will remain. Our children, grandchildren, and all who follow them will be much poorer for our apathy and lack of vision. We encourage you to add your voice to those who are engaged in deciding how we use our ocean resources.

## VISIT THE KELP FOREST WITHOUT EVER GETTING WET

Few visitors to Channel Islands National Park are aware that almost half of the park's resources are located beneath the sea. Park boundaries extend one nautical mile around each of the five park islands and encompass one of the most diverse marine environments in the world. Off the southern California coast and within the boundaries of Channel Islands National Park lie great forests of seaweed called kelp. These towering ocean plants flourish in the waters surrounding the Channel Islands and are an integral part of the park resources. Over 1,000 species of plants and animals live in the upper 60 feet of the water column in a kelp forest. Seals, sea lions, algae, fishes and marine invertebrates all blend together under the kelp canopy to form one of the most biologically diverse ecosystems in the world. The park offers an underwater video program to give visitors a rare glimpse into a seldom seen world, by taking them on a nature "hike" in a kelp forest.

Traditionally, this unseen yet crucial marine ecosystem has suffered from an out-of-sight, out-of-mind philosophy. Like ocean habitats the world over, the kelp forests of the Channel Islands are increasingly affected by coastal development, offshore oil drilling, toxic dumping and commercial and recreational fishing—but receive very little human understanding.

With the advent of the underwater video program in 1985 that situation is being remedied. Through advanced underwater technology, many park visitors are enjoying their first journey into the marine world—without ever getting wet! The audience joins the program via television monitors on Anacapa Island or in the visitor center on the mainland, as a park ranger dons a special microphone-equipped dive mask for communication to the surface, descending into the forest camera in hand. The camera is turned on and the kelp forest comes to life. From underwater, the park ranger explains



Brad Sillasen

Underwater program, Anacapa Island

what the TV monitors are revealing. The kelp forest and its many inhabitants are unveiled and explained as the visitors and divers "hike" among spiky, spiny sea urchins, iridescent abalone and soft, slow-moving sea cucumbers. Brightly colored fish move through the forest and are captured through the camera's eye. The story of the kelp forest is told. And those that hear it are the very ones who will determine its future. With this program, the seeds of understanding are planted. It is the hope of the National Park Service that from these seeds will grow the desire to preserve and protect this irreplaceable resource.

During the summer, this underwater program is presented twice weekly in the landing cove of Anacapa Island and broadcast back to the mainland visitor center in Ventura. It is open to the public and free of charge and occurs on Tuesdays and Thursdays at 2:00 p.m. Thousands of people have seen this program. Foreign visitors, national and local politicians, biologists, environmentalists, teachers, schoolchildren and the general public from all over the country have participated. Hopefully, few leave unaffected by its message of conservation and protection.



Brad Sillasen

Underwater program, Anacapa Island



Dan Richards

CHIS Marine Sanctuary

Garibaldi and diver in kelp forest, Anacapa Island

### FISHING

To fish in Channel Islands National Park, possession of a valid California state fishing license is required and all California Department of Fish and Game Regulations apply. In addition, the waters one nautical mile offshore around Anacapa, San Miguel and Santa Barbara Islands are California State Ecological Reserves. Special resource protection regulations apply. Please refer to the "Limiting Your Impact" section for additional regulations and guidelines. Visitors may also contact the Channel Islands National Park headquarters and island rangers for more information on marine resources regulations. **Visitors should also be sure to obtain the Channel Islands National Park brochure/map and the Channel Islands National Marine Sanctuary (NOAA/NMS) Synopsis of Regulations brochure/map in addition to this newspaper.**



Tim Hauf

Snorkeling, Landing Cove, Santa Barbara Island

### SWIMMING, SNORKELING AND DIVING

The kelp forests, sea caves and coves of Channel Islands National Park await the adventurous swimmer, snorkeler and diver. Some of the best snorkeling and diving in the world can be done right here within the park. These activities can be found on Santa Barbara, Anacapa and eastern Santa Cruz Islands. Due to extremely windy conditions on Santa Rosa and San Miguel, these activities should not be attempted on these islands by the novice or anyone who is not properly trained, conditioned and equipped. Please refer to the National Marine Sanctuary's "Diving" brochure or other diving publications available for sale in the visitor center bookstore for more detailed information on snorkeling and diving sites around the islands.

Since the marine environment can be unforgiving, use extra caution when engaging in these activities. **Ocean conditions are highly variable and sometimes dangerous.** Many beaches on the islands have steep, dangerous shore breaks. The wind and swell generally come from the northwest and become stronger as the day continues. From October through January, visitors must also be prepared for strong east or Santa Ana winds. The ocean currents outside of coves and protected beach areas can be strong and extremely dangerous. These conditions should be carefully considered when planning your trip and entering the water. In addition to the regulations and guidelines listed in the "Limiting Your Impact" section, the following suggestions should also be considered:

- There are **no lifeguards on duty**, so all water sports are at your own risk. Visitors should be aware of boat landing operations at all times—**avoid water sports near skiffs that are conducting surf landings.**
- Snorkelers, divers and swimmers should always **use the buddy system.** This may allow for someone to go for help if you encounter trouble.
- For your own safety, the law requires divers to **display a dive flag while diving.** It is recommended that spear guns be unloaded at least 50 feet from the beach.
- Before departing, swimmers, snorkelers and divers **should leave an itinerary and/or float plan with someone** who is on shore and can be easily contacted.
- Sea caves can be very dangerous—large waves or swells can fill a cave unexpectedly. Be extremely careful and **wear a helmet at all times when exploring sea caves.**
- Due to cold water conditions (55° to 70° Fahrenheit), **wetsuits and hoods are recommended.**

# SANTA ROSA ISLAND



Tim Hauf

Webster Point, Santa Barbara Island

## HIKING

Many trails and roads traverse the islands, providing visitors with spectacular hiking opportunities. These trails and roads range from the maintained, relatively flat, signed trails of Anacapa to the unmaintained, rugged, mountainous, unsigned paths of Santa Rosa. Please see individual island sections for descriptions of these routes. Hikers should be in good physical condition to explore them and must follow the regulations and guidelines listed in the "Limiting Your Impact" section. Hikers also should follow the suggestions listed below:

- Stay on trails and roads while hiking—**avoid animal trails** which are narrow, uneven, unstable and dangerous. **Cliff edges should be avoided** at all times since they tend to be crumbly and unstable. Stay well back. Children should be supervised at all times by an adult.
- **Carry plenty of water**—one quart for short walks, more for longer hikes.
- Hikers should **never hike alone—use the buddy system**. This allows someone to go for help if you encounter trouble.
- Be aware of **poison oak, "jumping" cholla cactus, ticks and scorpions**. Poison oak can be identified by its clusters of three shiny leaflets. Some ticks carry disease; check your clothing and exposed skin after hiking.
- In order to help prevent wildfires, **do not smoke on trails or in brush areas**. Smoking is allowed only on beaches or other designated areas.
- In departing from the islands, **visitors are responsible for meeting the boat concessionaire on time**. Be aware of departure time by asking the ranger or concessionaire employees.



Rob Waterman

Hiking Southeast Anchorage, Santa Rosa Island

## PICNICKING

Picnic tables are available for day use on all islands except San Miguel. If weather permits, many visitors enjoy picnicking on the islands' beaches. Visitors must bring their own food and water. Public pit toilets are available on all islands.

Santa Rosa Island illustrates the processes of a national park in development. Though the island was included as part of Channel Islands National Park upon the park's inception on March 5, 1980, it wasn't until December 1986 that the island came under the ownership of the National Park Service. Although under a special use permit the Vail & Vickers Company runs a hunting operation a few months of the year for introduced deer and elk, visitation is welcome throughout the year.

Located 40 nautical miles from Channel Islands National Park Visitor Center in Ventura, Santa Rosa is the second largest island off the coast of Southern California at approximately 53,000 acres in size. The island's relatively low profile is broken by a high, central mountain range, rising 1,589 feet at its highest point. Its coastal areas are variable, ranging from broad sandy beaches gently sloping toward a dynamic ocean to sheer cliffs plunging toward the turmoil of a sea intent on changing the contour of the land.



Tim Hauf

Torrey pines, Bechers Bay

As on its larger neighbor, Santa Cruz Island, these varied landforms support a diverse array of plant and animal species. About 500 plant species can be found within nine plant communities, including six plant species which are found only on Santa Rosa and nowhere else in the world. One of these species, the Santa Rosa Island subspecies of Torrey pine, is considered one of the rarest pines in the world—the last enduring members of a once widespread Pleistocene forest. A remnant, mainland subspecies of Torrey pine also can be found near La Jolla, California, at Torrey Pines State Reserve. Santa Rosa Island also hosts over 100 land bird and three land mammal species (including the island's largest native mammal, the endemic island fox), two amphibian and three reptile species, and colonies of sea birds, seals and sea lions.

### Santa Rosa Island Facts

- Santa Rosa Island is located in Santa Barbara County.
- Santa Rosa Island is 53,000 acres or 84 square miles, measuring 15 by 10 miles.
- Santa Rosa Island is 26.5 miles from the nearest mainland. It is three miles east of San Miguel Island and six miles west of Santa Cruz Island.
- Average rainfall is 15 inches per year.
- Six endemic plant species occur only on Santa Rosa Island and in no other place in the world.
- Santa Rosa Island is home to only three native terrestrial mammals—the island fox, spotted skunk and deer mouse. They are all endemic to the Channel Islands.
- The gopher snake is the only species of snake on the island. Other reptiles and amphibians include the alligator lizard, western fence lizard, Pacific tree frog and slender salamander.

Remains of an ancient endemic species, the pygmy mammoth, have been uncovered on Santa Rosa, along with Santa Cruz and San Miguel Islands. These miniature mammoths, only four to six feet tall, once roamed island grasslands and forests during the Pleistocene. The fossil skeleton discovered on Santa Rosa Island in 1994 is the most complete specimen ever found.



Bill Faulkner

1994 excavation of pygmy mammoth

Along with extensive paleontological resources, Santa Rosa Island has rich archeological resources. Home to the Island Chumash until approximately 1820, "Wima" (as the Chumash referred to the island) contains thousands of significant and federally protected archeological sites. Archeological investigations on the island have enabled archeologists to construct a more complete picture of Chumash life on the islands. Radiocarbon dating on some of these sites indicates that humans have been using the island for nearly 13,000 years.

Others have come to the island during more recent centuries to exploit its rich resources, sometimes making it their home. In addition to the native Chumash, European explorers, Aleut sea otter hunters, Chinese abalone fishermen, Spanish missionaries, Mexican and American



Tim Hauf

Historic barns (1870s), Santa Rosa Island

ranchers and the U.S. military all have left their mark on the Santa Rosa landscape. Visitors can see relics of these occupations in remnants of fishing camps, in the water troughs and fence lines, in the pier where where cattle were loaded and unloaded since 1901, in the buildings and equipment of the historic Vail and Vickers ranch at Bechers Bay, in the remains of the military installations and in a great diversity of sites to be discovered all around the island.



Tim Hauf

China Beach, Santa Rosa Island

*Campground,  
Water Canyon, Bechers Bay,  
Santa Rosa Island*

Tim Hauf



**Legend**

- Closed year-round  
To protect seals and sea lions, the beaches around Sassy Point are CLOSED TO ALL ACCESS YEAR-ROUND.
- Closed to all access from March 1 to Sept. 15  
The coastline from and including Skunk Point to just before East Point is closed to landing and hiking during this period to protect the nesting area for the snowy plover, a federally listed, threatened shorebird.
- Sea bird roosting and nesting sites  
Pinniped haul-out and rookery sites  
AVOID DISTURBANCE. These sensitive areas are not limited to those marked on this map. They may be found throughout the island and should be avoided.
- Under a special use permit the Vail & Vickers Company operates a private hunt for introduced deer and elk. During these hunting periods, hiking is restricted in certain areas. Please check with a ranger before hiking or kayaking and be aware of hunting operations.
- Roads
- Streams
- 80 meter contours (approximately 260 feet)
- Ranch
- Ranger station
- Campground (drinking water available)
- Restrooms



Tim Hauf  
*Skunk Point, Santa Rosa Island*



Tim Hauf  
*Island oak, Santa Rosa Island*



*The munchkin dudleya occurs only on Santa Rosa Island—nowhere else in the world.*

**Santa Rosa Island: “Things To Do”**

- One-day trips, and long overnight camping trips (minimum stay is generally 3 days—Friday to Sunday).
- Multi-day boat trips generally visit Santa Rosa.
- Be prepared for adverse weather.
- The only island where backcountry beach camping is currently available (limited to certain times of year).
- Hiking options are unlimited with over 54,000 acres of rugged peaks, magnificent canyons and beautiful beaches to explore.
- Due to high incidence of strong winds, swimming, snorkeling, diving and kayaking are limited and recommended for the experienced visitor only.
- Despite the wind, Santa Rosa offers exceptional beachcombing on white sand beaches. Access to one of the best beaches, Water Canyon Beach, is just over a mile away from the pier landing area in Bechers Bay and just down-canyon from the campground.  
*(Please see related articles for more information.)*

Destination (from the campground)	Distance (miles, roundtrip)	Difficulty	Description
<b>Water Canyon beach</b>	2	Easy	If the wind is not too strong, this is a wonderful 2-mile-long white sand beach to explore.
<b>East Point</b>	12	Strenuous, due to length	A beautiful coastal hike with opportunities to explore the Torrey pines and white sand beaches. Beaches, between and including Skunk Point and just before East Point, are closed from March 1st to September 15th. Please remain on road throughout this area.
<b>Water Canyon</b>	6 (or longer if you wish)	Moderate to strenuous	Follow the stream bed and animal paths, through a beautiful canyon with year-round water and native vegetation.
<b>Lobo Canyon</b>	13	Strenuous	Entering Lobo Canyon is like entering another world—wind and water sculpted sandstone cliffs, year-round stream, beautiful native vegetation and a spectacular coast at its mouth.
<b>Torrey Pines</b>	5	Moderate to strenuous	A spectacular hike with unbelievable views and a chance to see one of the rarest pines in the world.
<b>Black Mountain</b>	8	Strenuous	A great hike that puts everything in perspective (weather permitting)—views of the rest of Santa Rosa, San Miguel, Santa Cruz and the mainland.

\*Please respect the privacy of the ranching operation by following the signed path from the pier through the ranch area.  
\*Each year for a few months, Vail & Vickers operate a private hunt for stocked deer and elk. During these hunting periods, hiking may be restricted in certain areas. Please check with the ranger before hiking and be aware of the hunting operation.



Rob Waterman  
*Hiking Lobo Canyon, Santa Rosa Island*

The remaining challenges are many and will require commitment from the park, our partners, and the public to ensure that future generations have the opportunity to experience the abundant and unique assemblage of plants and animals of the Channel Islands National Park that it has been our pleasure to experience

Rachel Carson, in her 1962 book *Silent Spring*, wrote “We stand now where two roads diverge. But unlike the roads in Robert Frost’s familiar poem, they are not equally fair. The road we have long been traveling is deceptively easy, a smooth superhighway on which we progress at great speed, but at its end lies disaster. The other fork of the road—the one ‘less traveled by’—offers our last, our only chance to reach a destination that assures the preservation of our earth. The choice, after all, is ours to make.” We have made significant gains in the protection and restoration of the resources of Channel Islands National Park. We need to “stay the course” and continue this commitment to protect these lands for future generations.

### PARK RECOGNIZED WORLDWIDE

What does Channel Islands National Park have in common with Australia’s Great Barrier Reef, Ecuador’s Galapagos Islands, China’s Great Wall, Tanzania’s Serengeti National Park and Hawaii’s Volcanoes National Park?

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) recognized their superlative values and designated them International Biosphere Reserves with the aim to “develop within the natural and social sciences a basis for the rational use and conservation of the resources of the biosphere and for the improvement of the relationship between man and the environment; to predict the consequences of today’s actions on tomorrow’s world and thereby to increase man’s ability to manage efficiently the natural resources of the biosphere.”



knowledge, we will be more equipped to address local, regional and global problems and make intelligent choices.

In fulfilling its mission to protect and study the natural resources, Channel Islands National Park and Biosphere Reserve is contributing to the supply of knowledge being generated at biosphere reserves all around the world. Armed with this



Tim Hauf

**CHANGE AND RECOVERY ON SAN MIGUEL ISLAND:** By 1930, grazing by non-native sheep and burros had reduced San Miguel Island to what one biologist called a “barren lump of sand” (left). With the non-native grazing animals removed by the mid-1970s, vegetation has started to return as seen in the January 2000 photograph (right). Note that the sandspit that was so prominent in 1930 has disappeared.

### Measuring Ecological Health

BY KATHRYN MCEACHERN, KATIE CHESS, USGS - BRD Channel Islands Field Station, and DIETER WILKEN, Santa Barbara Botanic Garden, Santa Barbara, CA

The California Channel Islands have a long history of ranching, and island plants reflect the cumulative effects of this historic land use in their island-wide distributions and population structures. We studied a rare island endemic plant to see how populations are doing on Santa Cruz Island, where pigs still roam free, compared to those on Santa Rosa, where pigs were eradicated. Island jepsonia (*Jepsonia malvifolia*) is a tiny perennial herb in the Saxifrage family with a distribution on Guadalupe Island (Baja California) and all California Channel Islands except Anacapa, Santa Barbara, and San Miguel. It occurs on coastal bluffs and north-facing slopes in association with chaparral, coastal scrub, oak woodland, and pine plant communities. Island jepsonia has a very unusual flowering cycle. It produces leaves from a fleshy underground stem in the late winter and spring, but it flowers when the leaves are dead during fall and early winter.

Historic and current records for island jepsonia indicated populations were rare and apparently declining on the islands. The fleshy stem of island jepsonia is a food source likely favored by pigs. If this species is particularly threatened by pigs, populations should be recovering on Santa Rosa Island, where feral pigs were eliminated by the National Park Service in 1992. In contrast, Santa Cruz Island populations should reflect the demographic effects of continuing pig predation.



Island jepsonia



Island jepsonia habitat on Santa Cruz Is.

We measured tagged plants in 37 plots located in nine different populations annually from 1995 to 1999, to determine population structure, reproductive output, recruitment, and mortality. Pig rooting has killed plants in most Santa Cruz Island study plots, and very few new young plants have germinated from seed in those same plots. On Santa Rosa Island, we observed low mortality rates at all of our study sites and high to very high recruitment. Two of the three populations monitored on Santa Cruz are declining. All six of the populations we studied on Santa Rosa are rebounding with some sites showing exponential growth since pig removal. We will continue to track the plants on Santa Cruz Island, to see if populations stop their decline once pigs are removed. If island jepsonia is any indication, pig removal will be good for the native plants of Santa Cruz Island.



Pig rooting within island jepsonia study plot on Santa Cruz Island.

### CULTURAL RESOURCES, continued from page 1

minated in the *tomol*, a graceful double-ended plank canoe, which enhanced seaworthiness and sparked increased trade across the Santa Barbara Channel. It also increased offshore fishing and more intensive hunting of seals and sea lions.

As well as building excellent tomols, the Chumash made noteworthy wood and stone bowls and wove beautiful baskets. A sandal fragment from a site on San Miguel Island is the oldest woven textile known from the Pacific Coast, more than 9,000 years old. Just at the time the Chumash met the exploring Spanish, people on the islands were specializing in making beads, using the abundant local supplies of *olivella* shell and chert, a stone fashioned into the drills essential for bead making.

Many members of the modern Chumash community trace their ancestry to the islands. The National Park Service, working with Dr. John Johnson of the Santa Barbara Museum of Natural History, recently completed a detailed study of mission records and other census data to identify lineal descendants from the historical villages within the park. These island descendants and other members of the Chumash community provide significant assistance and information toward the park’s efforts to investigate and preserve the history and prehistory of the islands.

While archeological investigations to locate and identify sites associated with the park’s native population are ongoing, the park is also undertaking several long-term studies of the islands’ historical development since European exploration and settlement of the northern islands.

continued on next page

### The Wreck of the Comet

BY DON MORRIS, Archeologist, Channel Islands National Park

What is on the beach in plain view, but is the most inaccessible object in Channel Islands National Park?

Answer: The *Comet*, a nineteenth century lumber schooner that wrecked at Simonton Cove, San Miguel Island, in 1911. The vessel, navigating with a borrowed chronometer, hit Wilson’s Rock and drifted onto the beach, where salvors eventually retrieved its load of lumber, leaving the rest of the vessel.

For years, a portion of a massive anchor barely protruded from the sand, marking the wreck. Occasionally, such as in 1984, the sand shifted and the wreckage would be exposed. The cultural resource staff at the park had eagerly awaited the next exposure, to find out just exactly what remained of the wreck. For fifteen years the uncooperative sands hid the wreck from view. Finally, in the spring of 1999, timbers began to peek from the sand. Archeologists expected to find broken and scattered fragment of material from the bow of the vessel since, a capstan had been photographed during the last exposure of the wreckage in 1984. To their great surprise and delight, an intact ship’s bow gradually appeared. The long bowsprit was intact and the capstan remained bolted to the deck, just as it appeared in pictures taken over eighty years ago.

“It was a race against the clock and against the tide,” said archeologist Don Morris. “We would get up before sunrise and hike four miles off trail to get to the wreck as the tide was running out. Once on site, we would shovel to expose as much wood as possible, sometimes up to our knees in the surf, while two or three sketched and mapped. When the tide turned, it was all over for the day.” A crew of park archeologists and volunteer marine historians from Coastal Marine Archeological Resources and the Santa Barbara Maritime Museum worked in this fashion for over a week.

The result of their work is the best known archeological example of a lumber schooner. Only two lumber schooners survive of a fleet that once numbered more than 200, and none survived made by the Hall Brothers, builders of the *Comet*. The presence of two exotic hardwoods among the more common Douglas fir surprised archeologists. Matt Russell, director of the project, surmised that one of the exotics, known to grow only in Mexico, might have been brought back to the Hall Brothers shipyard on an earlier trip. An extensive report on the project is nearly completed and will be published soon by the National Park Service.



# THE CHUMASH

In the past, Chumash people lived in an area that extended from San Luis Obispo to Malibu, including the five northern Channel Islands. Many of their village sites were concentrated along the coastline. The early Chumash culture was a true maritime culture. They hunted and gathered natural resources from both the ocean and the coastal mountains to maintain a highly developed way of life.

Chumash society featured an upper class of chiefs, shamans, boat builders and artisans; a middle class of workers, fishermen, and hunters; and a lower class of poor people and outcasts.

The Chumash language featured several dialects. They traded with other Chumash villages, the Tongva of the southern Channel Islands, the Mohave, and the Yokuts of the San Joaquin Valley. Chumash articles such as baskets, steatite bowls and carvings, and shell ornaments and beads, were highly prized because of the skill with which the Chumash worked these items. Trade and travel between the islands and the mainland were accomplished by means of plank boats called tomols. These seaworthy vessels are a tribute to Chumash engineering.

Life was anything but dull for the Chumash. Games, gambling, music, religious ceremonies, storytelling, and art enriched the day-to-day lives of these people.

The Spanish were the first Europeans to visit the Chumash in 1542. Juan Rodriguez Cabrillo was impressed by their friendliness. However, along with European "discovery" came European diseases. Illnesses relatively minor to Europeans, such as the common cold, were devastating to the people of North America, and many Chumash perished.

Five Spanish missions were constructed in Chumash territory, an attempt to convert the people to Christianity and secure the area for Spain against the Russian and Aleut fur traders. The Chumash were assimilated into the missions and slowly began to lose their traditional way of life. When California became part of Mexico in the 1820s, the government secularized the missions, and the Chumash assimilated into the general society. Today the Chumash are working to revive their once forgotten way of life and educate others about their culture.

There are two National Park Service areas within the Chumash realm, Channel Islands National Park and Santa Monica Mountains National Recreation Area (NRA). The role of the National Park Service regarding the Chumash is twofold:

1) To provide opportunities for park visitors and local communities to learn more about the Chumash culture. Exhibits provide a small glimpse of some aspects of everyday life. The Satwiwa Native American Indian Culture Center in Santa Monica Mountains NRA is another exciting opportunity to learn about Chumash

## THE RAINBOW BRIDGE

The Chumash people have a very rich repertoire of stories and legends. Stories are a very important way to teach Chumash morals and ethics and provide entertainment for both children and adults. One of the most popular Chumash stories is the story of the Rainbow Bridge.

The first Chumash people were created on Santa Cruz Island. They were made from the seeds of a magic plant by the Earth Goddess, whose name was Hutash.

Hutash was married to the Sky Snake, the Milky Way. He could make lightning bolts with his tongue. One day he decided to make a gift to the Chumash people. He sent down a bolt of lightning and this started a fire. After this, people kept fires burning so they could keep warm and cook their food.

In those days the Condor was a white bird. But the Condor was very curious about the fire he saw burning in the Chumash village. He wanted to find out what it was, so he flew very low over the fire to get a better look. But he flew too close; his feathers were scorched and they turned black. So now the Condor is a black bird, with just a little white left under the wings where they didn't get burned.

Used by permission of the Santa Barbara Natural History Museum

After Sky Snake gave them fire, the Chumash people lived more comfortably. More people were born each year, and their villages got bigger and bigger. Santa Cruz Island was getting crowded and the noise people made was starting to annoy Hutash. It kept her awake at night. So, finally, she decided that some of the Chumash had to move off the island. They would have to go to the mainland, where there weren't any people living in those days.

But how were the people going to get across the water to the mainland? Finally, Hutash had the idea of making a bridge out of a rainbow. She made a very long, very high rainbow, which stretched from the tallest mountain on Santa Cruz Island all the way to the tall mountains near Carpinteria.

Hutash told the people to go across the Rainbow Bridge and fill the whole world with people. So the Chumash people started to go across the bridge. Some of them got across safely, but some people made the mistake of looking down. It was a long way down to the water, and the fog was swirling around. They got so dizzy that some of them fell off the Rainbow Bridge, down through the fog into the ocean. Hutash felt very bad about this, because she told them to cross the bridge. She didn't want them to drown. Instead, she turned them into dolphins. So the Chumash always say that dolphins are their brothers and sisters.

and other Native American cultures.

2) To preserve Chumash areas within the parks. Park archeologists and historians identify important sites, and rangers protect these areas from vandalism and damage.

The National Park Service would like to invite you to visit Channel Islands National Park, Santa Monica Mountains NRA and other local areas to learn more about the Chumash and other Native American people.



Peter Howorth

Chumash paddling a tomol (plank canoe)

## Oldest Human in North America

Researchers, including park archeologist Don Morris, recently re-examined bones from an ancient woman which were first discovered in 1959 on Santa Rosa Island. They have concluded these are the oldest known human remains in North America—some 13,000 years old. Although the remains first produced a date 10,000 years old, advances in chemistry and radiocarbon dating pushed the date back another 3,000 years.

Recent excavations in Daisy Cave on San Miguel Island have revealed shell midden deposits, fragments of basketry and seagrass cordage dating to about 9,000 years ago. Deeper still, a chert flake and bone fragment may date earlier than 13,000 years.

These discoveries have changed the way scientists look at this mysterious period in human history. According to the Santa Barbara Museum of Natural History, which participated in the study, "roving bands of big game hunters had been thought to be the first arrivals (in North America)—but now they appear to have had local neighbors. There actually may have been a greater diversity of ancient lifestyles and cultures than previously imagined."

## Cultural Resources continued

The park is completing a Historic Resources Study that details the history of human use and occupation of the islands and describes the significance of the remaining historic buildings, structures, and landscapes that illustrate that use. D. S. (Dewey) Livingston's 904-page draft study provides an island-by-island history of the five park islands and describes their development over the 200-year historic period. When it is complete, copies will be available in local libraries for public use and enjoyment.

Photographer William B. Dewey is preserving a record of the historic ranch buildings and landscapes on Santa Cruz and Santa Rosa Island. Many of these images will be displayed in the auditorium at the park visitor center during 2000 and 2001. These photographs illustrate the range of historic ranching features found on the islands, from bunkhouses and barns to water troughs and fence lines. Ranch vistas show the foggy and windy conditions on the islands and the difficult terrain ranchers often faced. The views included in the exhibits represent only a few of the 600 images to be included in the Historic American Buildings Survey collection, a federal program to document America's architectural heritage. Under the direct-

tion of the National Park Service, the Historic American Buildings Survey has recorded thousands of historic buildings and landscapes since it was established in 1933, through measured drawings, large-format photographs, and written historical documentation. These records are housed in the Prints and Photographs Collection at the Library of Congress in Washington, D.C. William B. Dewey's pho-



William B. Dewey

Historic ranch buildings, Bechers Bay, Santa Rosa Island (Santa Cruz Island in the distance)



William B. Dewey

Main ranch house, Bechers Bay, Santa Rosa Island.

tographs of the Santa Rosa and Santa Cruz islands will form part of that collection. Funding for the photography project was provided by the Santa Cruz Island Foundation, Terra Marine Research and Education, and the National Park Service Challenge Cost-Share Program.

# SAN MIGUEL ISLAND

Wind and weather constantly sweep across the North Pacific to batter the shores of the westernmost of all the islands, San Miguel. This extreme weather creates a harsh but profoundly beautiful environment. The 9,500-acre island is primarily a plateau about 500 feet in elevation, but two 800-foot rounded hills emerge from its wild, windswept landscape. Although lush native vegetation covers this landscape today, a century's worth of sheep



Brad Sillasen

Cuyler Harbor, San Miguel Island

ranching and overgrazing caused scientists in 1875 to describe the island as "a barren lump of sand." With the grazing animals removed, vegetative recovery is in progress. Giant coreopsis, dudleya, locoweed, lupine, buckwheat, coastal sagebrush and poppies are all recolonizing the island to their former extent, returning San Miguel to its more natural state.

Also making a comeback, after years of hunting, are the thousands of pinnipeds (seals and sea lions) that breed, pup and haul-out on the island's 27 miles of isolated coastline. Hikers who make the all-day, ranger-guided, 15-mile round-trip hike across the island to Point Bennett will never forget seeing one of the world's most spectacular wildlife



Jeff Foot

Point Bennett, San Miguel Island

displays—over 30,000 pinnipeds (including three different species) hauled out on the point's beaches at certain times of year.

Other wildlife include the island fox and deer mouse. Both

of these little creatures are "endemics"—they are found only on the Channel Islands. The island fox, the size of a house cat, is the largest land animal on the island. In the waters surrounding San Miguel, the marine animals get much larger. Dolphins and porpoises are often spotted along with gray whales, killer whales and the largest animal of all, the blue whale.

In the spring and summer the skies are filled with birds. Boaters entering Cuyler Harbor receive a greeting from western gulls, California brown pelicans, cormorants, and Cassin's auklets that nest on Prince Island. Black oystercatchers, with their bright red bills and pink feet, feed along the beach. Terrestrial residents include the western meadowlark, the rock wren and the song sparrow, an endemic subspecies. Peregrine falcons have recently been restored to the island and are nesting successfully once again after years of decimation by the pesticide DDT.



Kiff-Peregrine Fund

Peregrine falcon

continued on next page

## San Miguel Island: "Things To Do"

- One-day trips, and long overnight camping trips (minimum stay is generally 3 days—Friday to Sunday).
- Multi-day boat trips generally visit San Miguel.
- Be prepared for adverse weather.
- Hiking options are limited. Visitors may explore a small area on their own—including the 2-mile long Cuyler Harbor beach and the 3/4-mile trail to the ranger station. To see other parts of the island you must go with a ranger. Rangers are generally available to lead hikes, but check with the park or concessionaires in advance.
- Ideal place for viewing native vegetation, the unique caliche forest, and seals and sea lions (with ranger escort).
- Due to high incidence of strong winds, swimming, snorkeling, diving and kayaking are limited and recommended for the experienced visitor.
- Despite the wind, Cuyler Harbor is one of the most scenic beaches in the park.

(Please refer to related articles for more information.)

## SEALS AND SEA LIONS

Walking to Point Bennett on the western tip of San Miguel Island requires some stamina, for it is a fifteen-mile roundtrip hike. About halfway across the island, however, there is something that will help spur you on and encourage your feet to keep moving. That something is a sound—faint at first, but gradually getting louder and louder. The noise is a sort of rumble, low and rolling. What can be making this strange sound? As you come over the rise at Point Bennett you find your answer. There are thousands of elephant seals on the beach—flipping up sand over their huge torpedo-shaped bodies, moving like globs of Jell-O over the sand and carving out territories to call their own. The originators of the noise that you have been listening to are the gigantic males with their long proboscises that gives the species its name. You are witnessing a timeless ritual of which sound is just a small part.

The elephant seal is one of four species of pinniped (or "fin-footed") marine mammals that are commonly sighted around Point Bennett. Other species include California sea lions, northern fur seals and harbor seals. At one time, two other species were found here in abundance—Steller's, or northern, sea lions and Guadalupe fur seals. While Steller's have not been seen since the 1980s, a few Guadalupe fur seals are occasionally sighted. Nevertheless, not only are more species sighted at this remote spot than at anywhere else on the planet, but this gathering represents one of the largest congregations of wildlife in the world. Staggering populations of over 70,000 California sea lions, 5,000 northern fur seals, 50,000 northern elephant seals and 1,100 harbor seals breed and pup on the island each year.

The diversity of pinnipeds is part of a larger picture of biological diversity found in the Santa Barbara Channel. San Miguel Island lies in an area of water that overlaps two currents—a cold current moving down the Pacific coast from Alaska and a warm current moving up the Pacific coast from Mexico. Those two currents meet and intermingle not only water, but many of the species associated with corresponding cold and warm currents.

Islands also bring diversity by providing shelf areas where sunlight can penetrate the water and plants, such as the giant bladder kelp, can grow. The dense kelp forests around the islands provide food and shelter for many varieties of plants and animals. Diversity is also linked to upwelling conditions that exist near San Miguel Island. Upwelling sucks cold nutrient-rich water, that normally lies at the bottom of the ocean, to the surface, providing food for hundreds of species. Finally, the isolation of the islands also plays a role. A beach all to themselves with no disturbance from people must be very enticing for seals and sea lions. Therefore, the Santa Barbara Channel, the islands and Point Bennett, specifically,



Jeff Foot

Male elephant seal

provide all the necessary ingredients that the seals and sea lions need—wide sandy beaches, plenty of food and others of their kind.

Researchers from the National Marine Fisheries Service, in cooperation with the park, have been studying the seals and sea lions of San Miguel since 1968. Long-term behavior studies on marked animals provide information about reproductive behavior as well as migratory and feeding patterns. Current studies focus on winter feeding and maternal behavior of California sea lions; northern elephant seals' diving and migration patterns; and, of course, the impacts of El Niño on the pinniped population. Visit the park's web site ([www.nps.gov/chis/](http://www.nps.gov/chis/)) for more information on these research projects.

These pinnipeds are protected by spending at least part of their lives in a national park—or are they? Some threats to these animals know no boundaries. Threats made by water pollution, plastics and debris in the ocean, oil spills, overharvesting of fisheries, toxins and pesticides affect even isolated areas like Point Bennett. These threats can also affect people. Without protection, the spectacular rituals performed on the beaches of Point Bennett can become a thing of the past. Generations to come may only experience the grandeur of Point Bennett through stories and photographs.

People can make sure pinnipeds of the park and world survive into the future. Simple things like recycling plastics can make a difference to a curious young sea lion looking for something to play with. That plaything does not need to be a piece of plastic webbing that may strangle it. The most important action people can take is to visit Point Bennett. Discover the world of the pinnipeds for yourself—then tell others how important it is to keep the rituals continuing.



Dan Richards

Sea lions in kelp forest

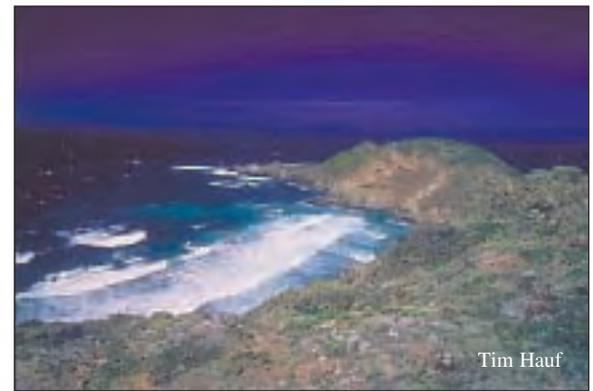
**Legend**

Trail  
 20 meter contour (approximately 65 feet)  
 Sea bird roosting and nesting sites  
 Pinniped haul-out and rookery sites  
 AVOID DISTURBANCE. These sensitive areas are not limited to those marked on this map. They may be found throughout the island and should be avoided.

Boating is prohibited within 300 yards of shore. From March 15 through April 30 and October 1 through December 15, boats may approach no nearer than 100 yards from shore.

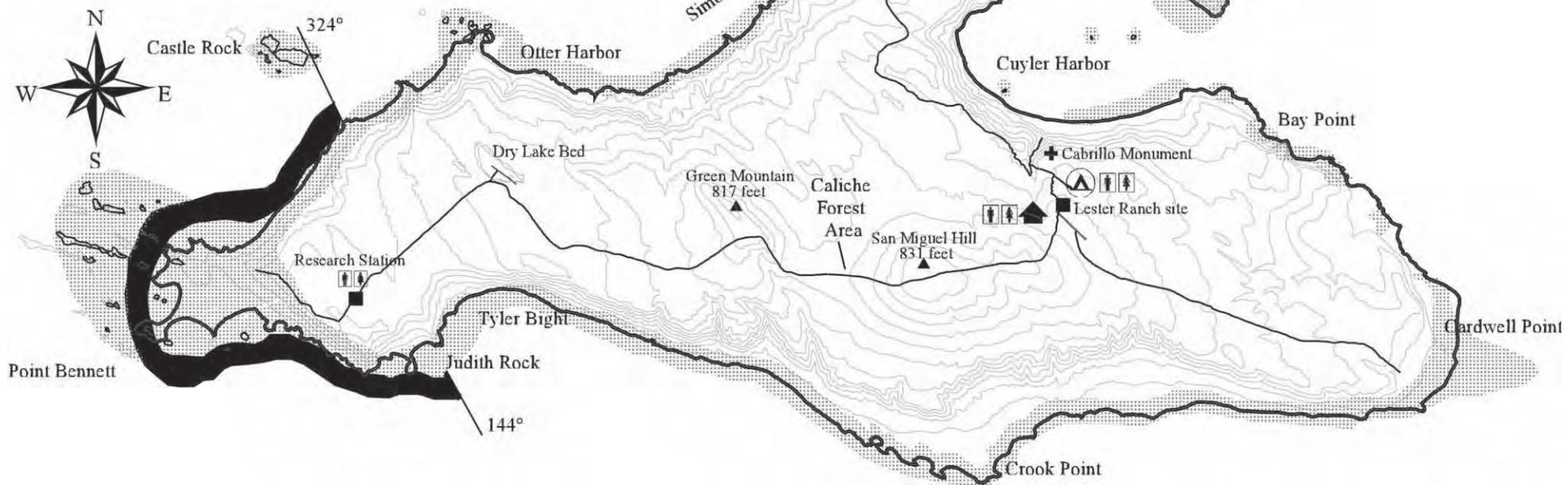
Ranger station  
 Campground  
 Restrooms

1 0 1 2 Miles



Tim Hauf

Harris Point, San Miguel Island



Tim Hauf

Cuyler Harbor, San Miguel Island

Destination (from Cuyler Harbor)	Distance (miles, roundtrip)	Difficulty	Description
<b>Cuyler Harbor beach</b>	2	Easy	If the wind is not too strong, this is a wonderful 2-mile long white sand beach to explore. The eastern section may be cut off by tides. Use caution on rockfalls.
<b>Lester Ranch Site</b>	2	Strenuous, due to short, steep climb to top of island	Hike up a spectacular canyon with lush native vegetation and waterfalls (during moist years) to the overlook at Cabrillo's Monument and the historic Lester Ranch Site.
<b>Caliche Forest</b>	5	Strenuous	Hikers must be accompanied by a park ranger on this hike to the caliche forest.
<b>Point Bennett</b>	16	Strenuous	Continue past the caliche forest with a park ranger to view one of the largest congregations of wildlife in the world--over 30,000 seals and sea lions.
<b>Cardwell Point</b>	6	Moderate to strenuous	Hikers must be accompanied by a park ranger on this hike to far east end of the island.
<b>Lester Point</b>	5	Moderate to strenuous	Hikers must be accompanied by a park ranger on this hike to an incredible, windswept overlook.

\*Hikers must stay on island trails to protect fragile vegetation and for visitor safety.  
 \*Hikers must be accompanied by a park ranger beyond the Lester Ranch.

In addition to the variety of natural resources, San Miguel hosts an array of cultural resources as well. The Chumash Indians lived on San Miguel almost continuously for over 11,000 years. Today there are over 600 fragile, relatively undisturbed archeological sites. The oldest one dates back to 11,600 years before the present—some of the oldest evidence of human presence in North America. Juan Rodriguez Cabrillo and his men laid eyes on San Miguel Island in 1542. Upon claiming the island for the Spanish crown, Cabrillo named it “La Posesion.” Some stories say that Cabrillo wintered and died on San Miguel Island. No one knows where Cabrillo is buried, but there is a memorial commemorating the explorer on a bluff overlooking Cuyler Harbor.



Tim Hauf  
 Caliche forest, San Miguel

Other outstanding island resources that visitors may experience on San Miguel include the caliche forest (sand-castings of ancient vegetation), fossil bones of the Pleistocene pygmy mammoths that stood 4 to 6 feet at the shoulders, 150 years of ranching history and numerous shipwrecks. Whether you are interested in life of the past or life of the present, San Miguel Island has it in abundance. Visit, explore and enjoy.



Tim Hauf

Cuyler Harbor beach, San Miguel Island



Tim Hauf

Island monkey flower

The protection and preservation of your park's biological, cultural and historical resources is a major mission of the National Park Service. By following the regulations and guidelines listed below, you can help protect these rare and unique treasures of Channel Islands National Park for future generations to enjoy.

Note: In addition, to the regulations listed below, visitors must comply with all regulations in title 36 CFR and the superintendent's compendium. Visit [www.nps.gov/chis/](http://www.nps.gov/chis/) for a complete list of regulations.

## Regulations

- As in all national parks, natural and cultural resources are protected under federal law. **Visitors may not collect, harass, feed or otherwise harm the native wildlife, plant life or other natural and cultural resources** of Channel Islands National Park. These include, but are not limited to, vegetation, animals, rocks, shells, feathers and other natural, archeological, and historic features within the park.
- Take or disturbance of any archeological site or artifacts, including shipwrecks and middens, is a violation of state and federal law.** Help preserve nearly 10,000 years of Native American Indian island culture and other cultural resources by having respect for these sites.
- To protect wildlife, **landing is prohibited on all offshore rocks and islets.**
- Visitors may not set foot ashore inside sea caves, including, but not limited to ledges and beaches.**
- Private aircraft may not land within park boundaries. All aircraft must maintain a minimum 1000 foot altitude above land and sea surfaces within the park.**
- Do not directly or indirectly feed the native wildlife.** Wildlife can become habituated to human food by being fed. Once habituated, these animals will beg for food, becoming nuisances to visitors. In addition, habituated animals may bite and transmit diseases, and may consume plastics which obstruct their digestive systems, causing them to starve. **Secure your food and garbage** at all times from birds, foxes and mice.
- Visitors should stay at least 100 yards away from marine mammals and seabirds.** Under federal law it is



Harbor seal mother with pup

illegal to disturb and/or harass seabirds, seals and sea lions. They are very sensitive to any type of human disturbance, especially during nesting and pupping seasons. Be careful not to disturb seal pups that appear stranded on beaches. These pups are being weaned by their mothers. Please check the bulletin boards at the campgrounds for seasonal closures of seabird nesting areas and caves.



Tim Hauf  
Pelicans, Anacapa Island

- Possession of a valid **California state fishing license and Ocean Enhancement stamp is required to fish**, and all California Department of Fish and Game regulations apply. In addition, the waters one nautical mile offshore Anacapa, San Miguel and Santa Barbara Islands are California State Ecological Reserves. Special resource protection regulations apply. **Visitor should be sure to obtain the Channel Islands National Park brochure/map and the Channel Islands National Marine Sanctuary (NOAA/NMS) Synopsis of Regulations brochure in addition to this newspaper.**
- Pack out what you pack in.** There are **no trash cans** on the islands. Please do not place trash in outhouses.
- Charcoal or other types of open fires are prohibited on all islands (except seasonally in designated areas at Scorpion beach on eastern Santa Cruz Island).** Camping stoves and gas grills are allowed.
- No pets** are allowed on the islands.
- No smoking on trails or in brush areas.** Please smoke only in designated areas.
- The national park boundary extends one nautical mile around the islands. Within this area, there are several agencies that have management responsibility and regulations. For complete information regarding these regulations, **please refer to the National Marine Sanctuary's Synopsis of Regulations** brochure available at the park visitor center.

## Specific Island Regulations

### Santa Barbara

- An invertebrate fishing closure exists on the east shoreline of the island in waters less than 20 feet deep.** Please refer to the National Marine Sanctuary's Synopsis of Regulations brochure, available at the Channel Islands National Park Visitor Center.



Michael McFadden  
Cormorants and gulls

### Anacapa

- West Anacapa Island is the largest breeding rookery on the West Coast for the endangered California brown pelican. In order to protect this nesting area from disturbance, **West Anacapa (except at Frenchys Cove) has been designated as a protected research natural area and is closed to public entry.** Frenchys Cove beach is accessible for day use without a permit. To protect the cliffside nests of the endangered California brown pelican, **the waters out to 120 foot depth from the northeast facing cliffs of West Anacapa are closed to entry by any craft, including kayaks, from January 1 to October 31.**
- Visitors to Middle Anacapa Island must be accompanied by a ranger.**
- The waters along the north shore of East Anacapa to a depth of 60 feet are designated as a "natural area."** **The take or possession of any type of aquatic life in this area is prohibited.**
- There are several other closures located around Anacapa in which activities such as fishing, discharging weapons and operating aircraft are prohibited.** Please refer to the National Marine Sanctuary's Synopsis of Regulations brochure.



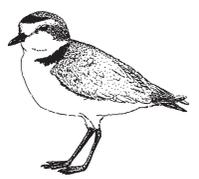
Jeff Foot  
Black oystercatcher

### Santa Cruz

- A landing permit is required for private boaters to land on The Nature Conservancy property** on Santa Cruz Island. Contact The Nature Conservancy for more information.

### Santa Rosa

- From **March 1 to September 15**, the coastline from and including Skunk Point to just north of East Point is **closed to landing or hiking** to protect the nesting area for the snowy plover, a federally listed, threatened shorebird.
- Camping and landing are prohibited year-round at beaches around Sandy Point. Please refer to map and legend for other beach camping closures.**



### San Miguel

- All of the shoreline of San Miguel is closed to public landing or entry with the exception of Cuyler Harbor.** Please refer to the National Marine Sanctuary's Synopsis of Regulations brochure.
- Hikers must be accompanied beyond the ranger station by a park ranger. Call the visitor center for arrangement.**
- No fishing from beaches.**

## BOATING AND KAYAKING

### Guidelines (all islands)

- **Avoid approaching areas with birds, seals and sea lions that are roosting, nesting or pupping. Look ahead and give animals a 100-yard clearance if possible. Be alert for birds that you may not be able to see around guano-covered rocks and pinnipeds hauled out on secluded beaches.** Cormorants, pelicans and snowy plovers are disturbed easily and may knock their eggs out of or abandon their nests if they are flushed suddenly from a cliff. Adult birds will stay away from the nest while people are in the area. The eggs or chicks may overheat in the sun without parental protection. Gulls and ravens are less shy of people and will take advantage of a disturbance to steal eggs and chicks. Entire colonies have been lost this way. Pupping harbor seals, sea lions and other pinnipeds also are sensitive to any type of human disturbance and may abandon their pups. In addition, all of these animals are easily disturbed when resting or preening on rocks or secluded beaches at the water's edge. Rest periods are important to their energy budget. Approach new territory slowly and quietly. If you see animals close by, quietly move away. There may be more animals than you first see.



California brown pelican

Tim Hauf

- **All rock islets within Channel Islands National Park are closed to access above mean high tide (park boundary extends to one nautical mile offshore around each island).** It is also recommended that visitors stay out of sea caves, including dry caves behind beaches, during the spring and summer when seabirds are nesting. Landing on offshore rocks, entering caves and making loud noises in these areas may cause seabirds to abandon their nests. Black oystercatchers, western gulls and Cassin's auklets are a few of the birds that nest on offshore rocks. Pelagic cormorants nest on tiny ledges of sea cliffs and just inside the mouths of caves. Pigeon guillemots and ashy storm-petrels nest in crevices and under rocks and debris inside caves. Many seabirds leave their nests alone while feeding, so even if birds are not present, a misplaced step could crush an egg or chick by moving a loose rock. Bats also hibernate in some of the dry sea caves and waking them can cause a fatal depletion of energy reserves. There may be resting birds and pinnipeds in caves and on offshore rocks even after the breeding season. Under federal law it is illegal to disturb and/or harm these animals. Be cautious of sea lions resting on rocks or beaches in the backs of caves. Startling a sea lion that you can't see in the dark could be hazardous for you as well.

- **In order to be rewarded with displays of interesting natural behavior, never chase any animals and do not try to see how close you can approach them.** If an animal starts to look alarmed (appears agitated or starts watching you), then you are too close. Even though it may not show obvious agitation, being too close can cause severe stress. Sit calmly at a safe distance. Let the animal's natural curiosity take over and it may approach you. Let seabirds, pinnipeds, foxes and other animals adjust to your presence and you will be rewarded with displays of exciting natural behavior. For your safety as well as theirs, do not approach sick or injured animals. Alert a ranger or a wildlife rehabilitation center.

- **Remember, these animals have nowhere else to go.** Help educate others. Let's protect our wildlife for all to see.

Boating and kayaking are unique and rewarding ways to experience the pristine marine environment of Channel Islands National Park. Here you will find solitude and splendor. Here you will also face new challenges and may encounter unexpected dangers. This section is designed to help in planning a safe, enjoyable and environmentally sound sea kayak trip in the park. Private boaters and kayakers (referred to collectively as "boaters") may land on all five islands within the park throughout the year.



Private boaters, Santa Barbara Island

W. Smith

### Planning Your Trip

To help you decide which island to visit, specific island information is available from the visitor center through publications, exhibits and the park movie. Some of the best kayaking within the park can be found on Santa Barbara, Anacapa and eastern Santa Cruz Islands. Due to extremely windy conditions, kayaking on Santa Rosa and San Miguel should not be attempted by the novice or anyone who is not properly trained, conditioned and equipped. Detailed boating information about the channel and islands may be obtained from the U.S. Coast Guard's "Local Notice to Mariners" publication by contacting the Coast Guard at (510) 437-2981. Cruising guides to the Channel Islands are available from the visitor center bookstore, and nautical charts are available at local marine stores. Refer to the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Survey charts 18720, 18721, 18725, 18727, 18728, 18729, and 18756.

Visitors with their own kayaks who would like to explore the park may contact the park concessionaires, who will transport kayaks on their public trips for an extra fee. The concessionaires offer year-round transportation to the islands for day visits and camping trips. Kayakers may also paddle from the mainland across the channel to the islands (due to conditions, most of these cross-channel trips are limited to Anacapa Island). However, **this is not for the novice or anyone who is not properly trained, conditioned and equipped.** Currents, shifting swells and strong winds can stretch a normal 3- to 4-hour trip to Anacapa Island into a 6-hour struggle. The strongest currents are often encountered near the island. The paddle from Oxnard or Ventura to Anacapa Island also takes the kayaker across some of the busiest shipping lanes in California. Potentially dense fog and ship speeds of 25 to 35 knots present a special hazard to kayakers while crossing the channel.



Kayakers, Anacapa Island Landing Cove

Tim Hauf

### Kayak Outfitters

Visitors may kayak with one of several outfitters that offer a variety of different kayak trips to the Channel Islands. The trips are moderate to strenuous in nature, but some do not require previous kayaking experience. Most kayak excursions are offered from May through October.

Adventours Outdoor Excursions	(877) 467-2148
Aquasports	(800) 773-2309
	or (805) 968-7231
Channel Islands Kayak Center	(805) 984-5995
Paddle Sports	(805) 899-4925
Southwind Kayak Center	(800)SOUTHWIND

### Weather

Conditions in the Santa Barbara Channel and around the islands are variable and the ocean is unforgiving. Only experienced kayakers and skippers with vessels capable of withstanding severe weather are advised to make the cross-channel passage. Boaters should obtain the latest weather broadcast provided by the NOAA Weather Service by calling (805) 988-6610, visiting their web site at [www.wrc.noaa.gov/oxnard/oxr3.html](http://www.wrc.noaa.gov/oxnard/oxr3.html) and by monitoring weather radio on VHF-FM 162.475 MHz (weather station 3) for marine forecasts and VHF-FM 162.55 MHz (weather station 1) and VHF-FM 162.40 MHz (weather station 2) for land-based observations.

Weather conditions vary considerably in the channel. The calmest winds and sea conditions often occur August through October, making kayaking ideal. Kayaking is possible during other months, but with a much greater chance for adverse wind and seas with sudden unexpected changes. High winds may occur regardless of the forecast. Forty-knot winds are not unusual for Santa Rosa and San Miguel Islands. Anacapa and Santa Barbara Islands have more moderate winds. Winds are often calm in the early morning and increase during the afternoon. Generally the wind comes from the northwest,

but from October through January kayakers must also be prepared for strong east or Santa Ana winds. Dense fog is common during the summer months, but may occur at any time, making chart and compass navigation mandatory. Ocean currents of considerable strength may be encountered both near and offshore from the islands. Ocean water temperatures range from the lower 50s (°F) in the winter to the upper 60s (°F) in the fall. **There are no public moorings or all-weather anchorages around the islands. It is recommended that one person stay on board the boat at all times. Boaters are responsible for any damage to the resources caused by their boat.**

Please see BOATING, 23

# SANTA BARBARA ISLAND

The smallest of the Channel Islands is deceptive. From a distance, this one-square-mile island looks barren, uninteresting and forlorn. Upon closer examination, the island offers more than one would expect—an island of resting elephant seals, blooming yellow flowers, tumbling Xantus' murrelet chicks and rich cultural history. Santa Barbara Island is the center of a chain of jewels, a crossroads for both people and animals.



Tim Hauf

Coreopsis (Arch Point in background), Santa Barbara Island

Santa Barbara Island is 38 miles from San Pedro, California. The smallest of the California Channel Islands, it is only one square mile in size, or 639 acres. Formed by underwater volcanic activity, Santa Barbara Island is roughly triangular in outline and emerges from the ocean as a giant, twin-peaked mesa with steep cliffs. In 1602, explorer Sebastian Vizcaino named Santa Barbara Island in honor of the saint whose day is December 4<sup>th</sup>, the day he arrived.

Visitors to Santa Barbara Island can witness the incredible recovery of the island's plant life and wildlife after years of habitat and species loss due to ranching and farming activities, including the introduction of nonnative plants, rabbits and cats. Although nonnative grasses still dominate the landscape, native vegetation is recovering slowly with the help of the National Park Service's resource management program. After winter rains, the native plants of the island come alive with color. The strange tree sunflower, or coreopsis, blossoms with bright yellow bouquets. Other plants, like the endemic Santa Barbara Island live-forever, shrubby buckwheat, chickory and cream cups, add touches of color to the island's palette.

This recovery of native vegetation, along with the removal of nonnative predators, has aided in the reestablishment of nesting land birds. Today there are 14 land birds that nest annually on the island. Three of these, the horned lark, orange-crowned warbler and house finch, are endemic subspecies found only on Santa Barbara Island. Unfortunately, the island's recovery did not come soon enough for the endemic Santa Barbara Island



Brad Sillasen

Song sparrow

was found only on Santa Barbara Island and is now lost forever, was one of the smallest forms of song sparrow, differentiated by its very grey back.

Seabird colonies have also benefited from the recovery of Santa Barbara Island. The island is one of the most important seabird nesting sites within the Channel Islands, with 11 nesting species. Thousands of western gulls nest every year on the island, some right along the trailside. Fluffy chicks hatch in June and mature to fly away from the nest in July. The steep cliffs also provide nesting sites for the endangered brown pelicans, three species of cormorants, three species of storm-petrels and one of the world's largest colonies of Xantus' murrelets.



NPS

Xantus murrelet chick

The rocky shores of Santa Barbara Island also provide resting and breeding areas for California sea lions, harbor seals and northern elephant seals. These marine mammals feed in the rich kelp forests surrounding the island. The raucous barking of the sea lions can be heard from most areas of the island. Overlooks, such as the Sea Lion Rookery, Webster Point and Elephant Seal Cove, provide excellent spots to look down on seals and sea lions. Visitors also can jump in the water to see what lies beneath the ocean surface. Snorkeling in the Landing Cove, visitors can see bright sea stars, spiny sea urchins and brilliant orange garibaldi fish. California sea lions and occasional harbor seals frequent the landing cove waters and the surrounding rocky ledges.

All of these incredible resources can be experienced by hiking the 6 miles of trails and by snorkeling, swimming or kayaking along the island's coast.

## Santa Barbara Island Facts

- Santa Barbara Island is located in Santa Barbara County.
- Santa Barbara Island is one square mile in size.
- The average rainfall is 12 inches per year.



Drost

Island Night Lizard

- The endemic, threatened island night lizard occurs only on Santa Barbara, San Nicholas and San Clemente Islands.

- Santa Barbara Island is home to 14 endemic

plant species and subspecies which occur only on the Channel Islands. Forms of buckwheat, dudleya, cream cups and chicory are endemic—found only on Santa Barbara Island and no other place in the world.

- The island's cliffs offer perfect nesting habitat for one of the world's largest breeding colonies of Xantus' murrelets, a rare sea bird.
- Many squatters lived on Santa Barbara Island before government leasing took place in 1871.



Tim Hauf

Santa Barbara Island Live-forever

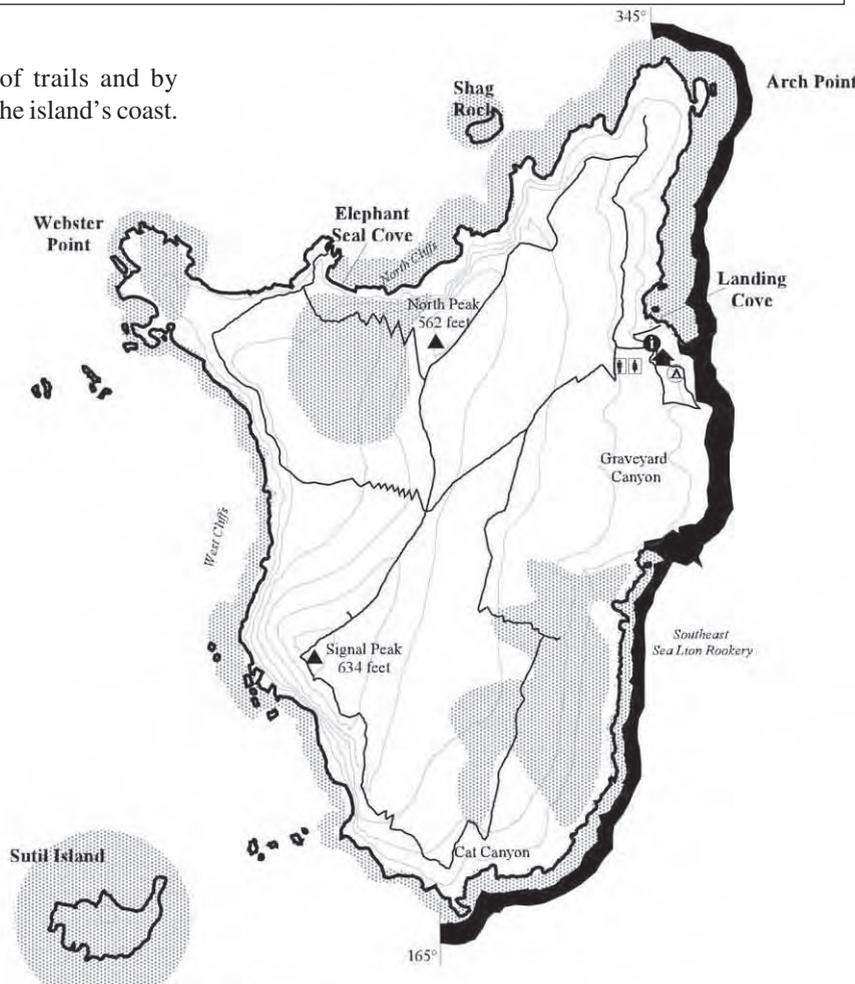
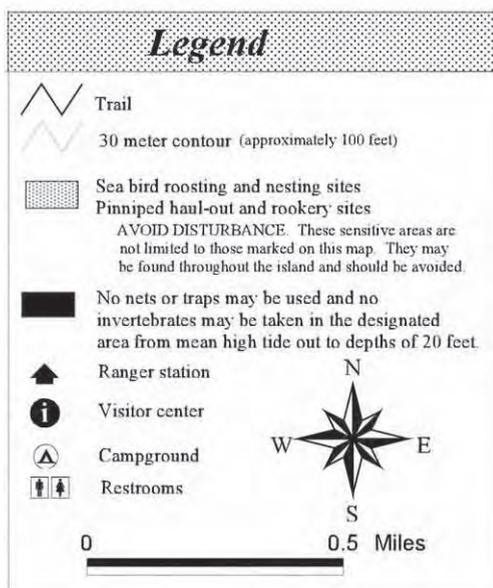
Destination (from landing cove)	Distance (miles, round trip)	Difficulty	Description
Arch Point	2	Moderate	Great views and spectacular wildflowers in season.
Elephant Seal Cove	5	Moderate to strenuous	View elephant seals from remarkably steep cliffs.
Sea Lion Rookery	4	Moderate	Watch sea lions as they haul-out on the rocky coast.

\*Portions of trails are subject to closure when pelicans are nesting January through August.  
\*Hikers must stay on island trails to protect vegetation, nesting seabirds and for visitor safety.

## Santa Barbara Island: "Things To Do"

- One-day trips, and long overnight camping trips (minimum stay is generally 3 days—Friday to Sunday).
- Although roughly the same size as Anacapa Island, the entire island is accessible through the 6 miles of scenic trails. Unlimited and exceptional island coastal views await the visitor.
- Ideal place for swimming, snorkeling, diving and kayaking. Since Santa Barbara Island is a cliff island, access to the water is only at the landing cove (no beaches).
- Excellent wildlife viewing—seabirds, seals and sea lions.

(See related articles for more information.)



**Safety**

**Float Plans:** Boaters should always file a formal float plan with the harbor master before departing. Family and/or friends also should be informed of your float plan. Names and addresses for the boaters, as well as emergency phone numbers, should be listed. Plans should also include the number of boats (this includes kayaks) and boaters on the trip as well as the color, size and type of craft used. Any survival and special emergency equipment should be listed (E-PIRB, VHF, food rations, flares, etc.). The place, date and time of departure and return should be logged as well as destination(s). This information can be invaluable for a search operation if something goes wrong. Remember to be flexible with your plans. Weather should always determine your course of action.

**Shipping Lanes:** Major shipping lanes lie between the islands and the mainland. Boaters should be aware of their location and use caution when crossing them. All boaters should listen to the Coast Guard notice to mariners broadcast on VHF channel 22 since the waters in and surrounding Channel Islands National Park are sometimes closed for military operations.

**Sea Caves:** Sea caves can be very dangerous—large waves or swells can fill a cave unexpectedly. Be extremely careful and wear a helmet at all times when exploring sea caves.

**General Kayak Safety:** Safety requires good planning and common sense. Sea kayaking is potentially hazardous, even for experienced kayakers. Before embarking on your Channel Islands sea kayaking adventure, be sure to obtain current weather and sea conditions information. Carefully selecting and equipping your paddlecraft is essential. Craft should be of a sea kayak design. Paddlers will help insure a safe and rewarding trip for themselves if they have the following:

1. A seasoned veteran sea kayaker as a group leader.
2. Equipment familiarity and ability to use it in an emergency.
3. Ability to right the craft or to assist others who have capsized.
4. Ability to brace the vessel in breaking seas and to deal with high winds.
5. Ability to prevent, recognize and treat hypothermia and other medical emergencies in wilderness conditions.



Tim Hauf  
*Kayaking at Arch Rock, Anacapa Island*

6. Ability to read nautical charts and to plot a course.
7. A filed "Float Plan" with the harbor master's office or with a responsible mainland contact. Kayakers are encouraged to contact island rangers at the beginning and end of a paddle.

**Landing Permits and Procedures**

There are no landing permits required for the islands administered by the National Park Service; however, there are closed and restricted areas on each island. Please refer to the

"Limiting Your Impact" section on page 20 for information on regulations and guidelines. A landing permit is required to land on The Nature Conservancy property on Santa Cruz Island. It is recommended that boaters contact the park ranger on each island before landing for an orientation, information on daily events, island safety, landing instructions, weather conditions or camping check-in. Park rangers occasionally monitor VHF Channel 16. Channel 16 is a hailing frequency only, and rangers will instruct you to switch to another channel upon contact. If you cannot hail the park ranger on the island on which you plan to land, try contacting one of the other island rangers on a neighboring island, as island canyons and mountains sometimes obscure radio transmission. Boaters may land according to the following procedures. **Please note that rocks or islets on or near any of the islands are closed year-round to any landing.**

**Santa Barbara Island**—A permit is not required to land or hike on Santa Barbara Island. Access to the island is permitted only at the landing cove. The landing dock is available for unloading purposes only. No craft, including kayaks and inflatables, should be left moored to the dock. Please lift your inflatables up to the upper landing.

**Anacapa Island**—A permit is not required to land or hike on East Anacapa Island or at Frenchys Cove. West Anacapa (except Frenchys Cove) is a protected research natural area and is closed to visitors. Visitors are allowed on Middle Anacapa only when accompanied by a park ranger. There are two moorings near the landing cove at East Anacapa Island that are reserved for use by the National Park Service, the Coast Guard and the park concessionaire only. Private boaters must anchor a reasonable distance from these moorings. **This is not an all-weather anchorage. It is recommended that one person stay on board the boat at all times.** The landing dock is available for

unloading purposes only. No craft, including kayaks and inflatables, should be left moored to the dock. Please lift your inflatables and kayaks up to the lower landing.

**Santa Cruz Island**—Boaters may land on the eastern 25% of Santa Cruz Island without a permit at any time. This area is owned by the National Park Service and is east of the property line between Prisoners Harbor and Valley Anchorage. No buoys are available at any landing area. Buoys are reserved for the National Park Service and the U.S. Coast Guard. A small pier is available at Scorpion Anchorage. Due to surf and swell conditions, boaters should use extreme caution when making surf-landings at any beach, especially Smugglers Cove and those beaches facing south and southeast between San Pedro Point and Sandstone Point.

A permit to land on the other 75% of Santa Cruz Island is required from The Nature Conservancy. A fee is charged and no overnight island use is permitted. It may take 10-12 days to process the request. Permit applications are available at the park visitor center or by contacting the Santa Cruz Island Preserve, 2559 Puesta del Sol, Santa Barbara, CA 93105, (805) 898-1642.



Tim Hauf  
*Little Scorpion and Scorpion Anchorage, Santa Cruz Island*

**Santa Rosa Island**—Boaters may land along coastline and on beaches without a permit for day-use only. Beaches between, and including, Skunk Point and East Point are closed from March 1st to September 15th in order to protect the threatened snowy plover. The beaches around Sandy Point are closed year-round. Boaters may not use the mooring buoys in Bechers Bay. They are reserved for the National Park Service, the park concessionaire and the private ranch.

**San Miguel Island**—Overnight anchorages are restricted to Cuyler Harbor and Tyler Bight. Visitors may land **only** on the beach at Cuyler Harbor. Visitors may walk the beach at Cuyler Harbor and hike up Nidever Canyon to the ranger station. To hike beyond the ranch site, a backcountry permit, subject to ranger availability, must be obtained by calling park headquarters (805-658-5730) **prior** to mainland departure.

**Kayak Equipment Checklist**  
Experienced sea kayakers recommend the following items:

- Compass
- Air horn/whistle/signal mirror
- Flares
- Portable marine/weather radio with waterproof pouch
- Area charts (per group)
- Bilge pump/bailing device
- Spare paddle/paddle float
- Personal Flotation Device (PFD)
- Helmet
- Broad-brimmed hat
- Adequate spray skirt
- Food and fresh water with extra provisions
- Dry storage bags
- First aid kit
- Sunscreen
- Heavy diameter haul lines with carabiners
- Knife
- Repair kit

Island	Landing/Day Use Permit Required	Fee	Landing Areas	Landing Facility
East Anacapa	No	No	Landing Cove	Small dock*
Middle Anacapa	Yes; must be accompanied by a ranger	No	Must make arrangements with ranger	Rocky shoreline
West Anacapa	No	No	Only at Frenchys Cove	Beach
Santa Cruz NPS property	No	No	Anywhere; facilities at Scorpion Anchorage, Smugglers Cove, and Prisoners Harbor	Beach; pier at Scorpion
Santa Cruz TNC property	Yes*	Yes*	The Nature Conservancy; designated areas	Beach
Santa Rosa	No*	No	Water Canyon Beach or pier in Bechers Bay, various beaches	Beach
San Miguel	No, but permit is needed to hike beyond ranger station*	No	Only at Cuyler Harbor*	Beach
Santa Barbara	No	No	Landing Cove	Small dock*

\* Please see specific island information.

# WHALE WATCHING

The waters surrounding Channel Islands National Park are home to many diverse and beautiful species of cetaceans (whales, dolphins and porpoises). About one third of the cetacean species found worldwide can be seen right here in our own backyard, the Santa Barbara Channel. The 27 species sighted in the channel include gray, blue, humpback, minke, sperm and pilot whales; orcas; Dall's porpoise; and Risso's, Pacific white-sided, common and bottlenose dolphins.



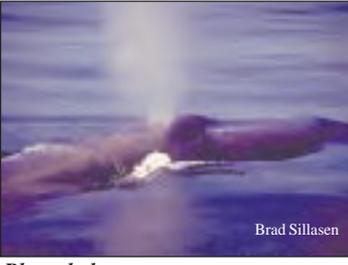
Orca, Anacapa Island

This diversity of cetacean species offers a great opportunity to whale watch year-round. The most common sightings are of gray whales from mid- to late-December through mid-March, blue and humpback whales during the summer and common dolphins throughout the entire year. Whales and dolphins can be seen either from shore or from a boat. The best shore viewing is from a high spot on a point that juts out into the ocean. Some examples include Point Dume in Malibu, the Palos Verdes Peninsula near Los Angeles or Point Loma in San Diego. The park visitor center has a tower with telescopes, which can be used for whale watching as well as island viewing. Watching in the early morning hours, before the wind causes whitecaps on the water's surface, will provide you with the best opportunity to see whales from shore.

Closer viewing of whales is possible from public whale watching boats or private boats. Whales have been known to approach boats quite closely. Under the Marine Mammal Protection Act, boaters must stay at least 100 yards from whales unless the whale chooses to approach the boat.



Blue whale fluke.



Blue whale

**Spouts.** Whether you are watching from shore or in a boat, here are a few distinctive habits to look for: Your first indication of a whale will probably be its spout or "blow." It will be visible for many miles on a calm day, and an explosive "whoosh" of exhalation may be heard up to 1/2 mile away. The spout is mainly condensation created as the whale's warm, humid breath expands and cools in the sea air.

**Diving.** Diving is preceded by the whale's thrusting their tail flukes out of the water. Gray whales have small tail flukes with rounded tips and serrations on the tail edge. Typically, whales make a series of shallow dives, followed by a deep dive.



Gray whale

**Spyhopping.** Whales and dolphins are believed to have reasonable vision in air as well as water. On occasion, a whale will extend its head vertically from the sea. Supported by thrusting flukes, the whale's head can rise 8-10 feet above the surface, sometimes turning slowly for thirty seconds or more before slipping back underwater.

**Breaching.** No one knows why whales perform this most spectacular of their behaviors. It may be part of the courtship display, a signal, an effort to dislodge parasites, an expression of stress—or just for fun!



Humpback whale

When breaching, 3/4 or more of the whale's body bursts forth from the water, pivots onto its side or back and falls back with an enormous splash. Gray and humpback whales often breach two or three times in succession and have been known to continue for a dozen or more displays.

**Footprints.** Ripples caused by the vertical thrusts of the tail as the whale swims just below the surface are called "footprints."



Watching humpback whales.

Many whales are on the endangered species list and should be treated with special care. All whales are protected by the Marine Mammal Protection Act; it is illegal to disturb or harm any marine mammal. Boaters who use private craft to watch whales must remember to stay at least 100 yards away from whales. Boaters who frighten or interrupt the whales' activities by approaching too close could drive the whales away from food or young calves. Please remember that whales are wild animals and can be unpredictable. We need to continue to explore the world of whales and dolphins. The well-being of the cetacean population is a good indication of the health of the ecosystem. Our ability to bring these species into the next century and beyond is an indication of the future of life on this planet. Every day we learn more about these mysterious and unique creatures that dwell beneath the water, yet rise above it to breathe.

The park concessionaires offer whale watching during the year. Please refer to the "How To Get There" section for contact information.

## HELP YOUR PARK

**Volunteer Opportunities:** Channel Islands National Park has numerous volunteer opportunities available, from staffing the visitor center to revegetation projects on the islands. You can share your skills and education or learn something new. Ask a ranger how to become involved or call the volunteer coordinator at (805) 658-5727 to obtain an information packet and application.

**ON THE NET?**  
Visit us at: [www.nps.gov/chis/](http://www.nps.gov/chis/)



**Channel Islands National Park**  
1901 Spinnaker Dr.  
Ventura, CA 93001



Inspiration Point, Anacapa Island