National Park Service
U.S. Department of the Interior

Channel Islands National Park

San Miguel Island Trail Guide

Exploring San Miguel Island

Welcome to San Miguel Island, one of five islands in Channel Islands National Park. This is your island. It is also your responsibility. Please take a moment to read this bulletin and learn what you can do to take care of San Miguel. This information and the map on pages three and four will show you what you can see and do here on San Miguel.

About the Island

San Miguel is the home of pristine tidepools, rare plants, and the strange caliche forest. Four species of seals and sea lions come here to breed and give birth. For 10,000 years the island was home to the seagoing Chumash people. Juan Rodriguez Cabrillo set foot here in 1542 as the first European to explore the California coast. For 100 years the island was a sheep ranch and after that it was used by the military. San Miguel is still owned by the U.S. Navy, but it is managed under agreement by the National Park Service. In 1980 it was designated part of Channel Islands National Park.

Access Permit Required

A permit (including liability waiver) is required to visit the island. If you are traveling to San Miguel Island with Island Packers, Channel Islands Aviation, or Truth Aquatics, they will provide the form to you upon your reservation. Private boaters can obtain the form at a self-registration station in Cuyler Harbor at the Nidever Canyon trailhead entry. San Miguel Island is open only when National Park Service personnel are on the island. It is the responsibility of private boaters to contact the park to ensure the island is open before coming ashore.

Many parts of San Miguel are closed to protect wildlife, fragile plants, and geological features. Several areas, however, are open for you to explore on your own. Others are open to you only when accompanied by a park ranger.

On your own you may explore the Cuyler Harbor beach, Nidever Canyon, Cabrillo monument, and the Lester ranch site. Visitors are required to stay on the designated island trail system. No off-trail hiking is permitted. The island was a bombing range and there are possible unexploded ordnance. In addition, visitors must be accompanied by a ranger beyond the ranger station.

The Nidever Canyon trail will take you to the ranch site, monument and ranger station. The trail begins at the top of the dune above Gull Rock. It climbs along the east wall of the canyon.

Arranging a Hike with a Ranger

To see other parts of the island, such as Point Bennett or the caliche forest, you must go with a ranger. If you are with Island Packers, Channel Islands Aviation, or Truth Aquatics a ranger or volunteer will be available for most of these trips to lead hikes. They will announce time and date during your arrival. If you are a private boater, the San Miguel ranger can be contacted on Marine Radio Channel 16. You can also arrange a hike with the ranger through park headquarters at (805) 658-5730.

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Nidever Canyon

Island Rules

Everything is protected. Do not collect anything.

San Miguel Island is open only when National Park Service personnel are on the island.

Access permit (including liability waiver) is required.

No pets are allowed on shore.

No smoking or fires.

Take your trash off the island with you.

Clean your boots and other possessions, such as backpacks, before you visit to avoid introducing nonnative species.

Hikers must stay on trails.

Hikers must be escorted except where indicated on this map.

California State fishing regulations apply. No fishing in marine reserves.

Safety

The island was a bombing range and there are possible unexploded ordnance. Do not disturb any munitions that you may find on or offshore. They are extremely dangerous and may detonate at any time. Report their location to a ranger, who will have it removed by qualified personnel.

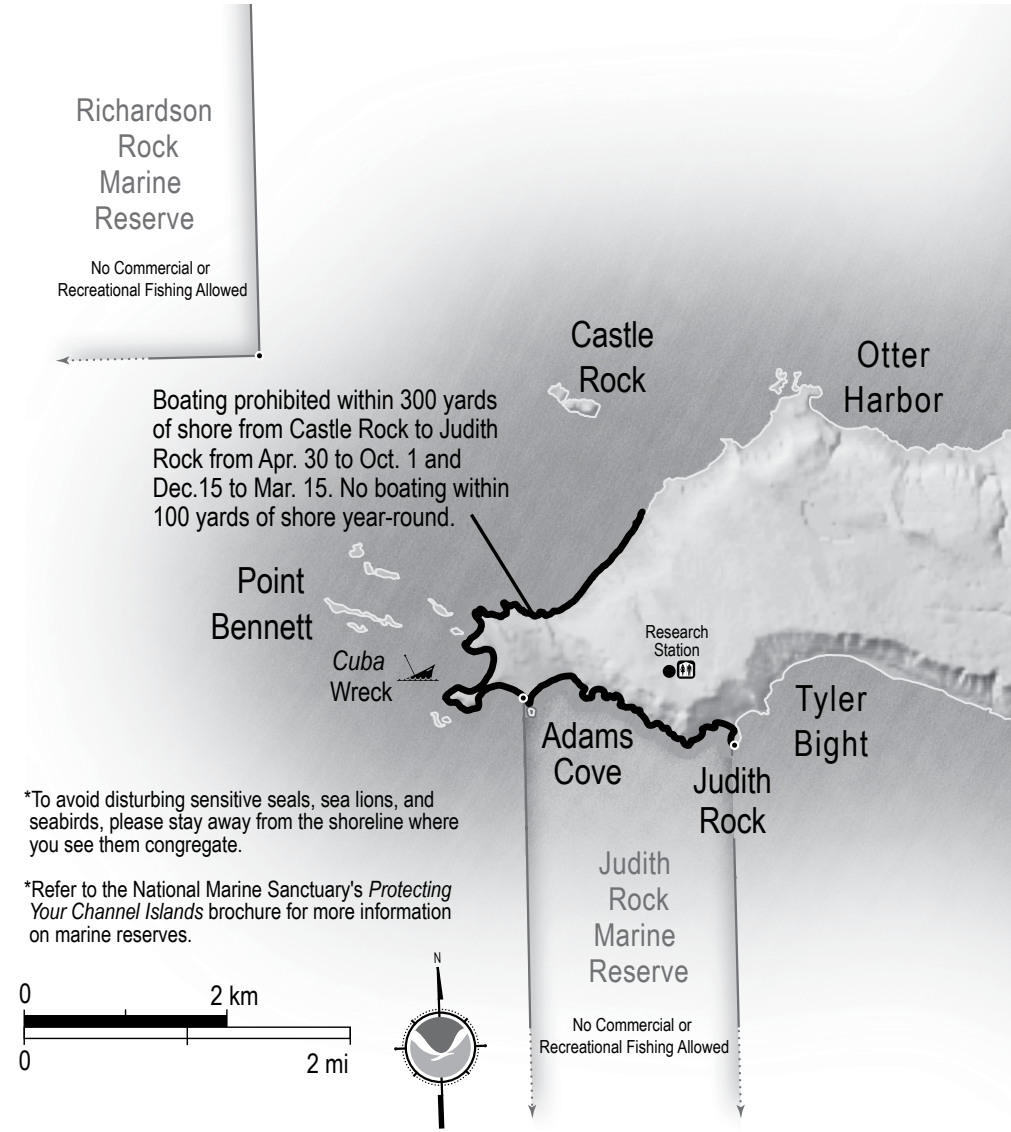
Use caution when crossing the rockfall along the beach.

The Nidever Canyon trail is steep and slippery. Watch your step.

Hantavirus has been found in deer mouse populations on San Miguel. This is a potentially fatal disease and some basic precautions should be taken: avoid contact with rodents; do not feed wild animals; keep food and drink in rodent-proof containers.

Carry plenty of water and drink it.

Hikers should never hike alone—use the buddy system.



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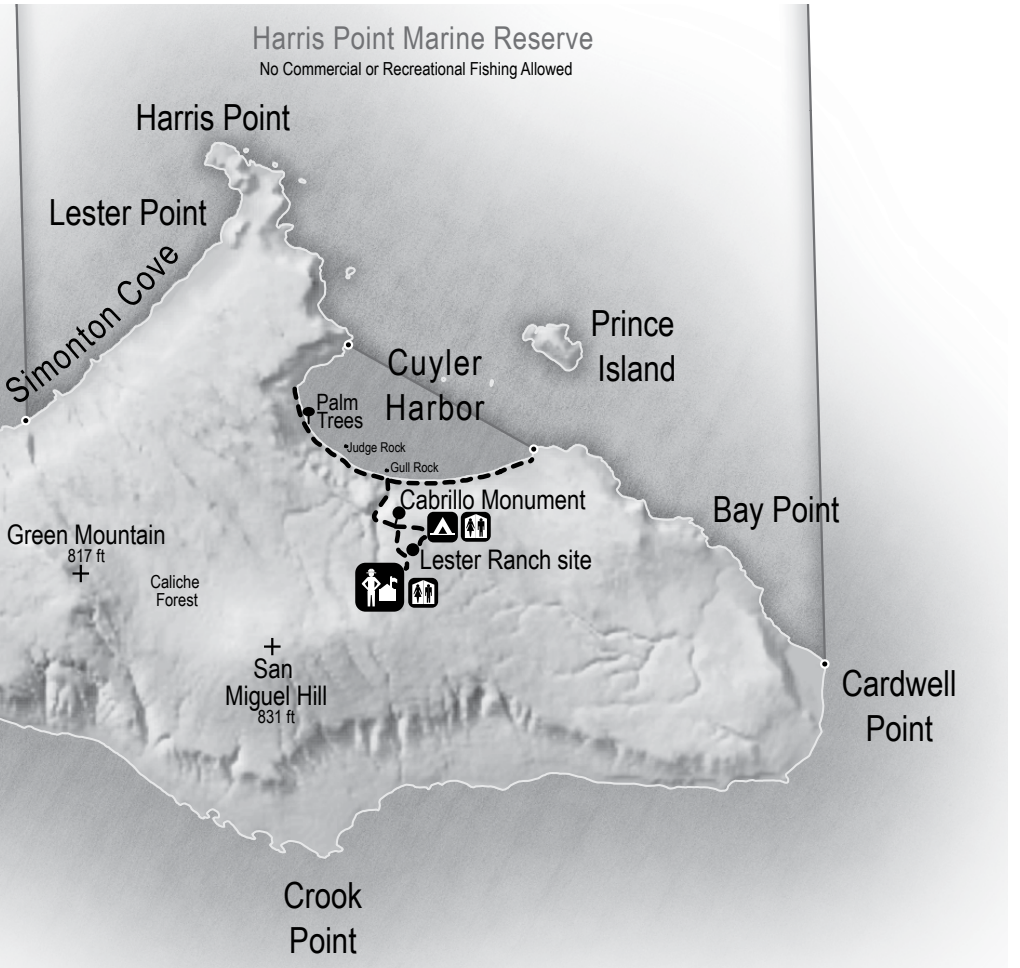
Cuyler Harbor



This map is your guide to the open areas on San Miguel Island. The dashed lines mark the trails and sections of beach that you may travel on your own with an access permit.

On the beach, you may walk to either end of the beach to where the sand runs into the rock.

If seals are present on the beach, do not approach or disturb them.

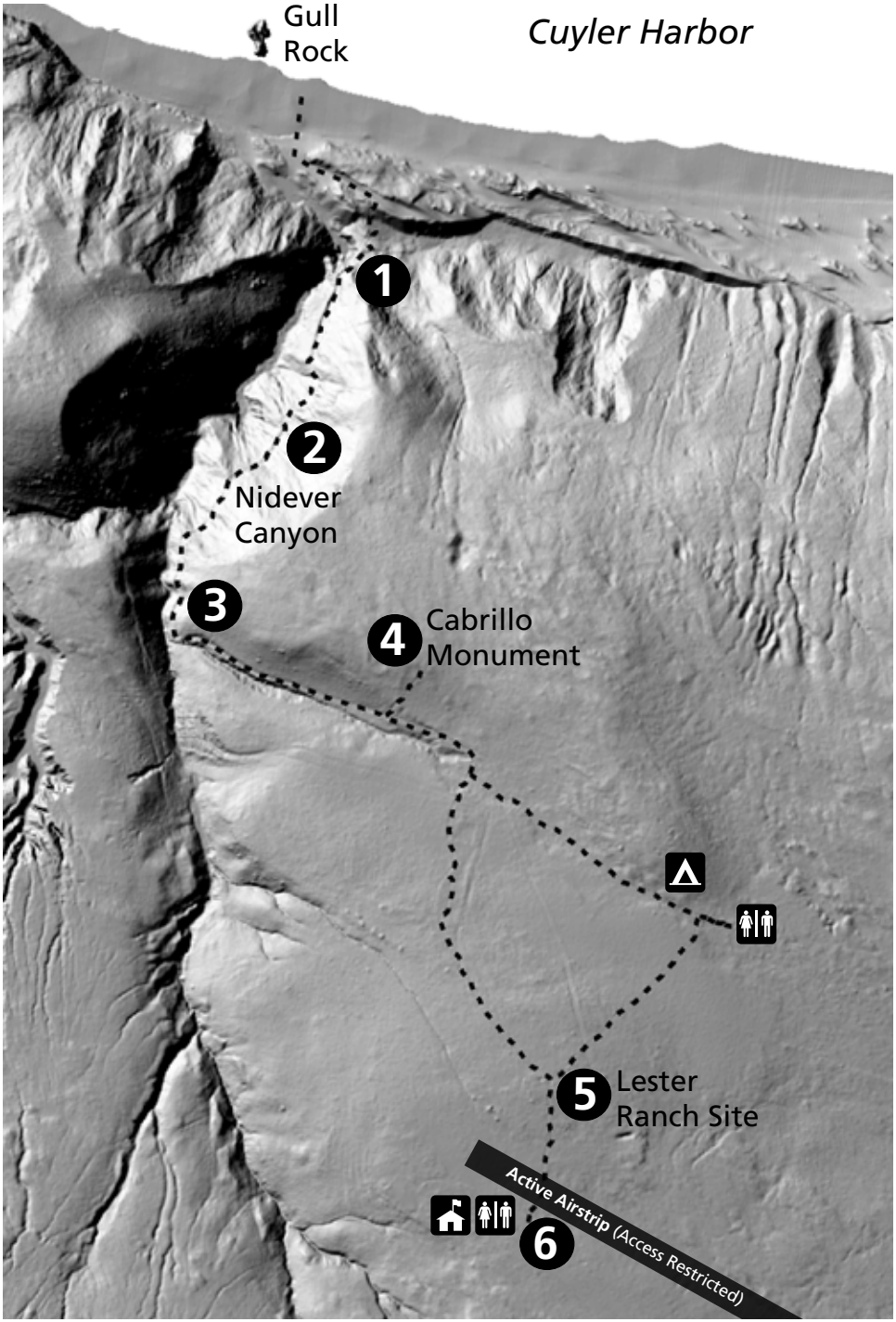
The distance from the palm trees to the campground is about 1.5 miles. From Gull Rock, the distance is .7 miles

Pit toilets are available at both the ranger station and the campground.

There is no drinking water on the island.

Landing is only permitted on the beach at Cuyler Harbor.

Only the unshaded portion of Cuyler Harbor (outside of the marine reserve) is open to fishing.


Gull Rock
Cuyler Harbor
1
2
Nidever Canyon
3
4
Cabrillo Monument
5
Lester Ranch Site
6
Active Airstrip (Access Restricted)
Trail
Trail Stops
North
.25 miles

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Prince Island within Cuyler Harbor.

How To Use This Trail Guide

This trail guide provides six interpretive stops along the one mile hike (one-way) to the ranger station.

Please see the adjacent map for specific stop locations. Note that many of the topics covered are applicable to any island location. So no matter where your visit takes you, carry this guide along to learn about the rich natural and cultural history of San Miguel Island.

Due to potential unexploded ordnance, you may only hike on your own to Cuyler Harbor beach, Nidever Canyon, Cabrillo monument, Lester ranch site and the ranger station. Visitors are required to stay on the designated island trail system. No off-trail hiking is permitted. Entering other areas without a ranger is a violation of federal law.

To see other parts of the island, such as Point Bennett or the caliche forest, you must go with a ranger. If you are with Island Packers, Channel Islands Aviation, or Truth Aquatics a ranger or volunteer will be available for most of these trips to lead hikes. They will announce time and date during your arrival. If you are a private boater, the San Miguel ranger can be contacted on Marine Radio Channel 16. You can also arrange a hike with the ranger through park headquarters at (805) 658-5730.

Trail Stop 1

Nowhere Else on Earth

Location: Welcome Sign at Nidever Canyon Trailhead

Close to the mainland, yet worlds apart, San Miguel Island, along with the other Channel Islands, is home to plants and animals that are found nowhere else on Earth. As on the Galápagos Islands of South America, the isolation of the Channel Islands has allowed evolution to proceed independently, fostering the development of nearly 150 plants and animals that are endemic, or unique, to these islands. San Miguel Island is home to 20 of these species and some, like the San Miguel Island song sparrow, are found only on this island.

Isolation has also played a major role in shaping human activities on the islands. While the southern California coastal mainland has seen extensive development, the Channel Islands remain undeveloped. The islands' separation from the mainland by 25 miles of an often turbulent ocean has limited and directed human use and occupation for thousands of years. And this limited use continues today, giving us a chance to see coastal southern California as it once was.

So step back in time and experience San Miguel Island's isolation as you walk up Nidever Canyon to the ranger station. It's like nowhere else on Earth.

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Point Bennett

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Point Bennett

An Ocean Park and Sanctuary

From this vantage point, one has the opportunity to gaze upon another part of the park: the marine environment. One nautical mile of water around each island is part of Channel Islands National Park, and the six nautical miles around each island form Channel Islands National Marine Sanctuary.

Within this ocean realm, one often sees or hears California sea lions, northern elephant seals, or harbor seals. The island's isolated shoreline offers these pinnipeds an ideal combination of safety from predators and freedom from human disturbance, making the island an ideal place to rest, breed, and pup.

But even San Miguel Island's isolation could not always protect these and other sea mammals from human predation. As early as the late 1700's, fur hunters were exploiting sea otters, fur seals, elephant seals, and sea lions for their fur, hides and oil. Sea mammal hunting ended in the early 1900's and laws like the Marine Mammal Protection Act now protect these species.

In this isolated environment, their protected populations have recovered from centuries of slaughter. Today, up to five different species (northern elephant seals, California sea lions, Guadalupe fur seal, northern fur seals, and harbor seals) and over 100,000 individuals use the island's shoreline. On Point Bennett alone over 30,000 individuals can be found—making it one of the largest concentrations of wildlife in the world.

These pinnipeds, along with over 800 other marine species, also depend on the extensive kelp forests found in these waters for food, shelter, and protection—

John Iwerks and Glenna Hartmann

Kelp forest

from foraging nudibranchs, to grazing snails, to fish seeking refuge, to whales feasting on plankton. Kelp is a type of algae that, under ideal conditions (cold, nutrient-rich water), is one of the fastest growing organisms on Earth—it can grow two feet per day.

While urban and industrial development has altered much of the southern California coastal mainland, the isolated islands contain the most undisturbed stretches of coastline in this region, providing some of the best conditions for kelp forests and their inhabitants.

Kelp forests don't just benefit marine species—they benefit us as well. Not only do we eat some of the animals that depend upon the kelp forest, but everyday products like ice cream, salad dressing, and even toothpaste also use a little bit of seaweed as well. Kelp is harvested for a natural ingredient called algin, which is used as a suspending, stabilizing, emulsifying, gel-producing, and film-forming additive in more than 70 commercial products. In addition, marine plants and algae such as kelp provide Earth with 80 percent of its oxygen.

Despite these benefits, human activities have placed the kelp forest and its inhabitants in jeopardy. Pollution and over-harvesting of marine species have altered the kelp forest ecosystem. Kelp forests in southern California today cover less than half the area they covered at the turn of the 20th century.

However, improvement to pollution controls, fishing regulations, and increased research and public education have come with the establishment of marine protected areas (MPAs),

Within the park and sanctuary, this network of MPAs provides a refuge for sea life, as well as opportunities for recreation, education, and science. In 11 marine reserves (including three around San Miguel Island), recreational fishing and commercial harvesting are prohibited; limited fishing and harvesting are allowed in two marine conservation areas. The MPAs total 318 square miles, the largest such network off the continental United States and an important part of a larger, worldwide effort to conserve natural, historic, and cultural marine resources.

An Ideal Isolated Home

San Miguel Island and its associated islets support regionally important and diverse seabird colonies, including one-third of the breeding seabirds in the Channel Islands. Prince Island, which lies at the entrance to Cuyler Harbor, hosts the most diverse seabird colony on the west coast with 13 different species. Ashy storm-petrels, Brandt's cormorants, Cassin's auklets, pigeon guillemots, California brown pelicans, and common murres all make their home here.

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The 40-acre Prince Island hosts the most diverse seabird colony on the west coast with 13 different species.

Brad Sillasen

Park staff restores habitat and monitors species like the Cassin's aucklet.

San Miguel Island, the other Channel Islands, and all of their associated islets and offshore rocks comprise one of the largest breeding centers on the west coast for seabirds and shorebirds. Their isolation and freedom from predators and human disturbance, as well as the abundance of food in the cold, nutrient-rich ocean waters surrounding them, make them an ideal place for marine birds to breed and rear their young.

However, the island's isolation was not able to protect some species of seabirds from human impacts. The destruction of native vegetation, importing of nonnative species, gathering of eggs, disturbance of rookeries, and the spread of pesticides in the marine environment have all been detrimental.

During the 1960s, the pesticide DDT nearly caused the extinction of the California brown pelican as a breeding species on the west coast of the United States. In 1970, only 552 nesting attempts were made on Anacapa Island (the largest colony on the West coast of the United States) and just one chick survived. On October 13, 1970, the brown pelican was listed as an endangered species.

Today, pelicans and other seabird species are gradually recovering now that their isolated island home is protected within Channel Islands National Park. Through monitoring and restoration programs, the park and its partners are working to conserve critical nesting habitat and to protect the integrity of the island and marine ecosystems that support 90 percent of southern California's seabird populations.

On San Miguel Island, these efforts have focused on restoring seabird nesting habitat, removing black rats and nonnative vegetation, revegetating with native plants, installing nest boxes, and closing areas to protect nesting seabirds.

The most notable results of these efforts have been the successful recovery of the California brown pelican and its removal from the endangered species list in 2009.

Trail Stop 2

Return of the Natives

Location: Halfway up Nidever Canyon

Halfway up Nidever Canyon is a good place to stop, take a rest, and observe the island's plant life including such species as coreopsis, buckwheat, dudleya, lupine, and morning glory. This incredible display of coastal sagebrush and coastal bluff scrub native vegetation is very similar to how the island would have looked to the first visitors.

Unfortunately, the island's vegetation was not always this lush. In the 1870s, the island was described as a "barren lump of sand." For over 100 years sheep (up to 6,000 at one point), cattle, horses, pigs, burros severely overgrazed the island, eliminating most of the native vegetation and creating open, disturbed, and eroded soils that allowed nonnative plants to flourish. Once established, these hardier nonnatives outcompeted the natives for limited soil and moisture due to their longer germination and growth cycles and ability to withstand grazing and browsing by livestock.

The park is working to restore the island's native vegetation, and special focus is being placed on the 10 plants endemic to the islands—those found nowhere else in the world. To ensure the survival of these unique species and encourage the recovery of the island's native vegetation, all nonnative animals have been removed and the effort to plant native species and control nonnative weeds is underway.

The recovery of native plants has so far been remarkable. Many have spread beyond the buried seed banks and steep canyon walls and cliffs, where they remained protected from grazing, and have reestablished themselves throughout the island.

This reestablishment of native plants has also aided in the recovery of endemic deer mice, island foxes, and nesting land birds by providing important habitat. Today, there are 16 land birds that nest

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Brad Sillasen

Once described as a "barren lump of sand," San Miguel Island is now densely vegetated with a diverse assemblage of native plants. Native vegetation has recovered remarkably well on the island since the removal of sheep in 1966. San Miguel Island in 1930 (top left) and in 2000 (top right) from about the same angle. The island's native vegetation as it appears today in bloom above Cuyler Harbor (bottom).

annually on the island. Six of these are endemic to the Channel Islands—the song sparrow, horned lark, orange-crowned warbler, loggerhead shrike, Allen's hummingbird, and house finch.

You can help with this recovery of island natives by cleaning your boots and other possessions, such as backpacks, before you visit. This ensures that you don't accidentally introduce nonnative species to the island. Together we can guarantee the return of native plants and animals throughout San Miguel Island.

Trail Stop 3

Geographical Isolation

Location: First Trail Junction

Although it probably feels as if the steep trail up Nidever Canyon will never end, eventually, at about 500 feet in elevation, the terrain will level out to a plateau. This plateau is a marine terrace—an ancient shoreline carved flat by wave action and exposed through changes in sea level and tectonic uplift of the land. Remnants of this and other marine terraces can be found around much of the island's coastline. A future marine terrace (called a wave-cut platform) is being created by wave erosion at the base of the sea cliffs below you.

The island's first shoreline was created around five million years ago, when compressional forces, caused by the ramming of Baja California into southern California, resulted in folding and faulting of marine sediments and volcanic rocks (deposited between 15–30 million years ago) and the eventual uplift of the islands. These compressional forces are still ongoing, making this area geologically active today. Earthquakes are quite common and all the islands continue to be uplifted.

Ever since these compressional forces caused the islands to emerge from the sea, they have been separated from the mainland. For decades, scientists assumed that the two were connected by a land bridge, but as bathymetric information (or topography) of the sea floor improved, it revealed that even during periods of lowest sea levels (about 20,000 years ago), the islands still remained isolated by at least four miles of ocean. It is this continuous geographical isolation that has shaped island life.

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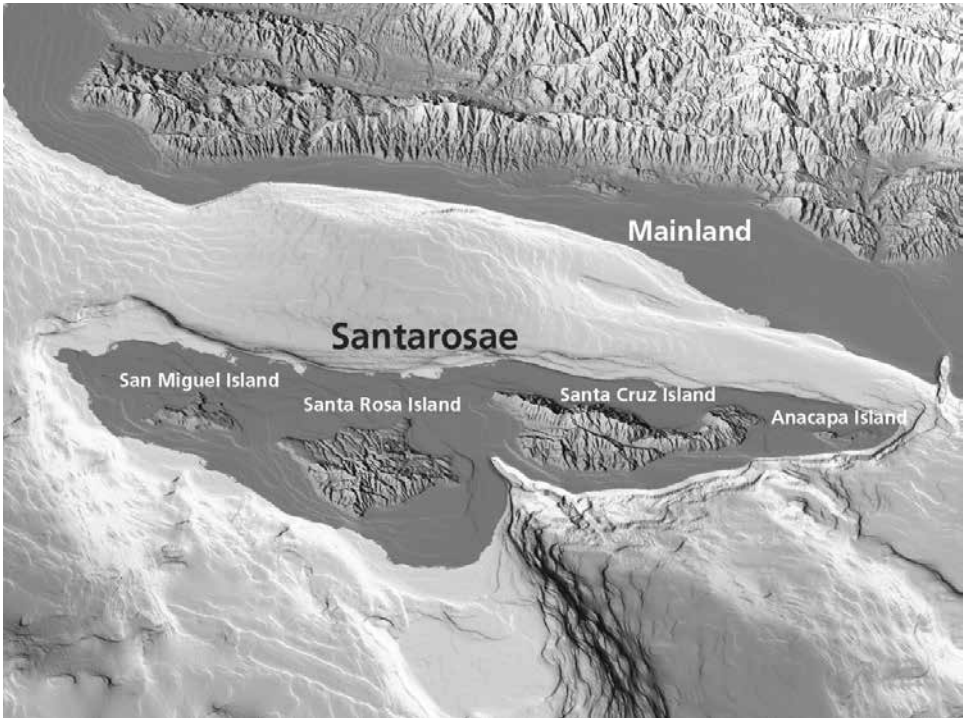
Aerial view showing San Miguel Island's marine terraces.



Although never connected to the mainland by a land bridge, the four northern islands were once part of the Pleistocene "super island" known as Santarosae, nearly four times as large as the combined areas of the modern Channel Islands. The dark-shaded area on the map depicts the ancient coast of Santarosae and California around 20,000 years ago when sea level was approximately 350 feet lower than it is today. As the ice sheets and glaciers melted and the sea level rose, only the highest parts of Santarosae remained as modern islands. (Adapted from a map by geologist Tom Rockwell)

Caliche Forest

The island's isolation has also helped to preserve one of the island's most interesting features—the caliche forest, calcified casts of ancient vegetation that have been exposed in several areas by the eroding sand. This ancient fossilized vegetation is comprised of roots and trunks of a variety of plants, including possibly pine and cypress that once grew on the island during periods of colder and wetter climates. The most unusual casting that has been found is a huge caliche log that was 2½ feet in diameter and about 30 feet long.

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Caliche forest

Please note: To visit the caliche forest, you must go with a ranger. You can arrange a hike with available island staff.

Trail Stop 4

Window into Their World

Location: Cabrillo Monument

In 1937, the Cabrillo Civic Club of California built this monument to commemorate Juan Rodriguez Cabrillo as a "Portuguese" explorer who discovered San Miguel Island and to mark his place of burial. Today, however, research has revealed that Cabrillo was most likely Spanish, probably died on Santa Catalina Island, and was most likely buried at sea.

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Cabrillo monument

And although in 1542 Cabrillo was the first European explorer to reach San Miguel's isolated, windswept shores, he was certainly not the first to "discover" it. When Cabrillo came ashore there were approximately 100 Chumash living in two villages along the island's coast, including a village at Cuyler Harbor. The Chumash and their ancestors had been living on San Miguel almost continuously for nearly 12,000 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.

Most of these archeological sites are "middens," a debris pile containing remnants of those societies who came before. These midden sites offer us a window into the Chumash world. By examining these sites, archeologists can piece together a picture of their ancient island life.

The Island Chumash were skilled crafts people and seafarers with a vast knowledge of the world around them and how to use it for their survival. The predominance of shells and fish bones within the middens reveal that although the islanders exploited terrestrial plant resources, such as acorns and cherries, they subsisted primarily on fish, shellfish, and other marine organisms. They often plied the channel in search of this rich variety of marine food, traveling in *tomols* (canoes) made of redwood or pine planks caulked with tar from natural seeps.

Taking from or disturbing archeological sites or artifacts is a violation of state and federal law.

The archeological sites around the Channel Islands are a testament to the importance of the Chumash and other American Indians. Archeological sites are sacred to Chumash peoples today, are protected by federal law, and are a vital nonrenewable scientific resource. Please help us in protecting and preserving this rich part of California's heritage.

The middens also reveal that other items not available in this isolated island environment had to be obtained from villages on the mainland or other islands. One of the principal products manufactured and traded by the islanders were shell beads, which were the currency of trade in the Chumash area and throughout California.

To produce these beads, chert microdrills were used to bore holes in pieces of olivella snail shells. Chert, a hard, durable silica rock, was found in considerable quantities on Santa Cruz Island. Because Eastern Santa Cruz Island had chert of the proper type and quality needed for tool construction, this location became the center for manufacturing chert microdrills. One particular site contains evidence of the highest density of microdrill production in North America. Other sites on San Miguel, Santa Rosa, and Santa Cruz Islands have been labeled by archeologists as "bead factories," with amazing amounts of discarded drills and bead debris.

San Miguel Island and the other Channel Islands were not isolated enough to protect the Island Chumash from the diseases the Spanish explorers and missionaries brought with them as they began colonizing California in the late 1700s. By the early 1800s, the Island Chumash had been devastated by measles and other introduced epidemics, as well as by drought and the disruption of their trade-based economy. The last of the islanders would leave their traditional San Miguel Island home by 1816.

Although much of the islander's history and way of life has been lost, enough remains to remind us of this unique part of San Miguel Island's past. These midden sites, along with today's descendants of the Island Chumash, remind us how important and sacred these isolated islands are.

Ancient Ocean Pathways Lead the Chumash Home

Peter Howorth

In 1976, the Chumash Brotherhood of the *Tomol* built and paddled the *tomol*, *Helek* (Peregrine Falcon), from San Miguel Island to Santa Rosa Island, and finally to Santa Cruz Island. This historic ocean voyage, the first since the mid-1800s, brought the Chumash back to their island home and sustained their traditional way life.

Then in 1997, a group of Chumash built the traditional style *tomol*, *'Elye'wun* (Swordfish), the first to be owned by the Chumash in 150 years, and paddled her from the mainland to Santa Cruz Island in 2001, completing the island circle begun by *Helek*.

Members of the Chumash community continue to celebrate their heritage and culture through annual *tomol* crossings to Santa Cruz Island. These journeys are an affirmation of tradition, which contemporary Chumash regard as a gift to their ancestors and children.

Centuries ago, the *tomol* was used to connect different island Chumash groups with each other and the mainland. Today, it links past generations of Chumash with the present-day Chumash community.

Trail Stop 5

Preserving the Past

Location: Lester Ranch Site

An island ranch is a study in self-reliance. With no stores, phones…everything has to be fashioned from whatever is on hand; it's the art of making do.

Gretel Ehrlich, *Cowboy Island: Farewell to a Ranching Legacy*

While the isolated island offered ranchers several advantages over the mainland, including no predators and the world's best fence (the ocean), it created special challenges as well. Supplying such a remote outpost was probably the most considerable of these. The transportation of supplies and stock on and off the island was always an adventure—the distance to the mainland, rough seas, and high expense made it very difficult.

However, ranchers adapted to the challenges of island life through self-reliance and, as one ranch foreman wrote, "learning to make do with what [they] had." In order to produce income and be as self-sufficient as possible, ranchers developed a diverse operation: they raised barley and potatoes, maintained a vegetable garden, and imported different animals, including sheep, cattle, horses, mules, pigs, chickens, turkeys, and ducks.

Not all of these enterprises succeeded. Several attempts to grow crops were severely hampered by the island's unrelenting winds and blowing sand. And droughts caused ranchers to remove their livestock, impacting the raising of wool and meat for market.

Nevertheless, ranching persisted for over 100 years on San Miguel Island and included such colorful characters as George Nidever, a prominent California pioneer, William G. Waters, an eccentric entrepreneur, and the well-publicized family of Herbert Lester.

Nidever was the first to begin ranching in earnest on the island. In 1850 he brought 45 head of sheep, 17 head of cattle, two hogs, and seven horses and by 1862 the stock had increased to 6,000 sheep, 200 head of cattle, 100 hogs and 32 horses. During the drought in 1863 and 1864 Nidever lost most of his livestock and those that remained denuded much of the island, leaving just sand dunes.

Nidever is most noted for finding the "Lone Woman of San Nicolas Island." She was an American Indian woman lived isolated on the remote island for 18 years after her people were taken to the mainland in 1835. While collecting seagull eggs on the island, Nidever found her and eventually brought her back to Santa Barbara where she delighted the town with her language, songs, and dance. Tragically, however, within a short period of time she became ill and died.

In the 1880s William Waters acquired the ranching rights to the island and became

California State Library

Santa Cruz Island Foundation

Top: William Waters. Bottom: Waters' road built in 1888.

California State Library

Santa Cruz Island Foundation

Top: Waters' Nidever Canyon ranch complex, 1903. Bottom: Waters' Nidever Canyon ranch house, 1895.

the longest-lived resident of the island, spending almost thirty years there. He proclaimed himself the "King of San Miguel," stating that the United States had no right to the island and that it was his for the taking. When the government tried to investigate, Waters threatened to shoot any invaders of his nation.

According to Waters, only when Grover Cleveland sent a civil request as the head of one nation made to another would he allow government surveyors to access to the island. In reality, what probably convinced Waters to allow the survey party access was the visit to the island by a U.S. Marshal and a contingent of armed men. Waters was eventually denied his request to remain as the self-appointed king and remained a U.S. citizen until his death.

Waters and his work staff constructed the island's first road from Cuyler Harbor beach to the top of the island via Nidever Canyon, blasting rocks and making a fine but narrow grade for hauling supplies up and products down. The road remains as a hiking trail today and some of the rockwork is still evident.

Waters and his staff also constructed the island's largest ranch house—the ruins of which lie before you. After sand drifts had buried the old ranch house in upper Nidever Canyon, work began on this new house in 1906. It was constructed out of materials salvaged from shipwrecks around the island – most of it from the lumber schooner the J.M. Coleman which had gone aground inside Point Bennett in 1905. The house was 125 feet long and 16 feet wide with double-walls to withstand the strong winds. A

blacksmith shop/harness room, tool shed, well, cistern, and root cellar were also constructed.

Robert Brooks acquired the island lease from Waters in 1917 and hired his friend from the Army, Herbert Lester, to manage the ranch from 1929-1942. Herbert brought his new bride, Elizabeth, with him to the island, and eventually had two daughters out here, Betsy and Marianne. Herbert and his family enjoyed isolated island life and saw it as an escape "from the shallowness of civilization and its incessant and inconsequential demands."

San Miguel Island soon came to be known as Lester's Island, and following in Waters' footsteps, he too dubbed himself the "King of San Miguel." He wore a makeshift insignia to designate his rank and their mailbag read "Kingdom of San Miguel."

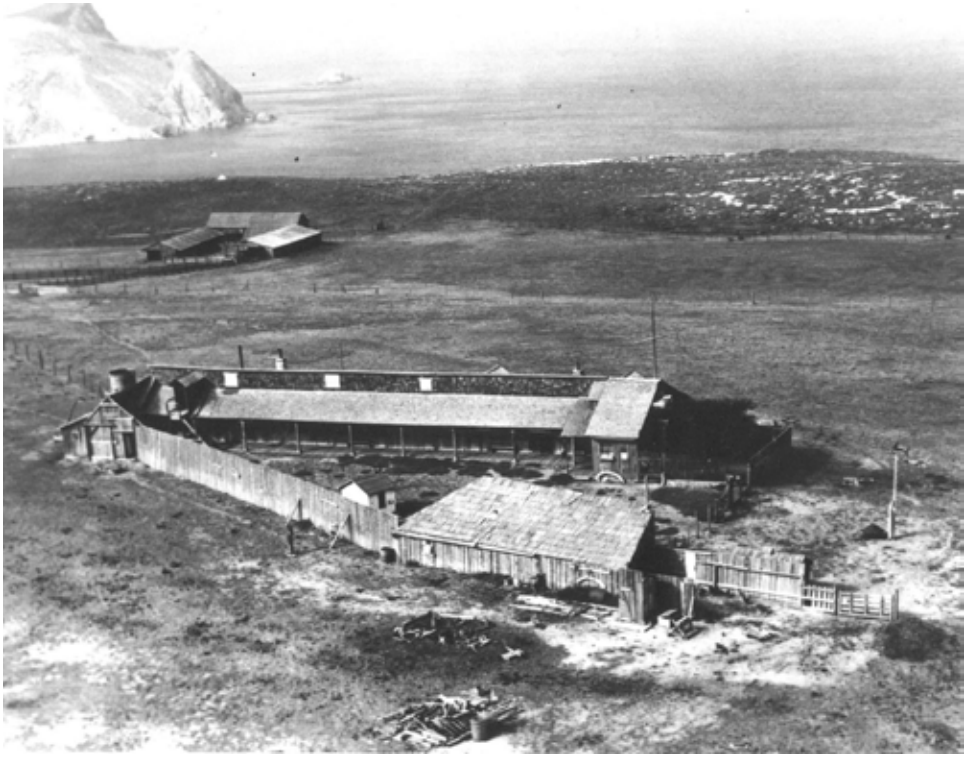
Numerous stories are known from the Lester era, due to extensive coverage in the press. In 1940, Life magazine ran an article about the family entitled "Swiss Family Lester," including a story about the kids being educated in the "tiniest schoolhouse in the world."

In 1937, The Santa Barbara News-Press carried an article headlined, "Man's Life Saved by Island King." The story described how Robert Brooks was working on the reconstruction of the landing down in Cuyler Harbor when he lost his footing, fell and impaled his thigh on a rusted bolt. He was in danger of bleeding to death if he did not receive immediate attention. Lester, relying on his Army experience, quickly sterilized the wound with Lysol and stitched it closed with a curved burlap sack needle and some fishing line. The ranch had no radio at the time so the American flag was hoisted upside down in the hope of attracting a passing vessel. Two weeks later their regular supply ship arrived and transported Brooks to the hospital. The doctors were quite impressed with Lester's work and refused to take any pay as Lester had completed all the treatment necessary and had saved Brooks' life.

In 1948 island ranching came to an end when the Navy revoked Brooks' lease so that the island could be used as bombing range to train and test for the nation's Cold War defense system.

Unfortunately, the ranch house built by Waters and lived in by the Lesters burned down in 1967 when the Navy inadvertently started a fire during weapons testing. All that remains today is what you see before you (piles of rubble, hardware and metal pieces, and two cement-lined excavations considered to be a cistern and a root cellar) and, of course, the stories of survival on a weather-beaten and most isolated island.

Even today, the isolation of this island still affects visitors and the National Park Service. Public boat trips for park visitors are limited to only a few days each month during the summer and visitors must bring (and carry up to the top of the island) all their own food and water. Park staff must import food and drinking water as well, and have established a solar power system for energy. Like so many who visited and resided here before, we must learn to make do with what we have.



Santa Cruz Island Foundation

SB Museum of Natural History

Clockwise from top: (1) The ranch house built by Waters in 1906. Note the shearing shed and barn visible in the background and the tiny schoolhouse within the fence. (2) The Lester family in front of the ranch house, 1939. (3) Hauling wool to the landing in Cuyler Harbor, 1939. (4) Herbert Lester shows Betsy his elephant gun in the ranch house living room in 1942. Marianne is at left, Elise at right.

Trail Stop 6

Back from the Brink

Location: Ranger Station

Perhaps by now you have been lucky enough to cross paths with an island fox. They are frequently seen along the trail as well as around the campground area. The island fox (Urocyon littoralis) lives on six of the eight Channel Islands—San Miguel, Santa Rosa, Santa Cruz, Santa Catalina, San Nicolas, and San Clemente. Each island has its own subspecies, and it is found nowhere else in the world.

The island fox is the largest native mammal on the the islands, but one of the smallest foxes in the world. It is nearly 20 percent smaller than its closest relative, the mainland gray fox. It's about the size of a house cat, averaging from 12 to 13 inches in height, 23 to 27 inches in length (including tail), and three to five pounds in weight. Similar in appearance to the gray fox, the island fox has a gray back, rufous sides (reddish-brown), and white undersides. There are distinctive black, white, and rufous markings on the face.

Unlike the nocturnal gray fox, which hunts at night to avoid predators, the island fox is also active during daylight hours. As a "generalist omnivore," it eats almost all available foods on the islands, including fruits, vegetation, insects, mice, and crabs. Mating takes place in February and March, with pupping usually in April or May. Average litter size is two. The adult males play an important role in the raising of young.

The fossil record for the island fox dates back at least 6,400 years. Since the Channel Islands were never connected to the mainland, scientists currently have two theories on how the fox arrived on the islands. However, due to the scant fossil history, significant questions still remain on the exact mechanism of the initial arrival.

One theory is that the island fox's ancestor, the gray fox, "rafted" to the islands on driftwood, propelled by a storm or currents. During the last ice age, 10–20,000 years ago, ocean levels were up to 400 feet lower than today, narrowing the channel between the islands and mainland to perhaps just four to five miles across and grouping the northern islands together into one large island we call Santarosae. The other theory is that gray foxes were transported to the northern Channel Islands, like they were to the San Nicolas and San Clemente Islands, by American Indians.

The foxes adapted to their new island home, evolving into a dwarf, or smaller, form of the gray fox. Environmental and ecological factors such as overcrowding, reduction in predators, food limitations, and genetic variations could have contributed to the natural selection for a smaller size. As the climate warmed and ocean levels began to rise, Santarosae was divided into the islands of San Miguel, Santa Rosa, Santa Cruz, and Anacapa. Because of a lack of permanent freshwater, the island fox did not inhabit Anacapa Island.

timhaufphotography.com

The island fox has recovered from the brink of extinction.

Steve Smith

Bald eagles have been reestablished on the Channel Islands.

Between 1994 and 1999, island foxes almost disappeared on San Miguel, Santa Rosa, and Santa Cruz Islands. Predation by nonnative golden eagles caused over a 90 percent decline in the population with just 15 foxes left on San Miguel Island, placing the island fox on the brink of extinction. By 2004, the island fox was listed as a federally endangered species. A successful recovery effort included captive breeding of island foxes, relocation of golden eagles, and the reestablishment of bald eagles (a natural competitor of the golden eagle). In all, on San Miguel Island 62 foxes were released over a six-year period with the final fox set free in 2007. This recovery effort has been recognized as one of the quickest and most successful recoveries of an endangered species.

Park Protection

In 1980, San Miguel Island was designated part of Channel Islands National Park to protect, preserve, and teach us about the island's fragile resources and unique past. By understanding these resources and the role isolation plays on these islands, the National Park Service can preserve them for future generations to study and enjoy.

The National Park Service needs your help as well. We encourage you to explore and learn more about San Miguel Island and the rest of the Channel Islands—but don't stop there. In recognizing the importance of these islands, take your awareness to the action level. Make every effort to preserve the plants, animals, and artifacts found not only within this park, but throughout the world as well.

Area Beyond Ranger Station is Closed to Unescorted Travel

Due to unexploded ordnance, visitors must be accompanied by a ranger beyond this point. Entering this area without a ranger is a violation of federal law. When not accompanied by a ranger, visitors may only explore Cuyler Harbor beach, Nidever Canyon, the Cabrillo Monument, and the Lester Ranch site.To see other parts of the island, such as Point Bennett or the caliche forest, you must go with a ranger.

National Park Service
U.S. Department of the Interior

Channel Islands National Park
1901 Spinnaker Drive
Ventura, CA 93001

805.658.5730
nps.gov/chis

2019, 1st edition
Written and designed by Derek Lohuis

Printed on 100% recycled paper

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