HISTORIC RESOURCE STUDY

Channel Islands National Monument
and San Miguel Island, California
HISTORIC RESOURCE STUDY

CHANNEL ISLANDS NATIONAL MONUMENT

AND

SAN MIGUEL ISLAND

CALIFORNIA

CONTRACT NO. CX-2000-7-0065

BY

LOIS WEINMAN ROBERTS

CHAMBERS CONSULTANTS AND PLANNERS

May, 1979
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FOREWARD

This technical report has been prepared by Chambers Consultants and Planners (CCP) to satisfy the research needs as outlined in Contract No. CX-2000-7-0065, Historic Resource Study, Channel Island National Monument, California. The historic sites have been identified, evaluated, and plotted on historic base maps. Structures already on the list of Classified Structures have been identified and included in a nomination for an Historic District on East Anacapa Island. National Register Forms have been prepared for the District and for a site on San Miguel Island nominated for inclusion on the National Register of Historic Places. Historic sites for which nomination forms have already been filed have been studied and further evaluated. A tabulated list of historical sites, a section on the research approach, photographs, historic maps and documents, and narrative history of the islands are included.

Numerous people have assisted the CCP researcher in finding leads to sources and in acquainting her with sites at the islands. Thanks are due to Superintendent William Ehorn and his staff and in particular to Todd Brindle at Anacapa Island and to Mike Hill at San Miguel Island. Walter Evans at the 11th Coast Guard District Offices, Long Beach, generously permitted the researcher to make extensive use of his files and office facilities. Robert Moore Brooks made available the Waters Diary, his photographic files, and newspaper clippings. Photographs were also made available by Don Meadows and Elizabeth Lester and were taken for the report by W.E. Roberts.

A major thrust of this research was to uncover the military role of these islands during and after World War II. All branches of the military have been active on the islands at one time or another, and many people are to be thanked for the exhaustive search they made to find documentation for the activities we know existed there. We wish to mention, in particular, the following in the Navy:

Mr. John Vandegrift at Commandant 11th and 12th Naval District; Com. John Baker and Louise Bidwell, Naval Air Station, North Island; Tom Smith, Miramar Naval Air Station; Al Frascella, Paul Foster, Les Maland and Harold Wilson at Pacific Missile Range, Point Mugu; Bernardo Cavalcante at the Classified

Army assistance came from:

Col. G.C. Burch, Los Angeles Branch, Department of Army; Mr. Webb at Center for Military History, Washington, D.C.; Dr. Anthony Turhollow, Corps of Engineers, LAD.

Coast Guard personnel included:


Useful leads to Air Force data came from:


Colleagues in the History Department, California State University, Long Beach, Dr. David Williams and Dr. Nicholas Hardeman suggested sources and Dr. Donna Boutelle read part of the manuscript. Rear Admiral W.E. Roberts USNR (ret.) read the manuscript and gave technical advise. Archaeologist Roberta Greenwood lent materials and suggested sources.

The researcher devoted most of the period allotted to this report to gathering data, a task which could have been extended over years had not the discipline of report writing called it to a halt. She then attempted to include in the text all of the information discovered on land occupancy and upon the lives of those people who made their homes on the islands knowing that this material was expected for the National Monument's interpretative programs. Fitting every document and note into the text is not considered good practice in the historical profession since it does not result in the best prose and may run the risk of creating confusion. In this report displaying the evidence took priority over the writing, and Monument personnel should be advised that nothing was withheld.
SUMMARY OF RESEARCH

1.1 RESEARCH APPROACH

Chambers Consultants and Planners (CCP) was contracted on September 29, 1977, to carry out the necessary services and supporting activities to conduct an Historic Resource Study at the Channel Islands National Monument and San Miguel, California.

1.1.1 The Study Area

The Anacapa, San Miguel, and Santa Barbara Islands all of which lie within seventy miles of the mainland belong to two groups of islands. Anacapa and San Miguel are in the Santa Barbara group. Anacapa is in actuality a chain of three small islands extending four and one-half miles east and west. It stands at the eastern approach to the Santa Barbara Channel just north of the 34° parallel at approximately 119.5° longitude. San Miguel, best known because of Juan Cabrillo's death there or nearby, is the most westerly island of the Santa Barbara group. It lies slightly north of the 34° parallel and east of 119° longitude. Santa Barbara Island belongs to the Catalina group and is in the Outer Santa Barbara Channel just east of the 119° longitude at approximately 33.5° parallel. Land use of the islands ranged from goat herding, sheep raising and farming to lighthouse and military.

Both San Miguel, administered by the NPS for the Navy, and the other named islands are owned by the United States government and thus fall under the mandate of Executive Order 11593. This report will satisfy the requirements under that order as set forth in this Contract No. CX-2000-7-0065.
1.1.2 Tasks

The tasks of the study were as follows:

1. Definitive literature search and pertinent oral history interviews;
2. On-site orientation of island contours and physical geography by air, water and land;
3. On-site identification and recording of the condition of individual historical features: photographing and mapping;
4. Resource evaluation for its significance to American history and culture and its integrity of location and association;
5. A narrative history of the islands and attendant tabular inventory of all historical features; and

1.1.3 Scope

The literature search and narrative history were centered upon the objectives of this report as set forth above. The literature search was made at the following archives, libraries and depositories:

1. National Archives, Washington D.C.;
2. Bancroft Library, University of California, Berkeley, California;
3. Huntington Library, San Marino, California;
4. California Historical Society, San Francisco and San Marino, California;
5. Ventura County Historical Society;
6. National Archives and Record Center, Suitland, Maryland;
11. Federal Records Center, San Bruno, California;
12. Federal Records Center, Laguna Niguel;
13. Eleventh Coast Guard District, Union Bank Building, Long Beach, California;
14. Monument Headquarters, Channel Island National Monument;
15. Division of Cultural Resources Management, National Park Service, Western Regional Office, San Francisco, California; and
16. Local military archives listed in the Section "Bibliography".

In addition to the above list, various local experts, agencies, participants, and societies were consulted.

The narrative included the following subjects:

1. Exploration, Indian populations;
2. Trappers;
3. Coast Survey and Mapping;
4. Shipwrecks;
5. Navigational Aids;
6. Ranching and leases;
7. Military and naval history; and
8. Administration of the islands by the National Park Service.

Primary documents were consulted wherever possible and relied upon for evidence since they in practice stand up against the questioning of professional historians and supplied the most convincing argument for features eligible for the National Register of Historic Places.

All data pertinent to the sites submitted for nomination was collected, such as:

1. Historical names;
2. Geographic location;
3. Category;
4. Ownership;
5. Status;
6. Present use;
7. Location of legal description of current property title;
8. Representation in existing historical surveys;
9. Bibliographical references;
10. Boundaries;
11. Photographs; and
12. Data needed for Property Photography Form 10-301.

1.2 SUMMARY OF RESULTS

The literature search, oral history interviews, and narrative history of this report were prepared so as to display significant local events and the sites were they took place as they related to the larger historical fabric of Spanish Imperial, and United States national, economic, social and wartime history. Chambers Consultants and Planners' boat and aircraft were employed for a physical survey of the islands and for photography. The National Park Service shared helicopter transportation to San Miguel Island and Ranger Mike Hill guided the island survey. The on-site surveys were used to study the present condition of historical features and to document them photographically. Twenty- six sites were evaluated and recorded, including a District of twelve structures. Various additional minor features (e.g. fences) were noted in the narrative history under the subdivisions "Comments and Recommendations". Two sites, the Anacapa Lighthouse District and the Nidever Adobe Ruins on San Miguel Island were entered on nomination forms for the National Register of Historic Places. Forms for two sites on San Miguel Island drafted in 1972 were revised.

As mentioned above, the general approach followed in this research was to review the published literature, contact knowledgeable people associated with the subject islands, and from these leads go to the archives of the
branches of the armed services which used the islands. A selective list of the offices visited and personnel who could be helpful to future researchers working on other Channel Islands off California is listed below.

Coast Guard

11th District Office
Union Bank Building, 400 Ocean Gate
Long Beach, California 90822
Walter Evans, Chief Logistics and Property Branch
Lt. Com. B.F. Thomson, Branch Chief Aids to Navigation

Coast Guard, Washington D.C.
Department of Transportation Building, 400 7th Street, SW
Mr. Lee, Chief, Logistics and Property
Dr. Robert Scheina, Historian
Dennis Noble, Chief, Marine Sciences Branch

Air Force

March Air Force Base
Dick Leminski, 15th Air Force Historian

Luke Air Force Base, Arizona 85309
Bob Sullivan, Historian

Maxwell, Alabama, has records of anything that has been completed by any unit in the Air Force.

Chief of Air Force History
Forrestal Building, Washington D.C.
Max Rosenberg. He has index and telephonic connections with Maxwell, Alabama, archives.

Vulenburg Air Force Base
Martin. Hagopian, Historian, 1st Strategic Aerospace Division

Edwards Air Force Base
Mr. J.T. Bear

Navy

Commandant Eleventh and Twelfth Naval District, 937 North Harbor Dr.
San Diego, California 92132
John Vandegrift, Public Affairs
J.E. Malloy, Chief of Staff
Navy

Commandant Eleventh and Twelfth Naval District
937 North Harbor Drive
San Diego, California 92132
John Vandegrift, Public Affairs
J.E. Malloy, Chief of Staff

Naval Air Station, North Island
San Diego, California 92135
Louise Bidwell, Librarian

Naval Air Station, Miramar
San Diego, California 92145
Tom Smith, Historian

Naval Air Systems Command, Washington D.C.
Dr. Armstrong, Historian

Operational Archives, Naval History Center
U.S. Naval History Division, Washington Navy Yard
Barnard Cavalcante, Archivist

Naval Records Management
Washington D.C.
Lt. Paul White

Chief Naval Operations, Aviation History Office
Potomac Annex
Mr. Van Fleet

Naval Facilities Engineering Command, Port Hueneme
Commander: Captain D.L. Saravia and in his office Mr. John Slatten
Vincent Transano, Historian
Sarah Riley, Librarian

Naval Facilities Engineering Command, San Bruno
Leon Conner, Real Estate Division

Pacific Missile Range, Point Mugu
Island Facilities Officer
Operations: Paul Foster and Harold Wilson
Les Maland, Facility Manager
Nan La Grange, Central Mail Room (Old Records)
A number of periodicals subscribed to by military personnel were asked to publish a few lines describing the report research in an attempt to reach some old timers who might have been assigned to the islands during World War II or who participated in squadron exercises at San Miguel in the post-war years. The following agreed to print a synopsis of our request:

1. Civil Engineer Magazine;
2. Navy Times; and

Responses may still be forthcoming.

Documents with the exception of those copies from the Bancroft Library, Berkeley, which they asked to be returned, are presently filed by topic and arranged as backup for the sections set up in this report. In a conversation
between Superintendent William Ehorn and this researcher on March 1, 1978, it was agreed that a proper repository for the collection along with xeroxed copies of published materials, books, maps, pamphlets, and photographs would be the Headquarters of the Channel Islands National Monument. It is suggested that an agreement might be reached between Chambers Consultants and Planners and Superintendent Ehorn for an historian to set up an archive and filing arrangement when the new Headquarters building is completed.
2.1 INTRODUCTION

The unique environmental setting which lies behind the recorded history of the Channel Islands National Monument is best understood if related to the geological history of the continental shelf for the western coast of California. Off central California the edge of the shelf almost parallels the coast; however, at Point Conception the coastline turns eastward forming a large bight (the coast regains its original trend in San Diego County). The edge of the shelf, however, does not follow the contour of the bight and instead continues in a directly southern trend and extends some one hundred twenty (120) miles further out than it did at Point Conception. This section of the continental shelf is likened to a submerged part of the continent with mountainous peaks of up to eight thousand (8,000) feet and intermountain basins.

2.2 THE CHANNEL ISLANDS

The tips of the mountains, rising above sea level, form an archipelago of islands, the Channel islands of California. Geologists suggest that occasionally the islands have been connected with the mainland. The four northern islands are summits of a submerged ridge of the Santa Monica Mountains. During periods of exposure, this ridge formed a peninsula or land bridge extending westward south of Ventura affording back and forth movement of Pleistocene animals and transfer of plants. This is indicated by the presence of fossil elephants of Santa Rosa, Santa Cruz and San Miguel Islands and by plants there with affinities as far north as Fort Bragg.\(^1\) Santa Barbara Island, on the other hand, maybe the high point of a submerged southeast ridge, since evidence ties it to the Guadalupe Islands.
Although the Galapagos Islands off the coast of Ecuador were probably never connected with the mainland, the conditions which make them a world renowned gigantic laboratory closely parallel those of the Channel Islands. Both archipelagos afford scientists the opportunity to study the effects of isolation on genetic characteristics and support the kinds of data which led Charles Robert Darwin in 1859 to publish *On The Origin Of Species*. Both archipelagos have a history of stops by early Spanish voyagers, of 19th century seal slaughter, and of feral cats and other domestic animals that ran wild and brought about the extinction of other species.

2.3 BACKGROUND OF THE CHANNEL ISLANDS

The Channel Islands were tied to a country destined to be wealthy and advanced. Their proximity to the California coast placed them in the mainstream of national and international history. In the early modern period, following centuries of Indian settlement on the islands, the settlers were restless mountain men who transformed themselves from trappers of beaver to hunters of sea mammals. These types were replaced by ranchers.

The adventuresome settlers of the Channel Islands despoiled the ecology and the laboratory potential of the area. Ranchers were followed by military installations and by off-shore oil exploitation sites. In more recent times, however, with a rising concern for conservation in the United States, the islands have received attention as potential landmark and research locales.

The modern history of the islands closely parallels that of the mainland, including the phenomenon of tourism. The historical landmarks brought into focus in this study, though localized and isolated by circumstance, are remnants of a familiar historic past to which Americans look with a fierce pride.
Footnotes

3.1 THE CABRILLO-FERRELO EXPEDITION AND LOG

Spain's great siglo de oro was half gone when Juan Rodriguez Cabrillo, a Portuguese, sailed out of Puerto de Navidad, New Spain, on June 27, 1542 to reach Alta California and to bring the Channel Islands into recorded history. Columbus had failed to find a passage to the East, and Hernando Cortez and the first wave of grand conquistadores had died or returned to Spain. It fell to Cabrillo, who had come to New Spain under Pánfilo de Narvaez, to discover the California coast.

Cabrillo had fought well in Guatemala under his commander, Pedro de Alvarado and received for his efforts at least three grants of Indian groups for labor. In 1539 Alvarado had placed Cabrillo in charge of building ships and gathering equipment for exploratory voyages out of Pacific ports in New Spain to the Moluccas and the Northwest. Spanish Imperial goals had remained much the same since 1492 and Northwest sailings were directed toward reaching China and discovering the Strait of Anian or the northwest passage along the way. Alvarado died in 1540 during an Indian uprising, so Viceroy Antonio de Mendoza took over the expeditions and in 1542 sent Cabrillo out in command of the San Salvador and Victoria. The historian Henry Raup Wagner speculates that Cabrillo took three years supply of food and a priest. The legacy of earlier voyages was anything but encouraging. In 1532 Diego Hurtado de Mendoza had ventured forth in tow ships and virtually disappeared; within a year one crew had mutinied and the other had turned back after reaching only the Revilla Gigedo Islands. Hernando Cortez had lead an expedition to Baja, California, in 1535, but had not continued north. In 1540, Francisco de Ulloa sailed north to the mouth of the Colorado River. He proceeded south, rounded the tip of the peninsula, and reached the Isle of Cedros off the western coast of Baja, California.
This researcher believes that Cabrillo's navigational map was based on Ulloa's voyage which went as far as 29° or 30° latitude. Ships in the sixteenth century were clumsy, shallow draft vessels and had a tendency to drift downwind. Yardarms on Spanish ships were so fixed to the mast that they were unable to turn at a sufficient radius to deflect the wind. Thus, Cabrillo could not lay a course into the wind. Further, Cabrillo was forced to sail against northwesterly winds and the Alaskan current. Against these odds, he arrived in San Diego on September 28, 1542, three months after leaving the vicinity of present-day Acapulco.

According to the summary log we have of his trip, one written in the third person and now housed in the Archives of Seville, Cabrillo made several stops as he continued north past San Diego, Catalina and San Clemente Islands, San Pedro, Point Dume, and Point Mugu. It was near the last named site that historian Henry R. Wagner feels Cabrillo took possession of California, planting a flag in the name of the King of Spain. The log describes a large number of Indians, their villages, and their friendliness. Yet, on the bottom line, Cabrillo must have been disappointed in not having found a civilization like that of the Aztecs with its riches in gold and a large labor force.

On Friday, October 13 (according to Wagner's translation of the log) they passed "two large islands, each of which measures four leagues in length and must be four leagues from the mainland. They are unpopulated because there is no water on them, but there are good harbors". ³

Anacapa Island is not noted for good harbors, but nonetheless it is presumed that this was the first record of the Anacapans. The ships proceeded along the mainland coast and Cabrillo's log mentioned the larger Channel Islands, but the expedition failed to take note of San Miguel Island until the ships had tried to round Point Conception, took a northwest wind, and had to turn back.
It was then that they noted two islands (probably San Miguel and Santa Rosa) and called them the Islas de San Lucas. They remained close to the two islands for a week, October 18 to October 25, evidently at Cuyler Harbor on San Miguel. The log reads:

Wednesday, the 25th, they left these islands, that is, the one farthest to windward, which has a very good port inside which no bad effects will be felt in any kind of sea weather. They named it "Posesion".

Cabrillo then set sail for the north encountering contrary winds and gales along the way. He made no landings since he had to stay well out to sea to avoid being dashed against the shore. The log describes the vicinity of Monterey Bay and his return trip to the Isle "Posesion". They arrived there on November 23 and "While wintering at the Isla de Posesion, there passed from this present life, January 3, 1543, Juan Rodriguez Cabrillo, the captain of the ships, from a fall which he had in this island the previous time they were there, in which he broke an arm, close to the shoulder".

This account of Cabrillo's death has been widely circulated since it appears in the summary log; however, Henry Raup Wagner, the foremost historian of Spanish voyages to the northwest, has placed before us another source which must be taken just as seriously. This latter account is testimony placed before the Audiencia (high court) of Guatemala in 1617 but actually transcribed and placed before an earlier court in 1560. In it two men, who had accompanied Cabrillo, testified at length. Lázaro de Cardenas, one of these men, swore that Cabrillo had gone as captain-general of three ships rather than two. Continuing in this vein, and of significance for this study, is the following quotation:

.... [Cabrillo] reached an island which he named "La Capitana", [San Miguel] where he decided to winter, in view of the fact that he had experienced a severe storm and thought the ships might be lost. On going ashore in a boat with some soldiers, he fell between some rocks and broke a leg. From this resulted a fatal illness. He died within twelve days and was buried there.
Francisco de Vargas, the other ship companion and witness, gave essentially the same account, but testified in addition that Cabrillo was going ashore to aid in an Indian attack against his men and that he died aboard ship.

The Spanish colonial system revolved around its legal institutions. It should be noted that the first high level administrative officers to come to New Spain were the members of an Audiencia. Most Spanish colonials were engaged in legal battles throughout their lives, records were kept, challenged, and sworn to, and as we see in this case, were brought into court again. The actual ship's log was not available and the summary log was not a sworn document. Evidence placed before an Audiencia by witnesses was highly respected. To date, no burial place has been discovered on the island and there is little hope any ever will be. Cabrillo may well have been buried at sea. But, both accounts tell us Cabrillo made San Miguel Island his chief harbor of repose and that he died there. Like the earlier great conquistadors, Cabrillo rose to achieve "impossible deeds". Cuyler Harbor, where he wintered and died, is of great historical significance.

The summary log parallels the Audiencia testimony in relating that Cabrillo placed Captain Ferrelo at the head of the expedition and charged him to explore further to the north. Both said that at Cabrillo's death, Ferrelo renamed the site "Isla de Juan Rodriguez".

Ferrelo set out on January 19, 1543, but a storm again drove the ships back to Cuyler Harbor to seek protection from the northwest and southwest winds. Ferrelo finally sailed north on January 29. He was not able to land north of Point Conception but was able to navigate and to see land as far north as Oregon. On the trip back and in the vicinity of San Miguel Island, early in March, 1543, the log reports that Ferrelo's other ship disappeared in a storm. Ferrelo sailed as far south as the Isla de Cedros off Baja, California, looking all along the way for the lost ship. It at last arrived with the report that it had passed over some reefs at the Isla de Juan Rodriguez during the night and all on board thought they were lost. This may have been the shoal now called San Miguel Passage or the sand bars at the entrance to Cuyler's Harbor. In any event, they were saved by praying and both ships arrived at Navidad, New Spain, on April 14, 1543. Many of the
early voyagers gave interesting accounts of the larger Channel Islands, but no account presents the details or is of such historical significance to the Island of San Miguel and this report as in Cabrillo's.

3.2 THE MANILA GALLEON: SEARCHING FOR A CALIFORNIA PORT OF CALL

The California Indians were not wealthy enough to warrant Spanish exploitation, hence no further exploration of the California coast took place until a port of call was needed for the Manila Galleons returning around a northerly great circle route in order to catch the winds and the Japanese current that would propel it eastward. This route brought it to the northern California coast at about Cape Mendocino whence it sailed down the coast of California to home port. Profit on the cargo ran about 400 percent, so the hold and even the deck were packed solid, leaving little space for food and water for crew and passengers. The four to six month journey made the galleons prey to English-based pirates on the last leg and held out a good chance of scurvy for all on board. According to Schurz' classic work on the Manila Galleon, sometimes nearly all on board were stricken and the mortality became frightful. Eighty died on the Almiranta of 1606 and many more after she reached Acapulco. A galleon of 1620 lost ninety-nine and the remainder, unable to continue on to Acapulco, were taken ashore at Val De Banderas on the Guadalajara coast. The Capitana of 1629 lost 105, and two galleons a few years later threw overboard 140 persons, ....

Hence, a port of call along California's coast became a prime goal of shipping administrators in Mexico City. Galleon captains under the Viceroy's orders reconnoitered the coast; and, after a lapse of over forty years, Spanish ships neared the Channel Islands, but few even saw them. Francisco Gali, sent to explore the California coast in 1584, did not report on them in his log nor did Pedro de Unamuno in 1587. Sebastián Rodriguez Cermén...
saw his galleon driven ashore and wrecked, the cargo of oriental luxury goods strewn over the sand. His men assembled a knocked-down launch they had taken along for shore work, and, to the chagrin of his starving crew, Cermeno continued his close survey of the California coast, finally sighting the island of San Miguel and other Channel Islands. His log described San Miguel as "a small island which runs northwest and southeast....." and Santa Rosa and Santa Cruz as "bare and sterile, although inhabited by Indians".  

The financial disaster brought about by the wreck of the galleon damaged Cermeno's reputation in the eyes of Spanish administrators, but it also persuaded the Viceroy to send the next California explorer north from Mexico rather than chance the wreck of another galleon. Sebastian Vizcaíno, a pearl fishing concessionaire, received the next commission from Viceroy Monterey and orders to look for a suitable port of call for the galleons.

His three ships set out from the tip of Baja, California four times against the winds but finally rounded the peninsula, reached the Isla de Cedros, and continued on north. The Derrotero, or sailing directions that were published as a result of the expedition, demonstrate the manner in which Vizcaíno sailed back and forth along the coast. He did away with many of the earlier names given to the islands and points along the shore and added many new ones. Vizcaíno anchored at what is now Santa Catalina Island, entered San Pedro Bay and, on departure, noticed two islands. He named one Santa Barbara Island although he saw it only at a distance. The narrative calls the rocky site northwest of San Miguel Island Farallon de Lobos, although on the plan it appears as Isla de Bajos (Isla de Baxos). It is now known as Richardson's Rock. Vizcaíno called "Gull Rock" off the southwest end of Santa Cruz the "Isles Grande". No mention is made in the narrative of a name for San Miguel Island, although on the sailing plan it carries the name "S. Anicleto" (sic).  

Vizcaíno returned to Navidad with half his crew dead, largely from scurvy. His naming of Monterey Bay in Honor of the Viceroy, and his descriptions of the excellent sheltered harbor there secured his personal notoriety,
despite the fact that few galleons ever paused at Monterey. By the time they reached that part of the California coast, they were too near home to bother with stopping. Nonetheless, Vizcaino's enthusiasm made Monterey Bay a prime goal for later explorer-settlers.

3.3 EIGHTEENTH CENTURY VOYAGES AND ISLAND NAMES

Miguel Costanso, an army engineer who joined the expedition which the Spanish Visitador-General Jose' de Galvez sent to occupy California, was the next Spaniard to leave us a record of the islands. Marching north with Portola's party on August 24, 1769, he wrote, "we discovered in the afternoon, the three last islands of the Canal de Santa Barbara: These are San Bernardo, the most westerly, [San Miguel] then Santa Cruz, to the East, and Santa Barbara, the most easterly of the three." Fr. Juan Crespi, in 1769, also called this island San Bernardo. George Vancouver, coming from the north in 1793 wrote, "the westernmost or first island forming the canal of Santa Barbara, called in one of the Spanish charts St. Miguel, in the other St. Bernardo (the former of which I have adopted) bore S. 25E to S. 32E." Malaspina mapped the California coast as far as Alaska and found no Strait of Anian existed. When Duflot de Mofras sailed the coast in the 1840s, he mentioned the names of the islands as we know them today.

The names of the Channel Islands changed frequently during the sixteenth and seventeenth centuries. Santa Barbara Island was an exception in that Vizcaino's appellation for it, which appears only on his plan, was the first permanent name. Anacapa Island, by contrast, was cited as Three Farrolones by Vizcaino, and as Santa Tomás by Costanso on his map of 1770. In 1793 George Vancouver, an Englishman, sailed the California coast following a Spanish sailing chart. In composing his own charts, he selected the names he preferred: for the much-named Anacapa, his designation prevailed. His charts were widely published and his names gained permanence.

San Miguel Island has a long history in names. George Davidson of the U.S. Coast Survey, listed them in 1889 as:
La Isla de la Posesion, Cabrillo, La Isla de la Posesion, Ferrelo; Una de las islas de San Lucas, Ferrelo; La Isla de Baxos, Vizcaíno's chart; Ciquimuymu, Indian, Ferrelo; San Miguel Island, Ferrelo; La Isla de Juan Rodriguez, Ferrelo; El Puerto de la Posesion, Cabrillo-Ferrelo....

In 1602 Vizcaíno named it San Bernardo, and this name is retained on the Carta General of 1791 preserved in the Archives of Madrid, of which we have a tracing of a certified copy by Navarrete. On his chart it is called Isla de Baxos.... In 1774 Dan Juan Perez's frigate named it Santa Rosa. Later Spanish charts showed San Miguel and Santa Barbara. 12

San Miguel was still listed as "Juan Rodriguez" on an 1837 map issued by the Mexican government.

3.4 COMMENTS AND RECOMMENDATIONS

On the 394th anniversary of Juan Rodriguez Cabrillo's death, the Cabrillo Civic Clubs of California set up a monumental cross to Cabrillo on a knoll overlooking the harbor. Although not his confirmed place of burial, the bay has integrity in that Cabrillo wintered in Cuyler Harbor and died there as substantiated by both the witnesses and the log. Cuyler Harbor should be nominated to the National Register of Historic Places.
Footnotes


2. Ibid. p. 46

3. Henry Raup Wagner, Juan Rodriguez Cabrillo, (San Francisco: Calif. Historical Society, 1941), p. 48. The following narrative is based upon the translation of the summary log found here.

4. These two quotations are taken from Ibid p. 50 and p. 55.

5. The Cardenas account, as translated by Wagner, appears in Ibid, p. 23. The Vargas account is to be found on pp. 25-26


8. All the information about the Vizcaino expedition has been drawn from Henry Wagner, Spanish Voyages to the Northwest Coast of America in the Sixteenth Century, (Amsterdam: N. Israel Press, 1966). Wagner, himself, writes on p. 403, footnote 147:

On the morning of the 5th, the San Diego was near San Miguel Island. A canoe with two Indians and a small boy came out. An attempt was made to pass between San Miguel and Santa Rosa, but the sea was so heavy that the San Diego did not undertake it. The Tres Reyes went on, however, and was lost for several days. On the plan, San Miguel appears as "San Anicleto." On Navarrrete's reproduction the name appears as "San Cleto," a mistake, as on the plans San is never written out but always appears abbreviated as "S," a practice at the time. No mention occurs in any of the narratives of a name for this island. They were there about December 6 and again about January 27. San Anicleto's day is July 14, and why his name should have been applied to it is a mystery the writer is unable to fathom.
M. [trans.], "The point [that is, Conception] is in the latitude of 35½°. The Isla de San Agustín in the latitude of 35° is to the south of it. On the northwest side of this are two small farallons and between them some shoals or reefs, altogether about a league in extent. The Isla de San Gregorio is shown on the preceding leaf." Isla San Gregorio does not appear on the preceding leaf or any other, nor does that of San Agustín. A reference to the plans will show that south of Pt. Conception is an island named Isla de Bajos, evidently intended for Richardson Rock, called Isla de Lobos by Bolanos. This must be San Agustín. In such case, the San Gregorio just mentioned was evidently San Miguel. San Gregorio, the Pope, had a day November 28, the nearest of any saint of this name to December 6. The next nearest was San Gregorio, the bishop, December 19. No San Agustín had any day at this season of the year. The Palacios was not altogether mistaken is evident from the fact that John Daniell on his map of 1637 has as island named St. Augustin in this neighborhood.


SECTION 4

INDIANS

4.1 INDIAN POPULATIONS

White men from western Europe and their followers into California in the Eighteenth Century were the first to leave a written record of the aborigines on the subject islands. Juan Rodriguez Cabrillo, in 1542, apparently did not see Santa Barbara Island, and if we interpret the two large islands he saw on the 13th of October as Anacapa, he judged it as unoccupied. However, the log for his journey gives us a clear account of San Miguel Island. The summary log called it an island with a good port which Cabrillo named Posesion. The log says very little about the inhabitants on the island; although strangely in the midst of its discussion of San Miguel Island it mentioned the great wars on the nearby mainland. After the entry about the death of Cabrillo on San Miguel Island, the log recites:

the Indians call it "Ciquimuymu." ....On the Isla de Posesion there are two towns, "Cico" and "Nimollollo." ....The Indians of these islands are very poor, being fishermen, and eat nothing except fish. They do not sleep on the ground. All their business and occupation is to fish. In each house, they say there are fifty souls who live very filthily, going naked.¹

Logs of the other early voyages of discovery rarely mentioned any of the island populations. When the Spanish planted missions and presidios in Upper California in the latter years of the eighteenth century, they brought with them two major factors which would lead to depopulation of the Chumash Indians who lived along the Santa Barbara Channel: European diseases and the system of reducciones (bringing together Indians near the site of the missions). Very little is known of the depopulation at the subject islands through historical sources. Father Engelhardt, historian of the Franciscan
Missions, stated in writing and conversations that there was no documentary evidence to show their removal in large numbers to the mainland, and he did not find any record even of the band from San Nicolas Island referred to by George Nidever in this trapper's well-known account of the lost woman of San Nicolas. As the mission system expanded, we know that expeditions were made into the surrounding country and to the islands to carry out the administrative policy of the Spanish and bring Indians into contact with the priests so that they could be protected and be saved from eternal damnation. Drawing upon Chumash oral history, we find that Jose Senan, O.F.M. at Mission Purisima (1812-1815) ordered thirty canoes to go out to San Miguel Island and bring the Indians back. Following instructions, the canoe men left Cojo Ranch in bad weather, many of the canoes sank, and the task was abandoned; but the next year thirty Indians were brought to the mainland from San Miguel. It was felt most of the Indians living on the island had already left before that time.

The Spanish contact took a great toll in aboriginal population throughout their New World colony, but on the Channel Islands the toll was added to by the presence of the Northwest Indians. The British, American, and Russian sea captains in the sea mammal fur trade made a practice of leaving the Indians they picked up in the north to do their hunting staked out on one of the Channel Islands for several months to collect hides. Since they possessed superior weapons to the Chumash, they established their territorial supremacy by simply exterminating the local people. The lack of first-hand accounts or of written historical evidence to this seemingly well-known practice is probably explained through the nature of the attacks which included men, women and children. Archaeologists can supply more data through the examination of skeletons and other remains.

Reaching back a century or more through the memories of informants, John Harrington supplied some of the history of the Chumash through the oral tradition. In regard to the Channel Islands, his informant, Fernando Librado,
told of eight families that settled on Anacapa Island after a civil war on the Ventura mainland. They settled on the north side of Middle Anacapa and dug a hole to catch water at what may have been the site of the cement cistern which stands there today. Seepage at Indian Cave on the North Coast of West Anacapa was also a water source. The great grandfather of the informant was credited with the first plank canoe. The informant said that the first eight families left Anacapa to settle on Santa Cruz and they spread to the other islands including San Miguel. Accordingly, they were the first Chumash, and, in fact, Chumash refers to Santa Cruz Island.

Island dances named after fish and seaweed were performed at the missions and on special days indicating that some island culture spread to the mainland. John P. Harrington made voluminous ethnographic notes on the Chumash and we can hope that scholars will be able to use these in compiling some of the narrative history of the Chumash islanders.

4.2 COMMENTS

The historical record tells us very little about the aborigines who inhabited the islands. Since archaeology and anthropology will be handled in this report as separate studies, a synthesis of their efforts would be duplication. In the historic period covered in the following sections, no Indians lived on the subject islands. The historical record does not supply any indication of Indian-related sites eligible for marking.
Footnotes


SECTION 5

TRAPPERS AND SEA MAMMALS

5.1 THE SEA OTTER

When the Spanish settled California in 1769, Russians had been in the Aleutians hunting and trapping fur bearing mammals for twenty-five years. To protect her northern frontier from what Spanish administrators felt was the Russian menace, the Spanish sanctioned the Santiago's voyage to the northwest in 1774. Natives eagerly traded the crew otter pelts for some abalone shells the sailors had picked up around Monterey, and the next Spanish voyagers took along trinkets and old clothes to trade for skins. Captain James Cook sailed to the North Pacific in 1778, and his men exchanged trinkets and mirrors for pelts; but they subsequently went to China and found, as the Russians had much earlier, that the otter pelt was prized above all other furs and would bring $100 and more. A detailed report of Cook's voyage published in 1784 was widely circulated. Entrepreneurs under several flags flocked to the north Pacific where the herds were the largest; but they soon discovered herds off the coast of California.

The otter they sought varied from four to six feet in length and had a lovely dense soft fur, lustrous white at the roots and darkening to brown or black at the tips. The pelts exhibited a shimmering gloss, and were loose and stretchable. The young were born at sea in a bed of kelp, hence the Channel Island kelp beds made attractive breeding spots. Adele Ogden in her classic The California Sea Otter Trade 1784-1848 described the otters as curious and playful and "seen to toss a piece of seaweed up in the air from paw to paw, apparently taking great delight in catching it before it could fall into the water." Great herds blackened the kelp beds beyond the surf and lay upon the beaches along the coasts. Hunters found them concentrated in the far northwest Pacific, scarce off Oregon and Washington, but again
abundant off California. At 1800 ship logs recorded the great numbers of sea otters in the kelp around Santa Barbara Island and the good hunting at San Miguel Island.

The Spanish attempted to exploit the otter trade, the Ventura and Santa Barbara Mission fathers in particular, and they paid the local Indians to hunt the otters. But the Chumash had hunted otters only infrequently, probably because the climate did not call for warm clothing; and they had developed no specialized hunting techniques. The Spanish, to protect their interests, set up regulations against killing otter pups and tried to enforce laws in their mercantilistic code which would have kept out poachers. Yet those who controlled spending in New Spain could not provide the patrol boats or the men to enforce the regulations; and thus, intruders continued to hunt off the coast till the otter was exterminated. English and American ships outfitted their ships with experienced Aleut hunters from the northwest numbering up to a hundred per ship. The Aleuts brought along their watertight sea otter canoes (baidarkas) and their women and harvested 3,000 to 5,000 pelts a trip out. The Aleuts used buckshot. They would usually send several canoes out together, surround the otter, and make escape impossible. Taking their hunters on board, the ships would come directly to California without doing any hunting along the way. So dependent were they upon northwest Indians that Captain Winship of the O'Cain complained in 1810 that he could not catch the numerous otters around Santa Barbara Island because he had no Aleuts. The next year he employed sufficient numbers of Aleuts to hunt and to arrive in Canton, China, with 3,952 pelts. Pelt counts were often broken down into grown, yearlings, and pups thus documenting the thorough and indiscriminate nature of the killings. In 1810, the schooner Albatross left a party of hunters with their canoes and women at Santa Barbara Island. They took sixty prime otters in three days. The Russian Ship, the Ilmen, took one hundred and fifty sea otters and some fur seals around the Channel Islands in 1814. Wintering in the islands was popular, the Aleuts being left on them for several months. The boom was over in the
1820s, and only a few men could support themselves from the sea otter in 1870. C.M. Scammon, writing in the Overland Monthly (January, 1870), reported that only 2,600 otters were taken along the entire coast the year before. Still, in 1890, some otters were seen killed near San Miguel Island. By then, scarcity had pushed the price up to $475 on the London market. A few sea otters were reportedly back on the California coast in 1938. One sea otter was observed asleep on the rocks on the northwest side of Santa Barbara Island on March 17, 1940. A recent count by the Department of Fish and Game approximated 800 otters.

5.2 MOUNTAIN MEN TRAP AT THE ISLANDS

Yankee frontiermen entered California by land in the late 1820s. A team of California historians wrote:

....these tough, durable, resourceful men came out of the east and breached the bulwark that nature and the Spanish erected around Alta California....Tempered in the waters of a thousand icy streams, steeling by conflict with Indians, made resourceful by years of grappling with a demanding and hostile environment, the mountain men received an uncertain welcome when they came wondering out of the desert country of Southern California. The resident population had good reason to look with reserve on these sun-blackened, leather-clad, grease-laden representatives of an alien land and culture....they were a "reckless breed--an American original as hard as the hardest thing that could happen to [them]."

Such a man was George Nidever who in 1833 in a party of other mountain men, made the first east-west crossing of the Sierras by white Americans. In the 1850s, Nidever built a sturdy adobe house on San Miguel Island and participated in the ranching period of that island. There is no doubt that Nidever and his fellow trappers played an important historical role in closing the gap between the commercial east and the Spanish colonial frontier. They brought the day closer when California would fall under the American flag. Nidever was preceded to to the Channel Islands by trapper Isaac Galbraith
who staggered into the Mission San Gabriel after a sixty-day walk from Utah in 1826 with Jedediah Smith and his party. He was the first of the "reckless breed" to switch from trapping beavers to chasing otters. He left his party to remain in California and he worked under the license of William Goodwin Dana, a naturalized Mexican. Galbraith would shoot at the otters, and Kanakas (Hawaiians) hired for the purpose would swim out to bring in the game. George Yount, a trapper from North Carolina, arrived at the San Gabriel Mission in February, 1831. Since it was too late to trap on the San Joaquin River, he too headed for the sea, broke into the sport, and in a few days had taken ten sea elephants and many otters on Santa Barbara Island. Then he resourcefully built himself a boat of sea elephant skins fashioned after the boats used by trappers on the inland rivers.

Adele Ogden, in her work on the California sea otters, claims that mountain man (Capt.) George Nidever was the outstanding hunter of this whole period. He arrived with Capt. Joseph Walker's party in November, 1833, at the age of 31. For 13 years he had trapped, fought Indians, and built a reputation as one of the best shots in the west. Fellow hunters bet as high as $5,000 on his skill to kill more buffalo than any other man in the Rocky Mountains. Intrigued with stories of California, he joined Walker's party on what was by orders a reconnaissance of present western Utah and Nevada. That Walker interpreted this to mean the California coast is a good example of the role mountain men played in extending the borders of the United States. The party was troubled by Indians all along the way, and finally spotted 400 or 500 coming out of a thicket. Walker decided to fight. George Nidever remembered that:

....Thirty-four of the Indians advanced in a body, and 15 of our men, myself among the number, were ordered out to meet them. From 50 to 60 yards from our company, we halted and awaited the Indians. We allowed them to get quite close before opening fire, but when we did shoot it was with such telling effect that but one of the 34 escaped.
Following the deer and elk down the Tuolumne River, the party reached Yosemite Valley and finally Monterey. Yount was there and invited Nidever to make an otter and beaver hunt around San Francisco Bay. Following this, Nidever sailed to Santa Barbara on Alfred Robinson's California and began hunting under William Goodwin Dana's license out of Santa Barbara at the Channel Islands. In the autobiography Nidever dictated to an assistant of Hubert Howe Bancroft in 1878, he told how he divided his time between hunting otters on the Channel Islands, and killing grizzly bears on the mainland. In 1837, he shot forty-five bears. Nidever married a Mexican woman, owned land, and hunted freely.

In 1836, Nidever, Burton Sparks and a Negro hunter named Allen Light, but whom they quickly renamed Black Steward, headquartered on Santa Rosa Island along with five Kanakas and other hunters. The party knew that northwest Indians, primarily the Aleuts, often claimed the islands for their own headquarters and that they were vicious, armed, and unpredictable. They had exterminated whole villages of the native Canalino Indians, killed livestock, and had at one time set upon Sparks and Steward and captured their supplies. Nidever told of a morning when some northwest Indians paddled toward the island in the fog and almost cut himself, Sparks and Steward who were fishing from canoes, off from the shore. Nidever's sharp shooting saved them as he helped kill at least three Indians and wound several others. The next day when Nidever and his party were on shore, they were able to see a brig through the lifting fog two or three miles off shore unloading 11 canoes. The Indians paddled toward the shore and stopped to fish in the kelp, but suddenly began to head for shore. Again the mountain men's marksmanship was superior to that of the northwest Indians and they returned to the brig which sailed away the following day. Nidever claimed this was the first reversal the Indians had suffered in the area and went on to describe their history of cruelties around the islands. The brig was captained by John Bancroft, and the next year he anchored off San Miguel Island in command of a different ship, the Lama. Apparently, there was
trouble from several sources: Bancroft drank excessively, his Kanaka wife was racially antagonistic to the 25 Indian hunters aboard, and Bancroft dispensed slim rations as a disciplinary measure when the hunt went poorly. On November 16, two of the canoes came back with only three otter skins; on the 20th two more canoes returned from Santa Cruz Island with only eight. On the 23rd all the canoes returned, but there were bad words. Provoked seriously, the Indians armed themselves, shot Bancroft and seriously wounded his wife. Bancroft had no legal right to hunt in the Mexican waters. It was men like him who moved the Mexican government in 1838 to urge upon the governor of Alta, California, a policy of encouraging land grants out on the Channel Islands in order to settle and protect their shores. No grants were made on Anacapa, Santa Barbara or on San Miguel Islands, but Nidever moved on to San Miguel and stayed for seventeen years. See Section II.

5.3 OTHER SEA MAMMALS

When the islands lost their land bridge to the mainland, some of the first visitors to the islands were pinnipeds, the sea mammals which could live on both land and sea: seals, sea lions and elephant seals. For centuries the rocky shoreline of the Channel Islands teemed with these animals who lumbered on shore to rest in the sun, shed their skins, satisfied basic sexual instincts, and gave birth to their young. The first threat to their supremacy on the islands probably came about 10,000 years ago with the first arrival of man. However, these first men took few of the animals as they used them for their own immediate needs: the meat for food and the hide for clothing or shelter. A study of the California fur seals reveals that "the Indian middens on San Miguel Island have more bones of Fur Seals in them than of any other pinnipeds, or any other animals". When the white man discovered the sea mammals and the commercial possibilities for their products on a world scale, the pinniped's thousands of years of peaceful existence came to an end. It is not clear when these mammals were first taken from the California Islands, but the earliest records seem to suggest they were still abundant in 1800.
5.4 **Fur Seals**

Fur Seals were first harvested for their valuable fur and for their oil on the islands of the Bering Sea: the Pribilofs and the Aleutians. Indiscriminate killing depleted the herds there and hunting spread to the south. Two kinds of Fur Seals are believed to have flourished for centuries in the waters off California: the Northern Fur Seal and the Guadalupe Fur Seal. Between 1790 and 1835, thousands of these seals were killed along the California coast. San Miguel Island, closest island to the organically rich marine upwelling off Point Conception, was an important source.

Charles M. Scammon traveled as a passenger on a hunting and whaling voyage in 1852 along the Pacific Coast studying the habitats of the various species of marine mammals. His book on marine mammals was published twenty-two years later. Although he gave no figures for Fur Seals taken at the Channel Islands, the magnitude of the hunting is brought home by estimated hunts at islands to the south. At Masofuero off Chile, one ship owner estimated that a little under a million Fur Seals had been taken there by 1789. Although the fur was the most valuable product, the flesh of the young was said to taste like mutton, the hearts and livers of the young were excellent, and an inch and a half of fat or blubber lay just under the skin which yielded one and a half gallons of oil.

In the early years when the Fur Seals abounded, they were killed easily in large numbers with an ordinary seal club. The crew, some twenty men, would get between the seals and the water, raise a lot of noise, and then slay the animals right and left by one or two blows on the head. Hundreds were taken in these knock downs, as they were called. When the animals became scarce, the boat would leave a few men on the island to watch out for single seals approaching the island and then shoot them one at a time as they came ashore. The California islands had gullies where the seals congregated, thus the men drove them back up into the land far enough so that none of them could get away. Since only the two and three year olds yielded...
prime skins, the flock was screened as they drove them inland allowing the older seals to escape. Another reason for driving them inland was to get them away from the breeding ground since the blood and carcasses disturbed the seals. Richardson's Rock, seven miles northwest of San Miguel Island and almost inaccessible to man, is credited with the last record of fur sealing in California. Five seals were taken off the Rock in 1890.

5.5 ELEPHANT SEALS

Elephant Seals were first taken by whalers. When the gray whales were gone in the summer and after they were generally depleted, whalers went after Elephant Seals for oil. Scammon reported on a bull taken at Santa Barbara Island, eighteen feet long, that yielded 210 gallons of oil. Among the favorite islands for the hunt was Santa Barbara Island. Although slow and lumbering, Elephant Seals have been found sunning themselves on ground fifty to sixty feet above the sea. The Sea Elephant comes on shore to shed his skin, stays until it is shed, and loses up to half its fat. They were captured in knock downs as described above for the Fur Seal. Occasionally, a large male would give battle, but one well-placed musket ball, a lance through the roof of the mouth, or clubbing by two men with heavy oaken clubs beating at its head would kill it. In their panic, Elephant Seals also smothered each other. After the kill, the men would flay the skin with a large knife for the whole length and cut out pieces of fat about eight by fifteen inches. These were hauled out to the boat by ropes and there boiled in large pots to extract the oil. The Elephant Seal had a close brush with extinction, and in 1892, the known population was reduced to nine on Guadalupe Island. Then, of these nine, seven were taken as specimens by misguided scientists.

5.6 SEA LION

The Sea Lion supplied several products useful to man: a silky skin for luxury items, oil, the sex organs (of bulls) that were sold to the Chinese
as a cure for impotence, and the whiskers. The last were used for ornaments and to clean opium pipes. It took many animals to satisfy the trade in genitals and whiskers. In the 1930s they were used to make dog food. The Sea Lion was fearful of man, and to escape would roll, tumble and sometimes make leaps from high rocks to get away. As in the hunts of other sea mammals they were clubbed, but they fled rapidly, and not many would be around if the crew did only this. In Scammon's time, the adult males were shot in the ear or near it. A shot in any other part of the body had little effect.

In 1852, every beach, rock and cliff at Santa Barbara Island was covered with Sea Lions. On the south side of the island where there is a narrow plateau, the animals became so versed in the ways of the hunters that when they saw the boats lowered in the morning, they would swim out to sea only to return when they saw the shore boats leaving the island. Scammon described all hands going toward the rookery of about seventy-five, shooting the largest and clubbing the rest. Of commercial exploits on San Miguel Island historian Francis Holland wrote that:

"... In 1879 Rogers and Company of Santa Barbara sent a group to the island [San Miguel] to hunt seals for their oil. During the same decade Sea Lions were captured there to be sold for exhibition purposes. E.G. Rogers, a seaman along the coast of California form 1875 to 1879, reported a man on the island hunting Sea Lions. This man had a large kettle set up and rendered the animal's blubber for its oil. During a season he would obtain fifty to one hundred barrels of oil which sold for fifty cents per gallon. The skins of the Sea Lions were sold for five cents to seven cents per pound. The sex organs of the bulls were sold to the Chinese as a cure for impotence".11

5.7 TWENTIETH CENTURY: RECOVERY OF SEA MAMMALS

In 1927 Paul Bannot made a census of pinnipeds on San Miguel Island. He listed two species: the California Sea Lion and the Stellar Sea Lion.
Since 1927 the population of California Sea Lions has steadily increased on the islands off Southern California. The Stellar Sea Lion which in the Southern California area only breeds on the western tip of San Miguel, has increased and then decreased. In 1911, Mexico prohibited the killing of Elephant Seals. The population on Guadalupe Island slowly recovered and by 1938 thirteen were counted on San Miguel Island. San Miguel is by far the most important site for breeding and reproduction of this animal in California waters. The Department of Fish and Game counted 3,000 of them there in 1965 and 3,902 in 1974.

Visitors and especially photographers came onto San Miguel in the late 1950s and 1960s and did considerable damage to the herds. Elephant Seals, when approached, drag themselves frantically into the water. Since they weigh up to 5,000 pounds, they can smother and kill the young pups as they drag themselves across the beach. Visitors brought about this kind of action. In the mid-1960s some Fur Seals were sighted around San Miguel. Then in July, 1968, marine biologists ran across a colony of breeding Fur Seals (Callorhinus ursinus), the first ever known to breed in California waters. Prior to this find, the Fur Seal was thought only to breed on the islands near and in the Bering Sea. More than forty females with new-born pups were counted, and four of the mothers bore tags showing that they had been born on the Pribilofs. The colony approximated 100 seals, and was located at Adams Cove, near the western tip of the island. The Guadalupe Fur Seal is also returning. The first were seen on the Guadalupe Islands off Baja, California, in 1956, and fifty were seen on San Miguel Island in 1967.

Protection of the marine mammals through cooperation with the Division of Fish and Game has been a prime goal of the National Park Service since it began administration of the Channel Islands National Monument and shared interest in San Miguel Island. In 1941 a survey of the Monument Islands showed that Santa Barbara Island had about 1,000 California Sea Lions present on the beaches, four to five harbor seals, as many as 22 Northern Elephant Seals, and evidence that six Stellar Sea Lions had been captured from a group.
of over forty and taken to the San Diego Zoo. One sea otter had previously been reported. The same party saw six or seven California Harbor Seals and a Northern Elephant Seal on Anacapa. In 1968 Robert L. Delong, Smithsonian Institution biologist, reported that San Miguel Island was the only island in the North Pacific where six species of pinnipeds are known to inhabit the same island. At that time they consisted of the Northern Elephant Seal, California Sea Lion, Steller Seal Lion, Northern Fur Seal, Guadalupe Fur Seal, and Harbor Seal. Since 1968 the sea otter has also been sighted. The unusual pinniped population of San Miguel Island, which on occasion now numbers more than ten thousand animals. In 1971 California Fish and Game closed the Point Bennett area to the live capture of seals and sea lions on shore. Marine mammals are under the jurisdiction of the National Marine Fisheries Service, the National Park Service, and the Department of Fish and Game. In 1973 the Pacific Missile Range agreed to restrict all aircraft flying over the island to altitudes over 1,000 feet. Helicopter landings were prohibited on the beach except in the cases of emergency.

5.8 COMMENTS AND RECOMMENDATIONS

Seal and other sea mammal hunters left no memorable sites or structures. Webster's Point at Santa Barbara Island once had a shack on it built by Webster, but it is long gone. Park visitors may be interested in knowing it once stood there, but its exact location is not known and the events surrounding it lack the historical significance to make it important for further study or marking. On the other hand, George Nidever was an outstanding hunter and a representative type. The house he built on San Miguel Island (SectionII) as a headquarters for ranching and for his hunting should be on the Nations Register of Historic Places. Nomination forms accompany the report.
Footnotes


2. (Berkeley: University of California Press, 1941), p. 8. Material on the sea-otter role unless otherwise cited is based upon this work.


4. Ogden, op. cit., pp. 161-162; Northwest Indians: It has frequently been charged that the Russians used the Northwest Indians along the Santa Barbara Channel; Capt. F.W. Beechey, Narrative of a Voyage to the Pacific and Bering's Strait; (Philadelphia, 1832), pp. 331-332 makes statements that are probably the basis for most of the written charges. His allegations were denied by Baron Wrangell of the Russian-American Fur Company and by Gov. Figueroa. They claim other nations committed the crimes alleged. See Sir Dimitry Zavoliskin, Russian Affairs, V the Affairs of the Ross Colony (Moscow, 1866). George Nidever wrote of the Indians nearly always as being on American or British ships and never on Russian ships.

5. Letter, 4-1-41, Herbert Maier to A.B. Hawell, NPS Rec., Bruno, Box 202302.


10. The Marine Mammals of the Northwestern Coast of North America, (San Francisco, 1874). The material which follows is drawn from this work, pp. 113-160.


14. Letter, Maier, Director, NPS to J.R. White, March 19, 1941, Box 202302, NPS Records, Bruno.


6.1 UNITED STATES BOUNDARIES AND SOVEREIGNTY OVER THE ISLANDS

The area included in the State of California is part of the territory acquired from Mexico by war and by the treaty of Guadalupe-Hidalgo of February, 1848. The southern boundary ran "across the Rio Colorado, following the division line between Upper and Lower California, to the Pacific Ocean". Since the Channel Islands were not specifically mentioned, claims that they belonged to Mexico have persisted up to the present.

"Excerpts from a Geological Survey Pamphlet", kept as title evidence by the U.S. Naval Facilities Engineering Command, Real Estate Division, San Bruno, rather effectively sets this issue to rest. Its arguments are that the boundaries of the State, as described in the constitution of 1849, not only follow those of the Treaty of Guadalupe-Hidalgo, but in addition add the phrase, "Also all the islands, harbors, and bays along and adjacent to the Pacific coast". The pamphlet went on to state that among the principal islands claimed as part of the State of California were Santa Catalina and San Clemente in Los Angeles County; San Nicolas in Ventura County; and Santa Cruz, Santa Rosa and San Miguel Island in Santa Barbara County.

Many smaller islands also passed into the control of the United States, and the following points clarify the fact that after the treaty was signed the islands were part of the territory ceded to the United States. First, the State constitution of 1849 mentioning the islands was approved by Congress in 1850. Secondly, an act of Congress approved August 31, 1852, appropriated funds for subdivision of the islands so that they could be disposed of under the laws of the United States. Third, the Supreme Court
in 1859 acted on a case relating to a land grant on the island of Santa Cruz, and thus its jurisdiction must have been considered valid. Further, patents have been issued for land on various of the islands by the General Land Office, reservations have been made for lighthouses, and leases have been granted by United States governmental agencies. No formal claim has been presented or won by the Mexican government, and it is certain that none could be made now with any hope of a reversal of claim.

6.2 UNITED STATES COAST SURVEY

The United States Coast Survey ascertained for the first time the number of islands lying off the coast between San Diego and Point Conception, their position and topography. The earliest record we have of island mapping and survey after they fell under the control of the United States is a map sketched by U.S. Coast Survey Assistant George Davidson, who camped near Point Conception in 1850. The Channel Islands are located more or less correctly, but their contours are indefinite and show his lack of familiarity with them.

The next maps appear in a "Sketch Book of the South Coast of California" executed by U.S. Navy Lieutenant Commander James Alden in 1851. Coast Survey habitually borrowed a detail of naval officers for hydrography survey. Alden was assigned to make a reconnaissance of the coast from Monterey to San Diego, examine anchorages, and thus provide data to Alexander Dallas Bache, Superintendent of the U.S. Coast Survey, 1843-1867. Alden made pencil sketches of Anacapa, San Miguel, and Santa Barbara Islands and wrote that San Miguel was somewhat similar to Santa Rosa but much smaller and with reefs to the north and west. He mentioned Cuyler Harbor by name, and described it as one and seven-eights mile at its mouth with a good deep landing, sand beach, and without surf.

The name "Cuyler" had not appeared earlier and it would seem logical to assume that the harbor was named after Navy Lieutenant Richard M. Cuyler who
came from Savannah to join Alden's party in 1850. Alden was extremely laudatory of Cuyler in his correspondence with Superintendent Bache. Writing in 1853, Alden stated, "I know of no one in the service who is better qualified for taking charge of a hydrographic party than Mr. Cuyler." Cuyler transferred to the east coast in 1853, but Bache placed him in charge of a party in Puget Sound in 1855. The survey parties made common practice of naming geographical points after members of the party.

In 1852, the U.S. Senate resolved:

That the Secretary of the Treasury be directed to communicate to the Senate what sums will be required, without interfering with the regular progress of the Coast Survey, to extend it the present fiscal year so as to include the islands in the vicinity of the Santa Barbara Channel, Coast of California, viz: the islands of Santa Cruz, Santa Rosa, San Bernardo [San Miguel], Anacapa, Santa Catalina, Santa Clemente, San Nicholas and Santa Barbara, and also to report whether the usual land surveys, dividing the islands into townships, sections, half sections, quarter sections, and eighth sections could not at the same time be made by the officers of the Coast Survey under the direction of the Superintendent.

Superintendent Bache, thus advised, collected information from Major Stevens, his assistant in Coast Survey, and from surveying parties on the West Coast in order to calculate the costs of a survey and for drawing the maps and charts and engraving the sketches for a report he was to submit to the Secretary of the Treasury. This survey was to:

....connect these islands with each other, and with the main [land], should determine the latitudes and longitudes of prominent points, should give the topography of the surface of each, and the hydrography of the shores as far seaward as may be necessary and including a general examination of the vicinity.
Bache suggested that the survey party use the Schooner Ewing for the year. He allowed the group to count on a naval detail for the hydrography and to hire a steamer for the latter work.

The estimate which Bache appropriated August 31, 1852, was $136,000.00 but as subsequent correspondence showed, the survey parties were under-budgeted.

Captain E.O.C. Ord was charged with the triangulation of the Islands in 1853; this consisted of measuring a series of connecting triangles in which many sides were common to the adjacent triangles. The points were called stations and marked. On September 23, 1853 (?) one was erected on Middle Anacapa near the east end and described as "A white pine pole some 30 feet long supported by three braces covered with white cotton [at the] junction of braces and pole.... The usual notices in English and Spanish are tacked to the pole. There is a wooden cap at the top of the braces, painted black."7

Ord had as his assistants, George Davidson and W.E. Greenwell. Meanwhile, Alden was making soundings from Point Conception to San Miguel Island, thence to San Nicholas, San Clemente, and on to San Diego. In his correspondence he discussed the need for a lighthouse on either Anacapa or Santa Cruz.

In 1854 the Coast and Geodetic Survey in Washington D.C. had in their employ a draftsman who was "habitually late, frequently absent, given to graffiti, and inclined to doodle on its official charts."8 He was James Abbott McNeill Whistler, a senior year dropout from West Point, who at the age of 20 attempted for three months to work as a government employee. The Bureau instructed him in etching and copper engraving. He decorated his first assignments of the east coast with little heads, mermaids, and smiling whales. His next assignment was Anacapa Island. In addition to the map, his assignment included a sketch of East Anacapa from the south with arch rock. Unfulfilled, Whistler added two flocks of gulls flying gracefully
U.S. COAST SURVEY

A. D. HACHE, Esq. Engr.

Sketch of

ANACAPA ISLAND

IN

SANTA BARBARA CHANNEL.

By Lieut. T. R. STEVENS
U.S.S. Astrolabe S.S.

1854

View of the Eastern extremity of Anacapa Island - from the Southward

James Whistler's rendering of East Anacapa while employed at U.S. Coast Survey office, Washington D.C.
south over the tip of the island. For this wrongdoing, Whistler was threatened with discharge, but he responded, "Surely the birds don't detract from the sketch; Anacapa Island couldn't look as blank as that map did before I added the birds." Due largely to tardiness, Whistler was asked to leave the following month, and he went on to study in Paris and to create such works as the celebrated portrait of his mother.

In 1856, W.E. Greenwell headed a party making triangulations of the Channel Islands. Bache wanted the Channel Islands off Santa Barbara given priority even over the mainland due to the heavy shipping traffic. Greenwell reported that Santa Cruz, Santa Rosa and San Miguel Islands were the only remaining islands fit for habitation. (He curiously omitted Catalina.)

The base for the main triangulation was the Los Angeles plan, so Greenwell stationed himself at the San Pedro Hill Station and tried to throw points on Catalina and Santa Barbara Island and Point Dume and another point still further west of Dume known as Point Conversion. When these were established, a line could reach out to Santa Cruz Island and the island work could get underway. The plan involved "four long lines all centering on the little island of Santa Barbara....This little Island was the turning point, as it were, or where these four long lines centered, the shortest of which would be 35 miles more or less." 10

After the main triangulation points were established heliotropes* would be posted, but, as Greenwell explained, these had to be placed before the southeasterly winds set in. The first real obstacle was funds. Greenwell's allotment was cut from $12,000 to $7,198 in January and he, therefore, made plans to break camp in March and call it quits for the year. Then there was the lack of visibility. During the two months and some days he was at San Pedro trying to observe the angles Santa Catalina-Santa Barbara and Santa Barbara-Point Dume, the island of Santa Barbara

* An instrument used for making long-distance observations by means of the sun's rays thrown from a mirror.
Map 6.2.2  1856-1872

Log Book Map by:
W.E. Greenwell and S. Forney

Red Lines show as faint;
Black lines show as dark.
RG 23, NA.
was only visible for nine days. The winter was unusual, Greenwell wrote, with no rain, the islands enveloped in fog, yet the inland fairly clear. Due to these problems, Greenwell triangulated the coast up to San Buenaventura and wrote to Bache that he would carry on the triangulation to Santa Cruz from there. A lag in correspondence then left Bache perplexed. He only knew that the islands were getting attention after the mainland and wrote critically to Greenwell on this. Greenwell, experiencing illness by April, explained again, but he also complained that the exposure he suffered on the west coast made east coast service seem like a mere exercise.

No progress on triangulation was reported for the year 1857, but that December Greenwell wrote that he hoped to do the triangulation of San Miguel in the summer of 1858. In May, he set out for the islands on the old Schooner, Humboldt; and his log, "Description of Stations", recorded for us not only the secondary triangulations on San Miguel, but also the island's appearance. They are included in Appendix #1. There is no mention of a tree, only cactus, sage and dark looking bushes. West from "Green Mountain" Station he saw a strip of sand drift and at "Cactus" Station no bushes or undergrowth. Unfortunately, the log reports nothing about the human habitation or the sheep which were by then on the island. Perhaps the sheep had taken a serious toll on the vegetation even then.

At the end of July, 1858, Greenwell's party headed for San Nicolas while Sub-Assistant W.M. Johnson worked on Anacapa, and James Alden continued hydrographic measurements on the Active. In the summer of 1859 Greenwell complained from Santa Rosa Island that they had made little progress. The approximately six to eight thousand cattle on the island knocked down his signals daily, and a northwest gale was so strong that for ten days they could do nothing.

Work began again in the summers of 1860 and 1861. Efforts to complete the triangulations were started but the topographic work was left for another time. The Civil War brought with it a breakdown in communications,
mail was late, and Bache was cut off from his men. Money depreciated, and Greenwell's men would only accept gold for pay in the face of devalued legal tender so that he had to cut down on the size of his camp. Throughout the period, Bache failed to grasp the problem of weather on the west coast which was reportedly mild. The survey team had worked around the United States beginning along the coasts of Maine, but in California, exposure and illness plagued them. Johnson reported at Point Conception, "We took the heaviest gale I have ever seen, the sea was certainly running 20 or 25 feet." 11

When the Coast Survey returned to San Miguel Island in 1871-1872 Stehman Forney was Chief of the Party. He calculated and sketched the topography and placed a Bench Mark* on the southerly tip of Prince Island. Forney executed further triangulations, red on the original map, but distinguishable by their lighter appearance on the map included here. He erected signals at eleven new points. Looking down on the water from Harbor Station, he described a hill to the right covered with sand. Greenwell saw it covered with low sage brush and cactus; this was graphic evidence that erosion had taken place in the dozen years in between, helped along no doubt by grazing and the drought George Nidever wrote of in 1863. 12

Also in 1873, A.W. Chase, the Sub-Assistant, reported to Superintendent Benjamin Pierce and gave him a description of the signal for primary triangulation erected on Santa Barbara Island. His maps and drawings also supply the topography of the island. His recommendation for landing would take us to the same landing we use today.

In approaching the island of Santa Barbara, should the wind be favorable, it will be best to anchor off the E. side. Inside the kelp bed you will get 8 fathoms, sandy bottom, you will see a fisherman's hut (white washed) on the rocky shore. Pull for

* A fixed point of known elevation that is established at intervals throughout an area to provide a permanent point of reference. Greenwell had only drawn a base line on the east arm of the island which was "merely a mean elevation above water".
that. When approaching the shore, you will see a narrow channel between two rocks awash. Pass through that and land on the North Western face of the rocky ledge just below the hut. Unless the sea be very smooth this land, the best on the island, will be difficult.\textsuperscript{13}

The signal he erected was on the highest point on the island, and his full description of it is included in the Appendix \#2. The National Archives now hold no log books or other materials describing the work on Anacapa, nor was this island mentioned in the Superintendent's correspondence used to bring to light some of the first observations made by Americans of the islands. With Forney's triangulations on San Miguel, Richardson's Rock was positioned, and Coast Survey commenced the main triangulation between the islands and Monterey in 1872.

6.3 COMMENTS AND RECOMMENDATIONS

The experiences of the first Coast Survey teams underline the sense of separation from the mainstream of American urban life all visitors to the islands feel. The National Park Service could use the descriptions of the topography and views in the 1850s in informative talks as they would transport the visitor back into history. The surveyors' encounters with weather, their landings on the islands, and their written descriptions of the stations parallel very closely what visitors would experience today.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{image}
\caption{Santa Barbara Is. 4 Miles West Bearing West By A.W. Chase}
\end{figure}
Further, the triangulation stations could form the outline for a trail talk, and an inspection of current markers would be of interest since they are among the very few man-made installations surviving on the islands. Copies of early maps should be incorporated in Monument literature.
Footnotes


2. "Boundaries, Areas, etc., of the United States", see in file, "Channel Islands", Real Estate Division.


4. Bache Correspondence, 1852, Vol. IX, Western Coast, RG 23, NA.

5. Letter of Asbury Dickens to Sir [Bache], August 5, 1852, in Ibid.

6. Ibid.

7. GA Series 941, Box 105, RG 23, NA, Suitland, Md.


9. Ibid.

10. Greenwell to Bache, April 9, 1856, Bache Corres., Vol. XVI, RG 23, NA. See Corres. January 25, February 16 and March 16 for material on 1856. The other source for this part of the report is Coast and Geodetic Survey, GA Series 941, RG 23, NA, Suitland, Md., where the Log Books are held. See Boxes 25467, 2083, 2086, 2096, 52211, 75 and 25047.


SECTION 7

SHIPWRECKS

7.1 THE SETTING

Ships traveling between San Francisco and Los Angeles have historically followed the Coastwise Traffic Lanes which lie in the Santa Barbara Channel between the Northern Channel Islands and the coast, Point Conception southward to Port Hueneme. The traffic in lumber schooners became extremely heavy after the 1880s as in that decade many of the small communities of Southern California such as Fullerton and Pomona, later cities, had their start. The real estate boom was a product of railroad competition. Santa Fe broke the monopoly of Southern Pacific with a route to Southern California from the east, rates tumbled, and many of the curious bought a one-way ticket out west. Masts of lumber schooners bringing timber to build all of the new homes and public buildings created a regular forest in the San Pedro Harbor, but some of them never made it. At Point Conception, they entered a graveyard for shipping, the foggiest and roughest waters off the coast of California. The map included in this section gives approximate locations for many of these wrecks. The list, drawing upon several sources, is still incomplete. Ships of United States registry were located if possible in the List of Merchant Vessels of the United States which lists vessels by year and provides the home port. The Lighthouse Service then provided wreck reports based on that data. Near the turn of the century when the lumber schooners were beating their way through the fog and sometimes colliding with a rock or an island, few records of this sort reached the east coast files. Thus, for the accounts of shipwrecks which follow, newspapers supplied most of the data. Shipwreck accounts and locations are incomplete and need the attention of both historians and marine archaeologists.
7.2 STEAMER WINFIELD SCOTT - BUILT 1851

This ship, a 225-foot steam paddlewheeler owned by the Pacific Mail Steamship Company, ran between San Francisco and Panama. On December 1, 1853, she left San Francisco under Captain S.F. Blunt. The next evening, as Blunt rounded Point Conception, he sailed into a dense fog, and as night fell he crept slowly east through the Santa Barbara Channel. His plan was to wheel his ship to the southeast after he had passed the Anacapas and avoid the mainland. But his reckoning was off; he made the turn too soon and slammed into the rocky ledge of the island close to the juncture of East and Middle Anacapa. Where the ship struck there was a perpendicular rocky cliff 250 feet high.

This much written about wreck has been reported in a variety of contexts. Although no passenger list for this final voyage is in the archives of the San Francisco Maritime Museum, lists for the previous year show an average of under 250 people. The report that the Winfield Scott carried close to a million dollars worth of gold dust and bullion is not documented, but, of course, might be true as this was not uncommon for Pacific Mail and Nicaragua Line ships. The account of the disaster given by Purser Watkins is probably the most trustworthy, although it is touched with great personal loyalty to the Captain. The following account is drawn from Watkins' report as given to the Alta California, December 7, 1853:

The ship's bow struck first, staving two holes in the bow; then, in backing off, her stern struck and knocked away her rudder. Most of the passengers had gone to bed but they came on deck in alarm. They could only look out into a thick fog and see nothing of the land. After losing the rudder, the ship drifted off the island a few hundred yards and then was swept back to strike the shore again with her bow. She had already taken on much water and now sank up to her guards.

The Captain immediately sent out a boat to see where he could land the passengers. The purser reported that a little island
separate from the main one was nearest and that the passengers could be placed on it for the night. The next morning the passengers, some mail, and the treasure were taken onto the main island. Captain Blunt stayed cool, provided bedding and provisions for the passengers, and moved among them unceasingly in his efforts to make them comfortable.

On the 4th, about eight in the morning, the California passed along the Channel and saw the smoke from the passenger's fires. It removed the women and brought them to San Francisco. When the California again sailed south, it arrived at the wreck on the ninth about daylight. In spite of heavy swells, it managed to take on all the remaining passengers. Since most of their baggage and about half the mail were by now under water on board the Winfield Scott, there was no hope of saving it or the machinery of the ship.

On the 10th the steamer Southerner hove into sight and landed provisions for the officers and crew of the Scott. Up to that time, the Scott had not been broken by the action of the waves. When the Republic arrived the next day, however, the midship was quite sunk and Captain Blunt gave up all hope of saving her or getting her off the ledge. The crew went out to the ship and saved what they could on the 12th before boarding the Republic for San Francisco. Sometime later, the side-wheeler toppled off the ledge and sank.

7.3 SCHOONER J.M. COLEMAN - BUILT 1888

Sunday evening, August 30, 1905, the J.M. Coleman struck a sunken reef on the windy westward shore of San Miguel Island just inside Point Bennet. Mate Patterson and four sailors boarded a small row boat and set out for San Pedro. The Captain and four others remained on board awaiting help. The men in the row boat had a hard struggle until they reached a point about sixteen miles off the coast where they were picked up by the Mandalay. The
Coleman had set out from Everett with 800,000 feet of lumber aboard and had run into dense fog. Grounded on the rocks, it became wedged between two of them and was badly beaten by the waves.

Somehow Mate Patterson succeeded in dispatching a distress signal, and the Schooner Chehalis hurried to the rescue bringing officers of the J.A. Hooper Company, owners of the J.M. Coleman, to the scene. On September tenth, the fog was still so thick that other vessels were also endangered. The Comet narrowly missed drifting up onto the rocks next to the Coleman as she was already inside Richardson Reef. The large square rigged vessel, loaded with lumber, was saved when a timely breeze cleared the fog. On the 14th, the Coleman's hull was wedged between the two rocks with the prow to the sea. The bottom was gone; other vessels could not come near to help save the rigging or transfer the lumber.

Finally, on September 26th, 60,000 feet of lumber was transferred. Seamen remained with the wreck for three weeks longer hoping to tow her out, but she lay deep in the ocean filled with water. When she was abandoned, her cargo of redwood lumber washed ashore. Much of it was taken up above Cuyler Harbor and used to construct a 120 foot long ranch house and sheep sheds. (See SMI, title and ranching)

7.4 STEAMER ANUBIS

On July 18, 1908, the German steamer Anubis left San Francisco for Hamburg loaded with lumber, tallow, wheat and sixty-seven people, many of them passengers. In a heavy fog the ship lost its bearings and went ashore on rocks a half mile east of Castle Rock on the west end of San Miguel Island.

After it struck, it settled on the rocks; the in-rushing water extinguished the fires under the boilers and caused the vessel to list. The crew was set to work heaving part of the deck load overboard to lighten her. Then Captain von Salzen decided to send a boat to shore for help. Seven of the crew set out in a life boat for Point Conception and rowed there safely.
The course of the ship had been laid well outside the island, but something went wrong with the reckoning. The Captain claimed later that his compass was off. The Santa Barbara Morning Press headline on July 23rd read, "Swelling Grain May Burst Ship Asunder". Wide cracks had appeared in the decks, and the ship was considered lost.

The vessel had gone through a half mile of densely woven kelp before she struck, so she lay surrounded by kelp and deep water with sixty-eight persons aboard. On the 23rd, nine persons went to the mainland in a life boat. The remainder were rescued and landed on San Miguel Island since by then the hold had 16 feet of water. This news was brought to Santa Barbara just when Captain Frank Nidever and a group of seal hunters arrived at the wreck on the power schooner Ynez. They had been camped on San Miguel when the Anubis struck the ledge, but the fog was so heavy that even though they sailed out within 200 yards of the ship, they missed her. When the fog cleared, they saw her and Nidever took his schooner out to be of aid.

Meanwhile, the ship lay easily, crew on board, since rocks protected it from the heavy seas. On the 27th, divers went down and reported a number of small holes and a good many sheered rivets in the bottom, but prospects were good for floating the ship and replacing the broken steel plates. The Steamer Fulton took on 450 tons of cargo and the Steamer Dee Westport also took cargo to San Francisco. On July 30th, the crew pumped out the forward and after holds, lifted out the freight, and hauled her off the sunken ledge with anchor cables attached to the tug Goliath. The ship still had ten water tight compartments fore and aft, the water being mostly amidship.

In Cuyler Harbor, she was patched up and then towed to San Francisco. The Anubis was the first ship to have been pulled off at the Islands and also the largest to have been wrecked there. 3

7.5 SCHOONER COMET - BUILT 1896

The Comet, carrying lumber to San Pedro from Gray's Harbor, ground its hull into Richardson's Rock as it ran the channel between San Miguel Island
and the mainland on the dark night of August 30, 1911. The same night it drifted ashore at Simonton Cove on San Miguel Island. Captain Borgenson reached Santa Barbara two days later, having left eight crew members on board. He claimed that a faulty chronometer had put him too near Richardson's Rock.

On September 11, 1911, a newspaper reported that there was 620,000 feet of redwood lumber on board the *Comet*. John A. Hooper, president of the Santa Barbara Lumber Company, claimed that his company had a part interest in the boat. On September 14, Captain Short, master of a power launch, found the wreckage. It stood in a shoal with 200 to 300 yards of breakers between it and the open sea. The masts had snapped and the rigging was hopelessly tangled. The ship and cargo were a total loss.

In 1962, Richard Headley, a sea lion catcher, went ashore on the island and came upon some pieces of the wreck; in 1973, it was reported that most of the *Comet* was buried in the beach at Simonton Cove with only its anchor exposed. The California Wreck Divers, Inc. requested permission from the Pacific Missile Range to excavate and remove the anchor and other artifacts. The request was rejected on grounds that the Antiquities Act forbids such removal.  

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### 7.6 SCHOONER WATSON A. WEST - BUILT 1901

Sailing from Aberdeen, Washington, to San Pedro, California, the Schooner *Watson A. West* crashed head on in a dense fog into the rock-toothed west end of San Miguel Island on February 24, 1923. The ship broke at the first impact; it had struck so hard that crew members were thrown out of their bunks. Sensing the emergency, they tumbled into the life boats and began to row for the mainland. They rowed all night and all the next day without food or water. Two sea biscuits were found in the life boat.
The only reason they had been able to escape was because of the cargo; the lumber they carried caused the boat to float long enough for them to get out. The following night they arrived at the foot of State Street exhausted, hungry, and half clad. Captain Sorenson had been with the ship since its launching twenty-two years before.

A Santa Barbara newspaper noted that it was a miracle that the men had made it through the waves, claiming it was only the second time in history it had been done. The owners failed to save the lumber, and some of it contributed to the fencing and out buildings of the ranch on San Miguel Island.\(^5\)

7.7 STEAMER CUBA

The Pacific Mail steamship Cuba, bound from Mazatlan to San Francisco, struck the rocks at Point Bennett about 4:15 a.m. on September 8, 1923. It was just a day after the seven Navy destroyers had gone aground north of Point Arguello. The Cuba's generator had broken down some time prior to the accident, so Captain Holland was not able to send out an S.O.S. call.

The master had obtained a good noon position on September 7th and had laid his course to pass about 2½ or 3 miles off of Point Bennett. He had given orders to be called so as to have ample time to check his bearings with Richardson's Rock Light, but he was still in bed when she grounded. Apparently, both the Third and Second Officers on watch had been ordered to call the Captain in case of thick weather, but they later claimed they could see at all times for a distance of from two to three miles. Superintendent Rhodes of the Lighthouse Service wrote:

> It appears from the records that the vessel overran its log, and also that it was set in a distance of between two and three miles. This amount of set, however, on a run of approximately 160 miles since the last fix, was not excessive and might be accounted for by careless steering or failure of the officer on watch to 'make his course good', that is, to allow for existing wind or possible leeway due to the sea.\(^6\)
At dawn, some forty passengers were put ashore in life-boats while others were sighted and taken on by a Navy torpedo boat which had somehow survived the mass grounding of the previous night. The *Cuba* had been loaded with coffee; the cargo was underwater so long, however, that it could not be salvaged. The vessel was advertised for sale and brought $700.7

### 7.8 Shipwreck Data and Map

The statistics of shipwrecks are provided here in tabular form. The following list has been taken from "An Archaeological Literature Survey and Sensitivity Zone Mapping of the Southern California Bight".8

<table>
<thead>
<tr>
<th>Year Built</th>
<th>Year Sank</th>
<th>Map No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>1932</td>
<td>107</td>
<td>Emperor</td>
</tr>
<tr>
<td>--</td>
<td>1955</td>
<td>144</td>
<td>Gypsy Q.</td>
</tr>
<tr>
<td>--</td>
<td>1898</td>
<td>156</td>
<td>J.F. West</td>
</tr>
<tr>
<td>1888</td>
<td>1905</td>
<td>157</td>
<td>J.M. Coleman</td>
</tr>
<tr>
<td>--</td>
<td>1950</td>
<td>205</td>
<td>Milmar</td>
</tr>
<tr>
<td>--</td>
<td>1951</td>
<td>335</td>
<td>Pacific</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>356</td>
<td>unknown</td>
</tr>
<tr>
<td>--</td>
<td>1801</td>
<td>347</td>
<td>Galleon</td>
</tr>
<tr>
<td>--</td>
<td>1920</td>
<td>180</td>
<td>Labor</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>251</td>
<td>Pactan</td>
</tr>
<tr>
<td>1901</td>
<td>1923</td>
<td>385</td>
<td>Watson A. West</td>
</tr>
<tr>
<td>1939</td>
<td>1943</td>
<td>282</td>
<td>San Francisco</td>
</tr>
<tr>
<td>1851</td>
<td>1853</td>
<td>394</td>
<td>Winfield Scott</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>561</td>
<td>unknown</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>562</td>
<td>Bar Bee</td>
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<tr>
<td>--</td>
<td>--</td>
<td>570</td>
<td>Aircraft</td>
</tr>
<tr>
<td>1920</td>
<td>1930</td>
<td>5</td>
<td>Adriatic</td>
</tr>
<tr>
<td>1937</td>
<td>1949</td>
<td>39</td>
<td>Balpua</td>
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<tr>
<td>--</td>
<td>1952</td>
<td>79</td>
<td>Coos Bay</td>
</tr>
<tr>
<td>1896</td>
<td>1911</td>
<td>76</td>
<td>Comet</td>
</tr>
<tr>
<td>Year Built</td>
<td>Year Sank</td>
<td>Map No.</td>
<td>Name</td>
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<tr>
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<td>--</td>
<td>1941</td>
<td>74</td>
<td>Cleopatra</td>
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<td>--</td>
<td>1908</td>
<td>27</td>
<td>Anubis</td>
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<tr>
<td>--</td>
<td>1938</td>
<td>85</td>
<td>Dante Aleghieri</td>
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<tr>
<td>1949</td>
<td>1949</td>
<td>112</td>
<td>Equator</td>
</tr>
<tr>
<td>1935</td>
<td>1952</td>
<td>90</td>
<td>Del Rio</td>
</tr>
</tbody>
</table>

To this list must be added the following: The Cuba wrecked in 1923; Balboa, lost off Anacapa in 1949; San Guiseppe, lost in 1950; St. Anne wrecked in 1955. Earlier wrecks missing in the tabulation but reported elsewhere include: The Kate and Anna, a schooner wrecked off San Miguel in 1902 and the Roy Soners, a schooner lost in 1901. The galleon (Spanish, Map #347) was probably carrying goods from the Orient to New Spain; these galleons carried Spanish silver to Manila to pay for cargo, but this ship was clearly sailing the California coast on its return route.

7.9 COMMENTS AND RECOMMENDATIONS

The reports on shipwrecks are not only incomplete, but made more complicated by the fact that they are only cited on the year of the accident. Since narrative accounts, and especially newspaper reports, can only be found when the exact date of the wreck is known (or by the exhaustive process of checking every page of ten or more Southern California newspapers for the past 100 years), no exact picture of this intriguing chapter in American economic history is likely to emerge soon. Nonetheless, some commemoration of the fate of ships and of the incredible attempts to save human life and cargo seems warranted.

From time to time ideas have been advanced for the development of a marine park at Anacapa and provisions for a protected area for divers. Proper controls would have to established, of course, but selected wrecks could be used for this purpose and for an educational program worked out to
serve in the training of marine historical archaeologists. The Winfield Scott with its passengers and cargo of gold dust represented a fascinating era of California history and deserves study by marine historical archaeologists for possible marking.9
Footnotes


2. This description of the Coleman's fate is given in the Santa Barbara Morning Press, September 7, 10, 14, 26, 1905. cf. Disaster Log, San Francisco Marine Exchange, San Francisco Marine Museum.

3. For fuller details on the wreck and revival of the Anubis, consult the Santa Barbara Morning Press, July 22, 23, 24, 30, and August 2, 11, 1908; cf. Disaster Log, op. cit., loc. cit.

4. This account of the Comet has been drawn from stories published in the Santa Barbara News-Press, July 1, 1962; cf. Disaster Log. For more recent parts of the story, see the letter from the Ca. Wreck Divers to Com. Baker, PMR, January 9, 1973, and answer January 31, PMR, on file at the Office of Public Affairs, Point Mugu.

5. Perhaps by 1923, shipwreck accounts were no longer newsworthy. Only a brief entry can be found on the Watson A. West disaster in the Santa Barbara Morning Press, February 25, 1923; see also Disaster Log.


8. Draft Final Report prepared by SAl, La Jolla, California, 1977. See Appendix A.1, CR. VIII.

8.1 LIGHTHOUSE SERVICE RECORDS

Lighthouses have been administered by several different government agencies during the period under study here. Prior to 1852, the Fifth Auditor of the Department of Treasury was responsible and he operated through the local collectors of customs which helps to explain why the Channel Islands received so little attention until Los Angeles Harbor developed. In 1852, a Lighthouse Board was created and California fell into the 12th and last district. In 1903, this was transferred from the Department of Treasury to the Department of Commerce and Labor; when the latter department split, Lighthouses fell to the Commerce Department.

In 1939 the Lighthouse Bureau went out of existence and all aids to navigation were transferred to the Coast Guard which had been created in the Treasury Department in 1915. During World War II, the Coast Guard, and thus Navigational Aids, operated under the Department of Navy; both were transferred back to The Treasury Department in 1946. The Coast Guard was transferred to the Department of Transportation in 1967.

The older documents of all of these lighthouse agencies have been brought together and housed in the National Archives under Coast Guard, Record Group 26. The following history of lighthouses on the Channel Islands is drawn from this collection of materials and from other documents cited in the footnotes.

8.2 SANTA BARBARA ISLAND

An Executive Order reserved Santa Barbara Island for Lighthouse purposes on August 24, 1905. The reservation included Santa Barbara Island proper, Sutil, an islet, and Shag Rock. The order described the area as
Dark lines shown approximate boundaries of the land on Santa Barbara Island reserved for lighthouse purposes prior to 1938 establishment of Channel Islands National Monument Coast Guard, 11th District Files.
663 acres about one and one-half miles long and one mile wide. The records of the Eighteenth District Office of the Superintendent of Lighthouses were destroyed by fire in 1906, but from copies of correspondence obtained from the Bureau of Lighthouses prior to 1918, it appears that recommendations for navigational aids along the western Santa Barbara Channel, and especially around Point Conception, outweighed those for lights along the south coast.

Nonetheless on July 27, 1928, the Bureau of Lighthouses authorized an automatic light on the northerly point of the island to "protect inter-island navigation in general and particularly for the protection of the Hawaiian Island and trans-Pacific traffic, which follows a course passing six miles to the northward of the island".¹

By this time, the Los Angeles Harbor had surpassed San Francisco in tonnage and became the principal terminus for trade on the whole west coast. The Commissioner approved a light for Santa Barbara Island in letters of January and March of 1928, and an allotment was made by the Bureau in connection with funds for additional aids to navigation on Anacapa Island. The light was a 375 mm acetylene lantern equipped with a K130 flasher, S20 Sunvalve, and one-foot burner (390 candle power) adjusted to show a flashing one second white light every six seconds, all at a cost of $2,286.00. The white wooden pyramid rose 195 feet above the water and appeared on the 1929 Light List as unwatched. The official lumber list included material for the lantern tower and an accumulator house built into the base of the pyramidal tower. The location given was the northeasterly point of the island, 33°29'.3" latitude north and 119°01'.8" longitude west.

In 1934, a second wooden light tower went up on the south end of the island, westerly side, reaching 486 feet above the water and visible for twelve miles. The light, a 480 candle power unwatched beacon, was on a ten second cycle, two seconds of flash.

When Santa Barbara Island was made a part of the Channel Islands National Monument, two parcels of land and right of ingress and egress were retained.
for lighthouse purposes. The northwesterly parcel, designated as "A", was of approximately 16 acres, and the southwest parcel, designated as "B", was 40.96 acres. At the outbreak of World War II, both lights were temporarily extinguished, but were relighted in 1943 when the immediate threat to Los Angeles Harbor was felt to be over.

During the war, the Navy became responsible for all navigational pulse equipment; the Navy, thus, supplied power for the island lights and placed additional bouys. ANRAC, developed during the blackout in 1942, was able to control acetylene and electric lights on bouys or fixed structures. The bouy had a radio receiver and relay to the control station which could be at a distance but control the light. These were dismantled in September, 1945, when the blackout was over.

In 1952, the Light List showed the south end light at 450 candle power and the north end or Santa Barbara Island Light as 200 candle power. On July 10, 1959, a fire denuded over two-thirds of the island and destroyed the south light tower. Permanent Discontinuance was published on October 16, 1959. The existing northeasterly light is visible from 969° to 356° being partially obscured by the hills elsewhere.

8.3 ANACAPA ISLAND

The wreck of the Winfield Scott in 1853 directed attention to the need for a navigational aid on Anacapa Island almost as soon as it had become United States property. An Executive Order, September 11, 1854, reserved the entire island of about 707 acres (some four and one-half miles long and one-half miles wide at the point of greatest width). Charles Hillinger wrote that when members of the U.S. Coast Survey team visited Anacapa that year they reported that it was an ideal but impossible site for a light station. Quoting a report, Hillinger wrote, "It is inconceivable for a lighthouse to be constructed on this mass of volcanic rock--perpendicular on every face, with an ascent inaccessible by any natural means....."
Nevertheless, in 1868 the old Lighthouse Board requested funds from Congress. The maritime needs of the West Coast were unfamiliar to the eastern administrators, but to satisfy the clamor for an aid, Congress financed a much less expensive mainland station at Point Hueneme. This began operation in 1874. Coastal shipping, and especially the toll in lumber schooners finally convinced the Bureau of Lighthouses to authorize a temporary acetylene light for the south side of the easterly entrance to the Santa Barbara Channel on October 17, 1911.

A fifty foot skeleton metal tower went up on the tip of East Anacapa some fifty feet east of the present structure. The light was on a ten second cycle, one second light, and had a luminous range of twenty miles in clear weather. It could be left unattended for 187 days. In addition, a whistling bouy was anchored 5/8ths of a mile off the east end of the island.5

A permanent lighthouse needed authorization by Congress and pressure continued for a better aid to navigation along the Channel. The American Association of Masters, Mates, and Pilots claimed that nine-tenths of all vessels trading up and down the Pacific Coast were passing inside the islands of the Santa Barbara Channel. They wanted a fog signal as well as a light.6 On February 28, 1921, the tank steamer Liebre grounded on the east end of Anacapa Island directly under the light and sustained damages estimated at about $40,000. Local inspectors at San Pedro reported to the Director of Coast and Geodetic Survey that no fog signal existed on the island and further that the east end whistling bouy was not in operation when the ship grounded since it had capsized.

In 1928 the Bureau of Lighthouses allotted funds for fog-signal and radio apparatus for Anacapa as well as boats and miscellaneous improvements for the water supply, sanitation, and grounds improvement. This was but the beginning of funds for one of the last major lighthouse complexes to be built on the West Coast. The Bureau of Lighthouses Annual Report for
Dark lines show approximate boundaries of the land on Anacapa Island reserved for lighthouse purposes prior to 1938 establishment of Channel Islands National Monument.
1929 gave an estimated total for the entire project of $186,000.00. It included station residences, service buildings, hoisting derricks, a fog signal, and a radio beacon. Bids for work on the roads and landing facilities were opened for contracts on January 15, 1930, and the Roth Construction Company turned in the lowest bid, $28,950.

The Department of Commerce looked over the bids, had the Roth Company investigated, and found that its activities had been limited to small buildings in San Francisco and also that the company had on record liquidation damages and incompetency reports in regard to contracts with the War Department. Roth had no financial resources, no experience in heavy rock work, and no floating equipment. Commerce suggested that the Bureau take the next lowest bidder ($37,000) as it would cost less in the long run. It passed this decision along to the Lighthouse Superintendent Rhodes in San Francisco.

On February 27, Superintendent Rhodes wired the Commissioner in Washington D.C. that the Roth bid had been accepted and secured with a bond of the U.S. Fidelity and Guaranty Company. Roth was instructed to go to work, as early completion of the station was urgent. The Secretary of Commerce discussed the case with the Comptroller General and was told he could not cancel the contract.

Part of the task involved crushing island rock, and delays in this by April 30 brought Roth the news that he would be levied damages. Roth had not even commenced active work in May and was having all sorts of difficulties in landing men and equipment. The records showed, for example, that:

.....on the morning of May 15th Mr. I.C. Roth, of the Roth Construction Company, with six men, started from Point Mugu for Anacapa Island in a 50-foot launch for the purpose of landing supplies and inaugurating the work on the Island. It appears that after landing three men on the Island the small dory used for landing purposes was swamped and lost, and that
the launch itself was disabled and carried away from the Island by the strong wind and heavy seas which prevailed at that time. The party in the launch was adrift for a day and a night, having drifted ten miles to the southward of the Island. They finally made temporary repairs to the engine and returned to the mainland, from which point they telephoned the Coast Guard at San Pedro, and the Coast Guard boat was sent from that place to rescue the three men who had been marooned on the Island for more than thirty-six hours without food, water or shelter. The damage to Roth's launch has not yet been repaired, but, in the meantime, he has chartered a Japanese fishing boat and landed a few supplies and a small amount of material and equipment on the Island.8

In June, Roth had only eight men on the island, no boat of his own, and no hoist. His men had to land everything with a small derrick erected by the Lighthouse service to hoist small accumulators up a sheer cliff one hundred and twenty feet in height. In spite of warnings that all material had to be inspected, Roth brought out cement, sand, and galvanized pipe by barge ignoring inspection. It took five days for all his men and all the barge crew to unload it; then the pipe and cement were found not to be up to specification and they were thus rejected by Mr. Lang, the Government's inspector on the island. Meanwhile, the foreman on another island job listened to the complaints of the workers: no pay, inadequate water, poor food, and inadequate housing.

An inspection by the State Division of Housing and Sanitation upheld the complaints, and Roth was ordered to install a floor in his cook tent, provide bathing water, and other improvements. When Roth applied for the first payment due under his contract in July when the job was to be 30% complete, an inspection showed no progress. In August steps were taken to cancel the contract that by this time had set back completion of the Light Station by some six months. Since bondsmen on federal contracts are first
responsible to the government for the full amount of the bond, U.S. Fidelity and Guaranty Company could supply nothing to cover payrolls. By November Roth was keeping up his correspondence from the Ventura County Jail where he was serving time for violation of various labor laws.

Before the contract went out for bids a second time, certain revisions were made which included the construction of a 30,000 square foot cement rain collecting pad behind the proposed tankhouse structure scheduled for construction in 1932. Carpenter Brothers of Beverly Hills made the low bid ($36,490) and began work in December where Roth had left off. The work proceeded satisfactorily, it would appear, as no correspondence to the contrary is in the Lighthouse files. Two gasoline-engine-operated hoisting derricks were installed: The lower derrick was situated on a rock platform approximately 15 feet above mean low water level, had a 40 foot boom, and five ton capacity. The upper derrick was placed on a rock platform, had a 50 foot boom, and four ton capacity. Both were designed to make a lift of 80 feet per minute.

With this equipment installed, public notices were published in newspapers up and down the coast for bids on the buildings in the complex. M.W. Lippman of Los Angeles got this contract with a bid some $15,000 below his competitors. For $74,595.30 he contracted to build (in four months): one light tower, one powerhouse, one oilhouse and one fog signal building, all of reinforced concrete; also four lighthouse keepers' dwellings, one tankhouse and one general service building, all to be frame and stucco construction...terra cotta tile roofs on all roofs excepting Tankhouse, which is to have rigid asbestos shingles.9

Lippman's bid was accepted in April, but the following March the work was still incomplete. Lippman blamed the delays on the weather, but it had been ideal during the four months specified for the contract and had not rained until December. His bid was too low and his proposed time schedule too short; with his crew, it would have taken that long on the
mainland to build the houses alone. In addition, there were two contentious factions in his crew: Mr. Lippman and his friends and his partner, Mr. McWilliams, and his friends. On one occasion, Mr. Lippman arrived on the Island with the Sheriff of Ventura County for the purpose of ousting Mr. McWilliams and his party.

For the late finish, Lippman had to suffer liquidated damages under terms of the contract. Inspector H.A. Lang reported that his orders to comply with specifications were often ignored. He would then reject the work; as a result of this practice, the workmen began to come to him directly for orders instead of going to the foremen. Questions were then raised as to whether Lang had overstepped his lines of authority and this raised a third area of contention. Yet all obstacles were at last overcome and the island light was fitted with a 2000 watt electric lamp (600,000 candle power) placed on a 60 second cycle with three flashes and visible for twenty-three miles.

Funds were allotted for fog signal diaphones and their installation in late 1931. Power was to be generated on the island. The power house was equipped with three 2000 gallon fuel oil tanks. The two-tone diaphone on a 30 second cycle was set to blast for three seconds. The resonators of the diaphone were depressed slightly in order to counteract the usual upward bending of the sonic beam.

The S.S. Golden Sun of the American-Hawaiian Steamship Company, reported in 1933 that this was one of the best fog signals it had ever experienced. On the negative side, however, the S.S. Lightburne reported that the [sic]:

Anacapan fog signal is 3 second blast and 27 second silent and Pt. Hueneme fog signal is 4 second blast and 26 seconds silent period, consequently, naturally having expected to make Anacapa we thought had done so and hauled ship NE'ly. to pass light to Starboard hand. About this time fog lifted slightly and we seen that fog signal was on Pt. Hueneme and proceeded on our voyage accordingly.
Comment in question is that since the blast and silent periods of the Lights mentioned have a difference of only one second it is confusing in indentifying either in a fog. At this, the Port Hueneme characteristic was changed.

Another negative commentary reached the Lighthouse Service on September 22, 1933, when the Beulah Port grounded on the south side of Anacapa Island near the west end of the rainshed and less than 1,000 yards from the fog signal. The keeper reported the fog signal in operation, but the vessel was badly damaged.

A radiobeacon on Anacapa was much in demand, and the Shipowners' Association of the Pacific Coast complained August 10, 1931, that the Naval Radio Compass Station at Point Hueneme was to be discontinued on October 1. They wanted the Commissioner of Lighthouses to arrange for temporary installation of a radiobeacon at Anacapa Island so that radio direction finder service could continue uninterrupted. In response, the Lighthouse Service Airways Radio Division purchased an ESCO 1000 watt rotary converter for temporary use with the Anacapa beacon until the permanent rotary converter could be delivered. In 1932 the permanent radiobeacon was set up to transmit on 286 kilohertz with the code dash, two dots, dash. When this interfered with the Navy's Fleet communications, it was changed to 314 kilohertz.

In 1931 Superintendent H.W. Rhodes requested a 26-foot whale boat with trunk and cabin to serve as a launch. To meet the problems of landing the craft, he had it equipped with special hoisting gear so that it could be hoisted upon arrival at the island onto the lower landing platform. Of this Charles Hillinger's account is memorable and reads:

Perpendicular cliffs shot straight up more than 250 feet from the water. Embedded in the rock 50 feet above the surging surf was the lower landing platform, our target and arrival point. Seated in the engine house on the landing platform when
the utility boat arrived was the boatswain's mate 1st Class, the officer in charge of the station.

The power was switched on, the heavy boom swung out over our boat and a steel derrick hoist cable and hook lowered. One seaman grabbed the hook and inserted it in a midship eye while another secured guiding lines at the bow and stern which were fastened to the landing. Screeching power echoed throughout the cave-locked cove as the powerful hoist was thrust into the lift gears.

Up out of the water rose the 7,000-pound boat, her crew and passengers. The boom swung us onto a custom-made cradle and our 50-foot flight to Anacapa ended. This facilitated bringing in supplies for the keepers from the town of Ventura some sixteen miles distant.

Anacapa Light was turned off during the Pacific Coast blackout in 1942 but restored to normal operation in 1945. In 1940 the station was synchronized for distance finding, but in 1961 this latter feature was discontinued.

8.4 SAN MIGUEL ISLAND

San Miguel Island was reserved for lighthouse purposes by Executive Order on April 23, 1909, and described as an area of 10,378 acres about seven and a half miles long and two and a half miles wide. Prince Island at the entrance to Cuyler Harbor was reserved in its entirety for lighthouse purposes by Executive Order November 5, 1917. Richardson's Rock, described as an unsurveyed island westerly of San Miguel Island in approximate latitude 34°06'00" north, longitude 120°31'06" west, was reserved for lighthouse purposes by Executive Order January 30, 1911.

In 1911 the Navy sent out a circular letter asking for opinions from shippers and marine underwriters as to where the Service should spend money first: Anacapa Island or Richardson's Rock. The latter was deemed more important because:
....the strong northwest coast winds are liable to set vessels past Point Conception in foggy weather, when they would be likely to run into the dangerous water near Richardson's Rock. 

Yet, when Anacapa got a light in 1912, only a flashing acetylene beacon was authorized for Richardson's Rock. A beacon and a powerful fog signal costing $140,000 were discussed but not funded or constructed; instead, Richardson's Rock was equipped with a lighted whistle buoy anchored in 270 feet of water northwest of the rock projecting 16 feet above water. This was rebuilt in 1948 some 1100 yards from the rock.

In 1911 a bell-buoy was established in 120 feet of water off the southwest end of San Miguel Island, but it was frequently found fouled and capsized by the enormous quantities of kelp reported by the visiting Coast Guard tender. Ships passing outside the island on their north or south course along the coast claimed they never heard or saw it. Since it was virtually useless, it was discontinued in 1918.

Traffic between Central and South America and San Francisco invariably passed outside of San Miguel Island because it saved them 25 to 30 miles over the inside course. They took the inside course only in heavy weather because it offered shelter from wind and swells. In 1923, while pursuing the shorter outside course, the Cuba was wrecked on San Miguel while rounding Point Bennett, on the westerly side. This generated a flurry of inquiries—especially from the Pacific Mail and Steamship Company—in regard to a lighthouse on the westerly side of the island, and a demand for the immediate placement of a gas and whistling buoy at Point Bennett.

New hydrographic readings were made outside the kelp beds there and the buoy was approved for establishment in 18 fathoms of water about one-sixteenth miles from the southwest tip of the island in November, 1924. In 1942 this was replaced with a first class nun buoy. 

The 390 candle power lights on Richardson's Rock and on Point Bennett went out in 1942, but the whistle on Richardson's Rock was only inoperative
for six days. On July 20, 1943, an unwatched light (#102) was established on San Miguel Island of 640 candle power on the south side of the island at Crooks Point. The light was fixed in a white skeletal tower and flashed 75 times a minute. It could be seen for 26 miles. This light was discontinued on March 13, 1953, and the tower removed.

8.5 COMMENTS AND RECOMMENDATIONS

The Santa Barbara light tower is critically in need of paint and general repair. The door is unlocked, but jammed, and the fittings are rusted and need replacement. With the exception of the Navy quonset hut, this is the only standing old structure on the island. It has a trail leading to it, but presents a poor and deteriorating appearance. The Service built it in 1929 and it represents a style no longer constructed.

The Anacapa Light Station, Fog Signal Building, and the complex of five remaining buildings constructed by Lippman are all in good to excellent condition. The Lighthouse and the Fog Signal building have already been nominated to the National Register of Historic places. The forms were submitted by Walter Evans, Chief Logistics and Property Branch, Eleventh Coast Guard District. Henry G. Law, Architect, NPS, completed the statements on physical appearance and significance. The five buildings are: the Residence used by the permanent Park Ranger, the Power House which houses the generator and serves as quarters for other park personnel, the Oil House which houses tanks of diesel fuel used by the Lighthouse and Fog Station, the General Service Building which has storage space and a visitors' center in it, and the Tank House which encloses the two redwood water tanks. The 30,000 square foot rainshed, a cement slab of irregular shape behind the Tank House, is shaped to funnel rain water down to the water tanks. It is no longer used for this purpose and instead serves as a heliport.

The five buildings erected in 1932 reflect the Mission revival trend in architecture which has served to satisfy California's search for its
own distinctive cultural heritage. When the first Americans arrived in California in the 1840s, they brought along New England styles from the east. Soon the neo-classical house designs appeared from the south, and simplified versions of these later showed up in the California bungalow in the 20th century with the familiar two columns at the front door. Reaching for the values of a higher culture, housing went Victorian for several decades in the late 19th century. As the western world began to look back to values of a local historical culture around the turn of the century, California went along. We found our own in the buildings constructed here by Spanish colonials. While adobe residences were usually one-room dirt floored buildings, the California Mission churches crowned colonial architecture. These churches provided a model for the Mission Inn at Riverside in 1894, influenced California greats like Irving Gil in the early decades of the 20th century, and by the 1930's provided a style for every man's home—the California bungalow. The British were the first to build small homes for their imperial administrators and they used these cottages throughout their empire. The bungalow style they pioneered reached its zenith in California where the old folks and working people who came out west could nearly all hope to own a city plot of land and build a small house. But the simplified Mission style was also a tremendous contribution to our 20th century architecture since it provided roots for the common man. The Mission style made use of California's natural resources of timber, plaster and terra cotta tiles.

The Anacapa complex of buildings brings together the British heritage of an administrative housing unit and the Mission revival bungalow of the 1930s. The bungalow reflected borrowed architectural styles in the past, but in 1930 when the designers went to work on the lighthouse complex, the Mission style was here. Real estate developers all over Southern California were using it. But the mainland is in the mainstream of change where Anacapa Island is not, and except for a few reversible changes this cluster remains as it was built. Not one of the five buildings is a really outstanding example of Mission revival in itself; but the collective, along with the other 1932 installations, embodies historical integrity and should be marked and preserved as a District.
The redwood water tanks inside the Tank House are important too. They reflect the use of California timber common to 1932 when redwood tanks were commonly in use both above and below ground; for example, septic tanks. These tanks, built by the George Windeler Company, are in excellent condition and presently in use.

All of these buildings were included in the "Classified Structure Field Inventory Report" submitted by Henry G. Law on May 13, 1976. Much of the repair work he recommended has been completed. The Residence, General Service Building, and Power House have new tile roofs contracted for through the Department of Navy, Naval Facilities Engineering Common, Point Mugu. The San Valle tile was carefully selected to simulate the original tile which has since been crushed for use on the walks. The Tank Building originally had asbestos shingled roofing. This was changed to terra cotta tile and has recently undergone a repair job. The present Resident Ranger, Craig Dormand, reports that the terra cotta tile blow off regularly during high winds. The Residence, Service, and Power buildings have new roof flashing and some of the copper gutters and downspouts have been replaced.

The Tank House needs minor repairs such as the replacement of a window pane on the west end, south side where birds now fly in and out and replacement of one front pane, easterly window. Window moldings on the west end, north side, need attention. The gutter running north to south along the western edge of the peaked roof is perforated and needs replacement. Part of the chimney top is broken away on the General Service Building. The Power House has two cracked glass windows. The Residence should be restored to its original design. This would at the least necessitate removal of the asbestos shingles which sheath the original stucco walls and restoration of the stucco. Rebuilding or the addition of thick outside garden walls would enhance its stylistic integrity as would a new front door of Spanish colonial style. This task would require the services of an historical architect. The green outside trim paint is wearing. Some of its original inside features such as wrought iron ceiling supports and carved beams are to the structure's credit.
The three houses razed by fire should be studied to determine whether there is any point in conserving the foundation material left. Since five of the structures remain intact, it is recommended that the NPS remove the debris and clean up the area thus making it compatible to the feel of a National Monument. 14

The much-photographed stairway, landing and hoists at East Anacapa reflect the ingenuity of the Lighthouse Service in providing access to their Light installations. The 90 steps are in good condition as are the landings. The Derrick Building at the top of the landing has a gabled roof, and the shingles are partially missing. This landing should be preserved.

It is recommended that the entire complex--including Fog Signal, Lighthouse, buildings, and landing--be nominated as a District to the National Register of Historic Places. Nomination forms for all this accompany the report. 14
Footnotes


2. "Santa Barbara Island" memo from Bureau of Land Management Sacramento, California office to writer. The parcels were described as:

1. Beginning at a point in the high water line at the northwesterly side of the island which bears 258°50' true azimuth from north, a distance of 525 feet more or less from the center of Santa Barbara Island North End Light Tower: thence 110° true azimuth from north a distance of 1000 feet more or less to the intersection with the high water line at the northeasterly side of the island; thence along the high water line around the northerly point of the island to the point of beginning comprising 16 acres more or less.

2. Beginning at a point in the high water line at the southwesterly side of the island which bears 223° true azimuth from north a distance of 300 feet more or less from the center of Santa Barbara Island South End Light Tower; thence 90° true azimuth from north a distance of 800 feet to a point; thence 330°30' true azimuth from north a distance of 2150 feet; to a point; thence 270° true azimuth from north a distance of 800 feet more or less to the intersection with the high water line at the westerly side of the island; thence southerly along the high water line to the point of beginning comprising 40.96 acres more or less.


3. U.S. Coast Guard, Light Lists Pacific Coast of the U.S., 1929-Pres; "World War Narrative History" Coast Guard, 11th Naval District, Coast Guard History, 1946, RG 26, NA.


5. "Memoranda on Lighthouse Island....", p. 2; Gibbs, West Coast Lighthouse; "Recommendation as to Aids to Navigation", p. 50; 9-26-1911; Lighthouse Bureau Corres., File 757A, RG 26, NA.
Footnotes (cont.)

6. Duenbeck to Capt. W.A. Moffett, USN, 8-16-1911, 757-E, RG 26, NA.

7. Letter, Office of Inspector, 18th District Lighthouse Service to Commissioner of Lighthouses, 4-6-1921.
   Letter in File 757A, 1932, RG 26, NA. See 757A for all documents and correspondence relative to construction of lighthouse complex of the 1930s.


9. "Request and Authority to Purchase", March 28, 1931, 757A.


12. Letter, E. Woods to W.A. Moffett, Com. U.S. Navy, August 14, 1911, File 757E, RG 26, NA.

13. Rhodes to Commissioner, Oct. 26, 1912, Feb. 19, 1924, Feb. 21, 1924, Sept. 22, 1923; W.A. Moffett, Com. USN to Commissioner, Sept. 26, 1911; H.M. Gleason, Pacific Mail SS Co. to Rhodes, Feb. 25, 1924; "Recommendation for Aid", Nov. 14, 1924, in File 252, RG 26, NA. Fog and lighthouses were contemplated for both Richardson's Rock and the Island operated by water power obtained from the island.

9.1 THE SETTING

Santa Barbara Island, Santa Barbara County, is a compact little island of 638.72 acres, or approximately one square mile. Located 24 miles almost due west of the northwest tip of Santa Catalina Island in the Southern California Bight, it is 38 miles from the mainland. Precipitous palisades on all sides of the island convey the impression of a mountain top that has emerged from the sea, and Sutil Islet* and Shag Rock to the southwest and northeast respectively are tips of lower peaks of the same submerged ridge. Yet the island for all this has a romantic pastoral quality when it is green and verdant, since it has rolling slopes and its saddle and two peaks are easily surmounted. It comes as no surprise that Americans who came west would want to own it, or put grazing animals on it, or even farm it. People tried all of these and more even though Santa Barbara Island had no water supply.

9.2 EARLY HISTORY TO LIGHTHOUSE ADMINISTRATION

The island became a part of the United States in 1848 and a Congressional appropriation of August 31, 1852, authorized funds for survey and provided that "all leases of any of said islands, or of any part of either of them outstanding, shall be regarded as without authority and void". Section 3950 of the Political Code of California which sets forth the boundaries of Santa Barbara County designated the island as part of that county. The island was said to be inhabited by many goats in the 1840s; research found but one source for this observation--Thomas Jefferson Farnham's Travels in California. Farnham sailed along the coast in 1839-1840 and mentioned the islands briefly. Feral house cats roamed the island in large numbers in 1896 and again in 1908. Popular writers claim they were introduced by a freighter.

* Appears on some maps as Gull Island.
It is known that they destroyed nesting populations of auklets, murrelets, petrels, and other sea birds. A man named J.R. Britton contributed an article to *Land of Sunshine* based on his own observations of the islands in 1897 and reported on a Chinese lobsterman's hut on the rocks above the landing and on the skulls and hoofs of sheep. Mr. H. Bay Webster was on Santa Barbara Island in the 1890's and, as he was primarily a fisherman and a man who hunted seals, he built himself a cabin on the northeast point of the island which bears his name, Webster Point. He was at home with the elements, went barefoot, and had homes on other Channel Islands. In 1940 Don Meadows talked to Webster at his cabin at Frenchy's Cove.

In January, 1903, the Office of Lighthouse Engineer, 12th District, requested information on certain sites used for lighthouse purposes and received the information that Santa Barbara Island had always belonged to the Government but that a reservation had never been made for lighthouse purposes. Upon the urging of the Lighthouse Board, President Theodore Roosevelt issued an Executive Order August 24, 1905, reserving Santa Barbara Island for Lighthouse purposes. Federal archives have no lease or grant on record for the island either by the Mexican government or the government of the United States prior to that date; however, once under the jurisdictional administration of the Lighthouse Service and thus the Department of Commerce and Labor, regulations for leasing set down by Congress had to be followed and the records maintained. Out of the regulations, two paragraphs were inserted in each lease:

That this lease shall be subject to revocation by the Secretary of Commerce and Labor at his discretion at any time prior to the expiration of the term of five years for which it is made.

That the premises hereby leased shall not be sublet in any event, and that no assignment of this lease shall be made without the consent of the Secretary of Commerce and Labor having been first obtained in writing.
Following upon instructions, the Department of Commerce advertised the subject island for lease for a five-year term in newspapers up and down the coast. Interested parties submitted sealed bids, and the lease went to the highest bidder.

9.3 THE J.G. HOWLAND LEASE

Mr. J.G. Howland obtained the first recorded lease on July 6, 1909. Howland grew up among the islands and his father had run sheep on Catalina during the Civil War. His period of five years commenced July 1, 1909, at a rental of $26 per annum. The lease is not in the Lighthouse files, National Archives, but a fair amount of correspondence attendant to it is there because Howland ignored the paragraph in the lease on the subject of subletting. On August 1, 1909, Howland leased San Nicolas Island under identical conditions to those of Santa Barbara except that he paid $151.00 per year. Then without consulting the Department of Commerce, he sublet a portion of each island to C.B. Linton, of Long Beach, California, in the sum of $125.00 per year for the purpose of propagating pearls in abalone. Linton, in turn, transferred his interest in the lease to C.B. Linton Investment Company, Inc. which was a pearl culture enterprise. The first contract with Linton was under the date of October 6, 1909, and the second on January 24, 1911. The latter read:

I, the undersigned, hereby grant to C.B. Linton of Long Beach, California, the exclusive right or privilege to place camps upon the islands of San Nicolas andSanta Barbara, California, so long as I own the lease of said islands, for the purpose of securing and preparing abalones....

The lease was duly signed by Howland and Linton. In 1911 a controversy arose between the two men over the killing, on San Nicolas Island, of sheep belonging to Mr. Howland by the Linton employees. Howland appealed to the Department of Commerce to remove Mr. Linton and his employees from the island. Linton
denied the charges stating that if any sheep were killed, it was by men who were not working for the Linton Company and instead collecting abalone on their own but paying the Linton Company in shellfish in exchange for transportation and provisions. As the charges flew, Linton said that Mr. Howland subleased pearl-fishing privileges on Santa Barbara Island to a Japanese for $300 a year, that he subleased certain portions of San Nicolas Island to two former employees of the Linton Company for the same purpose, that he sold alcoholic liquors on the Island of San Nicolas, and that the only use to which he put Santa Barbara Island was to sublet fishing privileges. In replying to these charges, Howland replied that the fishermen had been granted these privileges without charge but with the agreement that they carry no guns and that they would not shoot or disturb the stock. Howland's name came to light again in 1912 in alleged improper activity at "certain islands off the coast of California" where thirteen Chinese were said to have entered the United States without inspection. They were later captured while being smuggled to the mainland. Linton finally interested the Bureau of Fisheries in his work and it urged Commerce to let Linton enterprises stay and finish their experiments with the shellfish in progress. The matter was settled by the Department granting a license to Linton to operate on the shore of San Nicolas Island and for Mr. Howland's lease to run for its unexpired term. Although the correspondence is largely about San Nicolas, it does tell us that Howland did not run sheep on Santa Barbara Island, that he exploited it only for fishing rights, and since he only sold alcoholic beverages on the larger island it may be assumed that Santa Barbara had no human habitation worth serving. No mention is made of goats.

9.4 THE ALVIN HYDER LEASE

In the spring of 1914, public notices pursuant to the leasing of Santa Barbara Island Lighthouse Reservation for five years were posted in post offices between San Francisco and San Diego, mailed to numerous private parties, published in the U.S. Government Advertiser, and inserted in five
NOTES OF INTEREST

* 1. Cabin built by Carl Jurgensen's father. D.O. Hyder stayed here during visit when four years old.
* 2. Cabin built by uncle Cleve Hyder
* 3. Landing platform
* 4. Hay barn
* 5. Water pond
* 6. Hyder divided house
* 7. Paul Miller's cabin
* 8. Chicken houses
* 9. Skeleton and skull found here by Al Hyder giving graveyard name to area
* 10. Seagull nesting
* 11. Seal beaches
* 12. Marine gardens; heavy breakers; blow holes
* 13. 200' cave
* 14. 1916 bald eagle nest taken by Al Hyder and his brother (died as pets). Also called "Sutter Rock"
* 15. Water pond and old ranch
* 16. Pelican nesting
* 17. Seagulls nesting
* 18. Seal beaches
* 19. "Seal Cove"
* 20. Very deep cave at low tide
* 21. Clover Hyder lobster fishing cabin, about 1919-1920
* 22. Lobster fishing cabin, about 1919-1920, for two years Ben Pierson
* 23. Blowhole arch
* 24. Seal beaches
* 25. Cormorants nesting
* 26. Sea elephant beaches
* 27. Called "North Rock"
* 28. Only sandy beaches; gathered sand in skiff for cement work on island (later covered by slide).
* 29. Too rocky for farm
* 30. Seagull nesting
* 31. Websters Hse. Websters terrace house photo 1936-SBI office (notation by Meadows)
* 32. Natural bridge
* 33. Shark Harbor
* Noted by Denton A. Hyder - May, 1970

CONSULTANT: Don Meadows
newspapers. The advertising and printing must have cost at least one year's rental. However, the two bids received were well above Howland's yearly payment. T.D. Webster of Carpinteria bid $225 and Alvin Hyder of San Pedro, California, bid $250 a year thus acquiring the lease on June 16, 1914. The largest settlement of people on the island in historic times moved onto the island with Hyder. Alvin Hyder's only son, Denton O. Hyder, has been able to enlighten us on the farm community he belonged to through interviews he had with Don Meadows in 1940 and with Ralph Philbrick in 1970. This account has largely, but not entirely, followed the notes from the 1940 visit in writing the following account of the Hyder family on Santa Barbara Island.

Alvin Hyder was born in a log cabin near Claremore, Oklahoma, one of twelve children. His father died while he was a young boy and in 1892 the mother brought the family to Huntington Beach. When Alvin was 14, he went to sea on a sailing vessel for two years. By 1900 he and his brother had a small boat, and they went around the various island picking up crayfish on a regular route. In 1904 Alvin built the *Nora*, a 65 foot, 15 ton boat used to haul sheep to and from the Channel Islands. In the summers he used it to haul fish for the canneries. This boat burned off the coast of San Juan Capistrano. Hyder had the *Nora II* built by Fellows and Stuart in Wilmington: 65 feet long, 18 foot beam, and 16 tons. It traveled at 9 knots. On January 16, 1916, his lease of Santa Barbara Island in hand, Alvin Hyder set out in the rain with his wife and two children to establish a farm on the island. They took with them household goods, furniture, and lumber to build a house. Only one house was on the island when they arrived. It stood on the north side of the present landing. A bridge ran across the cove from the south side to the house, that of the Chinese lobster trappers who had lived there in the 1890s.

Hyder built his new house near the edge of the island 100 yards south of and 100 feet above the landing. It had two rooms: one for Alvin and his family and the other for his brother Clarence, his wife and four children. The two families arrived in January so as to be able to plant crops and take
advantage of the winter rains. The island was covered with foxtails, ice plant, and jungles of coreopsis, which the Hyders called cabin stock. Feral house cats were abundant. Clarence and Alvin hired Cleve Hyder, a relative, and his wife to work for them, and Cleve built a house near the upper part of the landing in 1918. George Sands and his wife, Effee, joined the community, fished for crayfish, and had a tent near the barn. They left after two years. Paul Wills also worked for Alvin and Clarence, and he lived in a 10 by 12 foot house southwest of the double-room house. The Hyders also built a 60 by 40 foot barn and a stable with two stalls. The seven structures on the island in 1921 are keyed on the map, "Santa Barbara Island, the Hyder rears". Since the island had no springs, the Hyders built three small reservoirs: one at the houses, one on the west side of the island (and this is still visible), and one near the south end. The latter was extant in 1940, a "V" shaped slab of asphalt which tilted downward into a collector basin. Water had to be delivered from the mainland in the Nora II, and for this Hyder had twenty-five 50 gallon barrels. From the boat the water was piped to the reservoir beside the double-room house through a 1½ inch pipe. In 1918 they installed a Rambler auto engine to pump the water. Water was supplied for the human population, which reached 15 people in 1916, and for the livestock. Cooking was done with a coal-oil stove.

To clear the land, the coreopsis was pulled up by hand while the mesembryanthemum was cut, dried, and burned. The island was burned each year. The Hyders grew five acres of potatoes on the west slope and 150 acres of barley on the east slope. They plowed with a mold-board plow hitched to four horses. The soil was extremely rich, and produced plentiful barley which was cut, baled, and shipped on the Nora II to the mainland fifteen tons at a time. Since there was no market for the potatoes on the mainland, they rotted in the ground. From 1918 to 1922 hay was raised. In the summer of 1918, the entire island was purposely burned over to clear it. The fox-tail and even the ice plant partially burned, but the coreopsis persisted.
In the early decades of this century, good money had been made by raising rabbits, marketing the meat, and selling the pelts as well. Following the trend, the Hyders brought 1200 Belgian Hares out to the island, carefully selecting pure blacks and pure whites. The Nora II brought them over and they were turned loose on the island. At the time, there were more cats than rabbits there, and the rabbits were rather quickly destroyed by the cats and resident eagles. The Hyders then employed strychnine to rid the island of the cats. At the same time, four hogs were put on the island. They died from eating poisoned rabbits, rabbits doped with strychnine to poison the cats. When the Hyders left the island in 1922, they took off twelve goats, 300 sheep, and four horses along with the family dogs. The sheep were taken to a ranch at Cuyama Valley north of Santa Barbara. In 1928 Alvin Hyder took sheep to Point Conception, and from there he tried to get a lease on Santa Barbara Island without success. He then took 250 sheep to the island without a lease and kept them there for two years, fattened them, and returned them to the mainland. Denton Hyder recalled that when the family left the island in 1922 they tore down the buildings and took the lumber to the mainland. Leases from the Lighthouse Service required that all buildings be removed. According to the correspondence and the leases in the Lighthouse Service archives, Hyder's lease ended in 1919 and he made no attempt to renew the bid.

9.5 RESORT PROMOTION AND UNEXPLOITED LEASES

In 1919 the usual notices were published and advertised for the re-leasing of Santa Barbara Island. There were two sealed bids to examine: C.P. Visel for $25.50 a year and Abbot Kinney for $1,250. The latter enclosed a check for $250 and got the lease.\textsuperscript{12} The bid had originally been made in the names of all the members of the Board of Directors of the Chamber of Commerce, Venice, California, but since bids had to be made in the name of an individual or corporation, Mr. Kinney, one of the Board members, came forward. The Chamber actually wanted to develop the island for public use:
fishing and boating, a station for hydroplanes, camping places, and to furnish headquarters for the Venice Aquarium and for the Venice Marine Biological Station of the University of Southern California. To make the plan a success would cost a considerable sum of money since the entrepreneurs would have to supply a safe water supply, sanitary facilities, fences, houses, wagon roads, and landings. Mr. Kinney asked for a twenty-five year lease so as to justify the expenditures, but was advised that he would have to seek Congressional authority. Accordingly, House Bill 9641 was drawn by Congressman Osborne and arguments set forth in its favor. Santa Barbara Island, it was claimed, was directly in front of Venice and adjoined the celebrated Osborne fishing bank, over a thousand seals graced its rocks, and it was time to open this and other islands to the public rather than leave them to sheep men. A fellow Congressman appealed to the Department of Commerce to extend the lease since the resort would serve the entire bay district from Redondo to the Long Wharf, Collis Huntington's colossal docking facility in Santa Monica Bay. The Bill was poorly drawn, and seemed to restrict competition for the proposed twenty-five year lease to the Venice Chamber of Commerce, so in the end it was abandoned. Since the lease could not be extended, the Venice Chamber of Commerce put an end to their project. Mr. Kinney failed to pay the annual rental in 1920, and his lease was revoked. After this reversal, Abbot Kinney went to Santa Cruz Island at Pelican Cove and there built a casino, bar and cabins. These were the prohibition years, but at Kinney's island resort alcohol was plentiful. Rum running was a known activity around the islands, and the old residents on Anacapa such as Frenchy, Charles Johnson, and Bay Webster were all said to have had a hand in it.

Mr. Visel who had made the lower bid of $25.50 per annum in 1919 asked that he be awarded the lease in the event Kinney's was ever revoked. Superintendent H.W. Rhodes of Lighthouse Service, 18th District, found his bid so absurdly low that he refused it. Rhodes, however, showed some sympathy
for the idea of a resort on Santa Barbara Island and recommended that no action be taken toward releasing the island until it was known what further legislation would be drawn up to extend the lease period by the Venice group. During the next three years, Rhodes received a steady flow of correspondence from parties who wished to purchase or use Santa Barbara Island on a long term lease for resort or fishing purposes, and one request to exploit it for oil. Although most looked upon it as a business venture, others, like the Venice Chamber of Commerce, seemed to feel it was time to open the island to all the people and not limit its use to sheep grazers. In 1927, the island was still without a leasee. In that year the DeQuer School of Human Engineering in Los Angeles asked to get a concession on the island for vacation cottages and a hotel for those who followed aquatic sports. Mr. Crawford Baxter, who wrote the letter, apparently did not know the island or of its lack of sandy beaches. The Lighthouse Commissioner informed him that:

....there is a very limited and poorly protected anchorage off the landing place on the lee side of the island which is partially protected from northwesterly winds, but the prevailing northwesterly swell usually makes this landing difficult throughout the greater part of the year.15

The Commissioner further advised that the Department was authorized to lease the island and would resort to the necessary advertising if Baxter wanted to submit a bid. Baxter evidently did not follow through, but public notices for bids were advertised in 1929. The Lighthouse Service reserved for itself two lighthouse sites and a right of way.

Arthur M. McLellan and Harry H. Cupit were granted a lease for five years on November 1, 1929, apparently to use the island for grazing. The lessees made several short visits to the island but never occupied it for any length of time nor did they ever place any equipment on the island or attempt to improve it. The only payment they made was the $75 covering their
first year's rental and submitted with their bid. Lighthouse Superintendent Rhodes in San Francisco recommended that their lease be cancelled February 6, 1932. Theirs was the last lease on the island, so that in 1937 when the Channel Islands National Monument was in the planning stage, no grazing leases were outstanding.

In the early 1920s when Superintendent Rhodes was writing to prospective resort and fishing developers, the Department of Commerce was corresponding with the Navy over use of the island for Naval target practice. In 1925 the Commander, Battle Divisions, Pacific Fleet, received permission to fire over the island to observe the effect of plunging gun fire over the island at invisible targets. Superintendent Rhodes was directed to work out the details which included sending the Battle Fleet to the island to make an inspection and "insure that there were no inhabitants or domestic animals on the island which might accidentally be injured". The Navy made the same arrangements for May, 1926. In 1931, the Commander of the Battle Force requested use of Santa Barbara Island as a target to experiment with the explosive effect of different kinds of projectiles. Since the island was under lease to McLelland and Cupit, authority for such use was denied. Further, Rhodes felt testing explosives on Santa Barbara Island was unwarranted since the Navy could use portions of San Miguel, San Nicolas and San Clemente Islands, two of which had already been transferred to them. The damage to the small area of level ground on Santa Barbara would be so great as to spoil the surface for other uses. He argued that the damage could also interfere with Lighthouse Service transport of accumulators and other equipment which was being done by hand carts operating from the landing to either end of the island. Rhodes recalled his visit to the Channel Islands in a sailing schooner in 1888, and from that day he had envisioned their natural resources developed for future generations. He saw the time coming when little public land would be left for recreational purposes. He argued in 1937 that the Department should adopt a policy to advise all applicants for leases that in the best interests of the Lighthouse Service the islands...
should not be leased. He knew that representatives from the Park Service had visited the island in the early 1930s, but they reported they were not prepared to take over the islands. Santa Barbara Island, in particular, Rhodes flet, should be withheld from private interests who might exploit it and saved for the day when it could be "developed into a most attractive national monument open to the general public".18

It is not within the scope of this historical survey to assess the impact of human habitation upon this island after 1848 and until the leases came to a close in 1932. Rabbits in the 1940s, and after brought such damage that no assessment is possible for the earlier period alone. however, sheep did graze on this island without natural water, the Hyders cleared large areas of coreopsis and mesembryanthemum and burned over nearly all the tillable portions of the island each year they farmed there.19 Feral cats eliminated large colonies of sea birds, especially xantus murrelets and cassin auklets which originally occupied the island. People gathered gull eggs, and abalone were exploited. When the Channel Islands National Monument was formed, the climate of opinion in the United States lent its support. Then war captured our attention and military use of all necessary outposts to the mainland came first.

9.6 COMMENTS AND RECOMMENDATIONS

The idea of living apart from society and farming ones own island is in many ways the epitome of the American Dream. Industry, ingenuity and survival at the frontier all combine to provide an image many visitors to Santa Barbara Island will want to recapture. Since the Hyders survived in their pastoral pursuits, if only for a few years, they left behind a legend people will want to know more about. Two delapidated shacks of the Hyders were extant in 1936. Photographic collections at the Santa Barbara Natural History Museum, at Monument Headquarters, and in private collections show the buildings. D.O. Hyder described the buildings and the various areas where the crops were grown and his mapping is provided here. The Hyder
stories would provide an interesting talk for visitors to the island, and
the map could be reproduced for visitors to follow as they pass along the
trails.

Don Meadows has a splendid memory of the islands in the 1930s. He has
accurate field notes, photographs and records of his interviews with people
who lived on the islands. Should an archive be established for historical
documents pertaining to the islands, he should be contacted.

Structural historical resources at Santa Barbara Island are at a
minimum thanks, in part, to the clause in every lease and military permit
which required removal of buildings and equipment. At the southwest of the
island are remnants of the light tower and of the observation tower on Signal
Peak. Ron Morgan, who spent several months on the island, saw what appeared
to be a buried metal tank on the northwesterly point on the island. The
Navy cement camera pads with upright threaded bolts are in excellent condition.
East of Cat Canyon Morgan saw the remains of a fence with 3 to 4 stakes upright.
There is a large denuded area on the slope near this. Southeast of Webster's
Point is a catch basin and concrete trough with lead-in pipe dating from
the Hyder occupancy. East of this is a concrete wall six inches high which
may have been another trough or a foundation for a cabin. Lumber and some
wire is strewn on the ground. The fence is three feet high and suitable
for a sheep pen. It may have been a corral with a watering trough on one
end. The fence goes all the way up to Saddle Point. At Webster Point,
Morgan found a collapsed Coast Survey marker eight feet in length. On the
saddle is a triangulation marker. These are visible on Arch, Signal, Saddle
and Webster Points. All have metal markers except the one on Webster Point.
A plow was reportedly on the island some years back; and if found, could be
used in an exhibit. Plow furrows are still visible on the west slope as
one stands at an altitude on North Peak. The track bed on the incline leading
from the westside landing to the site of the quonset hut is visible, but the
track and winch are gone.
The only standing structures on Santa Barbara Island in addition to the Navy quonset hut now converted for Park Service use, are the stairway and landing and the light tower located on Arch Point at the northeast point of the island. The white wooden tower, comprised of a conical house and accumulator stand, is in need of immediate attention. The paint is badly peeled, the door jammed, and the lock in disrepair. None of the above embody significant or unique historical elements.
Footnotes

1. "Index of Transactions Affecting Interest in or Use of Coast Guard Property", July 28, 1966, 11th C.G., L&P; Ralph N. Philbrick, "The Plants of Santa Barbara Island, California", Madrono. XXI, 5 (1972). This excellent article is used here as a source for geographic, human use, and other data.

2. Letter, John Wilson, Commissioner, General Land Office to Thornton A. Jenkins, Secty. Light House Board, Dept. of Treasury, Nov. 11, 1853, 11th CG, L&P.


5. "Our Summer Isles", October, 1897, pp. 192-197; Interview, Don Meadows, Santa Ana, 2-21-78.

6. Memo to Lighthouse Board, February 11, 1903, in 11th CG, L&P.

7. Memo, W.W. Trott, Dept. of Commerce to Commissioner of Lighthouses, July 30, 1912, Lighthouses, File 1614, RG 26, NA. Lighthouse papers given to the National Archives come from Treasury, Commerce and Coast Guard. All have been brought together in Record Group 26, Coast Guard Archives. Under an act of Congress, March 3, 1879 (20 Stat., 383) the Secretary of Commerce was given authority to lease unoccupied lands for a period not to exceed five years.

8. Ibid, File 1614, 1911.

9. Contract is in File 1614.


Footnotes (cont.)


13. Letter, John E. Claus to Wm. C. Redfield, Dept. of Commerce, August 9, 1919, File 1614, 1920, RG 26, NA.


10.1 THE SETTING

Anacapa Island is six miles long and its segments are the peaks of the easterly extension of a submarine ridge which is composed of Miocene Conejo Volcanics and interbedded San Onofre Volcanics. It lies thirteen miles from Port Hueneme on the California coast. Anacapa Passage is a deep channel of up to 31 fathoms and separates Anacapa proper by five miles from Santa Cruz Island. The island is actually composed of three segments--East, Middle and West Anacapa--which has caused it to be called the "Anacapas" in some of our literature. Each isle is unique; however, they have in common precipitous cliffs which drop off directly into the sea, especially on the south or seaward side where erosion was strongest. East Anacapa was described by the sportsman, Charles Holder, in 1910 when he landed there as a:

.... great tilted mesa reaching out into the sea. A piece had been cut out of it, and the isolated portion formed a vast sea arch through which a large yacht doubtless could sail....

The island, like many others, rises out of deep water and is surrounded by a forest of kelp or nereocystis, which affords a refuge for myriads of fishes. The coast is a maze of strange caves eaten into the rock. One of vast size is supposed to have been used by the pirates of old, and until late years by seals and sea-lions. Many of the caves are beneath or just at the surface, and are constantly hissing and growling like living things, and spouting water in great white flocculent masses with the miraculous force of compressed air.\(^1\)

Both East and Middle Anacapa have some fairly level areas at their tops, but West Anacapa differs in that it is wider and rises to an altitude
of 930 feet. The former two reach only to 125 to 250 feet. The East islet is 106.16 acres, the Middle 174.92 acres, and the West 449.18 acres totaling 703.26 acres.²

10.2 NINETEENTH CENTURY HISTORY

The Mexican Government did not grant any part of Anacapa to private individuals during its administration of the island and thus the whole became part of the public domain of the United States in 1848. Franklin Pierce issued an Executive Order on September 11, 1854, reserving the entire group of three islets composing Anacapa for lighthouse purposes. A second Executive Order on January 26, 1867, issued by Andrew Johnson, reserved 20 acres each of certain lands on the West Coast for lighthouse purposes, including Anacapa Island, or a portion thereof. Various opinions were put forth; yet in practice, the entire island remained reserved for lighthouse purposes since the 1867 Order did not specify that any part of the reservation declared by the 1854 Order had been relinquished. Thus, in effect, the first reservation governed all matters of title and use of the island, and this was confirmed in a Department of the Interior opinion letter of July 16, 1901.³ Still, occasional maps to the contrary were drawn—such as the 1873 General Land Office map which showed only the ends of Anacapa but the whole of Santa Barbara Island in red and described the red areas reserved.⁴

The earliest description of Anacapa by an American encountered in this research was an unsigned document among the U.S. Coast Survey logbooks dated September, 1853, and included in the Appendix #3. The writer recommended a landing on the north side of Middle Anacapa as the most practical to use in climbing up to the top. He described the remains of an old house there; it is safe to presume that another house or even two have been constructed in the same general area over the past 100 years since the spot is one of the few places one can land and ascend today. Up a trail from the rocky landing is a cement cistern at the edge of a grove of exotic Eucalyptus...
trees and a flat place which appears to have been a building site. The old log entry was probably made by either Captain Ord or Assistant Greenwell who traveled among the islands on the Frolic that year and is in the Appendix. 5

There is very little information about the island in the 19th century. Since it had no dependable water supply and only water seepage in a cave on West Anacapa could be counted on. Indian occupation seems to have been seasonal or infrequent. The Spanish did not find them occupied; although Glassow does not rule out the possibility of earlier aborigines living there on a year round basis. 6

10.3 GRASSING LEASES

The earliest lease appearing in the lighthouse files is that awarded to Louis le Mesanger by the Department of Treasury for $25 a year beginning April 1, 1902. Fire destroyed records of the 18th District Lighthouse Service in 1906 at the time of the great earthquake and fire in San Francisco, so only the Lighthouse Bureau Records are extant. The Department of Commerce and Labor leased the island to H. Bay Webster of Ventura on April 1, 1907, for $31 a year. The lease read "All the Island of Anacapa....consisting of three islets....and known as the Anacapa Light Reservation,...for grazing and farming only". He could place on it no permanent buildings, and the lease noted that an old cistern had been left by sheepherders. 7

Charles Holder, who visited the islands at about this time, called it a sheep ranch and reported that several hundred animals found sustenance there even in the summer. A herder volunteered that although there was no water, there was an abundance of fog. The moisture from this was soaked up by the sheep's coats and in the morning they licked each other to obtain water. In the spring, Indians and Mexicans were hired by the sheep owners to go to the island and shear the sheep. 8
H. Bay Webster was awarded the lease again on April 1, 1912, but only for Middle and West Anacapa since a light had been installed on East Anacapa. He bid $381 a year, just 75 cents over his nearest contestant, Ira K. Eaton. He was reportedly keeping several hundred sheep there in 1917. During this period, Mr. E.G. Ruggles of the Lima Bean Growers Association of Oxnard, California, wanted to lease East Anacapa Island in order to extract guano deposits from rocks off the eastern end. Since this was near the site of the unwatched Island Light, his request was denied.

A year before his lease expired, Webster tried to obtain a longer lease so that he could feel justified in making extensive improvements. Having been informed of the limits of authority over the length of the lease held by the Department of Commerce, he wanted to have a bill introduced before Congress to make the term of the lease twenty-five years. This came to nought and in 1917, after the usual advertising, he bid $381 again but lost to Ira K. Eaton of Santa Barbara who bid $607.50. Eaton was awarded the lease a second time in 1922 for $676 per annum. At this time, Superintendent Rhodes expressed doubt about leasing the island again, and indeed no lease for the period 1927 to 1932 appears in the archives. 11

A public notice, "Sale of Rock at Anacapa Island Lighthouse Reservation, California" was issued by Superintendent Rhodes on November 26, 1926. It asked for sealed bids on the sale of approximately 160,000 tons of rock to be taken from the reservation. Middle and Western Anacapa, it recited, were leased for grazing and farming and those industries should not be interfered with. "The point or points at which the rock is quarried must be approved by the Government and the lessee of the reservation". 12 All buildings and equipment had to be removed within 60 days after the expiration of the period of two years allowed for the removal of the rock. The only bid received was for $10, and Rhodes advised not to take it for rock which was presumed to be worth up to $10,000.

C. Fay Chaffee leased Anacapa, the Middle and Western Islands, April 1, 1932, for $760 a year. Like previous lessees he could use it only for grazing
and farm purposes. He could erect no permanent buildings on the land or in the water in front, and all structures he did construct had to be removed within two months from the date of the expiration of his lease. Chaffee's lease is one of the few complete leases in the archives and is included in the Appendix. The clause regarding removal of structures was probably common to all of them and would help explain why so little remains in the way of human habitation for historians to see. Even the fallen fences were left in violation of the leases.

Neither was the lessee permitted to do any excavation or to cut trees. Chaffee's lease had the usual clause preventing him from sub-leasing. Nevertheless, on June 8 of the same year he entered into contract with J.M. Johnson of the Redlands Investment Company according to which he gave

...the exclusive right and privilege of the free and unrestricted use of the said leased Island for the purpose of the propagation, for the entire period of the said lease, of any and all game birds and the selling of the same and of the granting of the privilege to any and all individuals of the right to hunt for and to kill such game birds on such terms and under such conditions as the second party shall impose, subject to the approval of the Lighthouse Division of the United States Government....It is agreed that....the second party agrees to not in any way compete with or conflict with the fishing business enterprises of the first party [Chaffee].

Johnson's American Game Bird Company intended to stock the island with game birds and to conduct an extensive reforestation program planting such trees and plants as once grew there before their destruction by grazing. Chaffee's enterprise, it appeared, was to be that of conducting fishing parties over to the island, and both would share the costs of a suitable boat landing. The agreement, although claiming not to be a sub-lease, was rejected. In July, Johnson made formal application to buy Middle and West Anacapa, bidding $2000; the property, however, was not for sale.
10.4 ISLAND OCCUPANCY

Chaffee's lease expired on April 1, 1937, and Rhodes wrote to him in June requesting that he remove his buildings and other property from the island if he had not already done so. The lighthouse keeper at Anacapa Island had notice to inspect the property and report upon the removal. C.R. Coursey, Keeper, replied in July that Mr. Chaffee had run no livestock on the island during the term of his lease but that he had erected buildings. One was occupied by two radio operators from Coast and Geodetic Survey boat Pioneer, who expected to be there all summer. A second was occupied by one Charles Johnson, erstwhile "Mayor" of Anacapa Island, who had lived on the island for about five years. Mr. Johnson asked Coursey to solicit Rhodes for a permit allowing him to remain on the island. In return, he offered to be an unofficial caretaker of buildings and to discourage wild parties on the island. Coast and Geodetic Survey backed up their request with a letter asking that they be allowed to use the existing eighteen by twelve foot building and a shack five by eight which they had put up. They promised to remove them both when they left unless instructed otherwise.

Since Lighthouse policy was to keep the landscape free of shacks, equipment, and human debris brought on the island by lessees, it is presumed they selected removal. Rhodes made the usual request to lease the island again in 1937 for a five-year period, but the Commissioner of Lighthouses advised against it, giving as cause the Act of August 27, 1935, 49 Stat. 885 (Public No. 351). That statute dealt with disposal of unused property by government agencies. Rhodes was instructed to file a form reporting on the surplus area of Anacapa; and as the matter progressed, we know that the property was declared excess and in 1938 fell under the administration of the National Park Service. Most sheep were then removed from the island when the ranching period came to an end, but in the 1960s a few were said to serve as mascots to the Park personnel.
Ranching was not the only commercial activity on Anacapa prior to 1938 as even from the earliest recorded times we read of a fishermen's or lobsterman's hut. An egg-picker's cabin sketched for an article in Harpers Magazine, 1898, with an arch shaped rock in the background may have been on Anacapa. The article informs us of the eggs of several island birds, such as the cormorant, which were considered useless for human consumption but describes the gull egg as palatable. It claims that it became known in the 1850s that the Channel Islands were repositories of edible eggs. At the same time, San Francisco suffered a shortage of eggs but had plenty of gold. Many people came to the islands to gather eggs, quarreled over sites, and competed with birds who at times raided each others' nests.  

Best known to National Park personnel of those occupants who resided on Anacapa was Raymond Le Dreau, an emigrant from Bretagny, who arrived in the 1930s prior to the establishment of the National Monument. He built several huts and provided boat services to visiting fishermen and lobstermen on the northeast end of West Anacapa at the site of a tiny beach, but the best natural landing on that side of the island. The cave, which provides seepage water, is two-tenths of a mile west of the cove. Historian Holland wrote:

Raymond Le Dreau... built a small shack on West Anacapa above the cove and here he eked out a hermit's existence. Living principally on fish, he, according to some accounts, also served as watchman over cache's of liquor temporarily stashed in certain caves on the island during prohibition. He dwelled on the island until sometime in the 1950s when a broken limb forced his evacuation to the mainland. Still remaining, however, is the designation "Frenchy's Cove", a title honoring the Park Service's only representative, even though unofficial, for over a decade.
In 1939 when Victor Cahalane, Acting Chief, Wildlife Division visited Anacapa, he reported that Le Dreau exhibited an accurate knowledge of and interest in the pelicans and other wildlife, and suggested that he be given some sort of minor custodianship and authorization to warn away would-be egg collectors. In 1941 Le Dreau was receiving copies of Superintendent Scoyen's letters and called an informal caretaker. Park personnel established camp with him when they visited the island, stayed in his cabins, and used his row boat and outboard motor. Frenchy reported on vandals and reported on happenings at the island during the early years of the National Monument. The only other inhabitant on the island in August, 1939, was a lobster fisherman named Cal Vallin who was said to have lived there for many years. For years Frenchy's cabins appeared in photographs of the cove area, but today none of them remain.

10.5 COMMENTS AND RECOMMENDATIONS

According to research biologist James K. Baker, who visited the Channel Islands in 1967, in contrast to Santa Barbara, Santa Cruz or Santa Rosa, Anacapa Island had made a remarkable recovery from the grazing period. Recent visits by this historian confirmed the observation even though from the air and before the rains the island looked dead and brown. Rain brought forth a luxuriant green mantle.

Historical remains of things that tell us about the past are few. Ron Morgan spent a month on West Anacapa recently and reported the following:

On West Anacapa there is a fence on the west end that was once part of a sheep landing facility. There is also a seismograph station, white plastic markers for aerial survey, and on the summit of Camel Peak a Coast and Geodetic Survey triangulation marker consisting of a small wooden tripod four feet tall and an eight foot tower with cross beams all presumed to be part of the survey indicators. On the knoll overlooking Frenchy's Cove is an eight foot tower. On the north side on an alluvial fan below the summit is another eight foot tower, standing.
The drift fence is still in the saddle between the summit and Camel Peak. On Middle Anacapa are the remains of an old fence, survey markers of the 1890s and a cement cistern. Little or nothing is known about the things listed above. They all fit into the larger historical picture of ranching and early Coast Survey, but none in themselves embody the historical integrity that would place them on a register of historic places.

Since the property was government owned, it was not taxed and ranch values do not show on Ventura County Assessment Records. An historical monograph on the ranching period would be speculative in nature at best. One could conceivably search for market data, make some educated guesses at the number of sheep on Anacapa, take into consideration rainfall and other factors and thus draw some conclusions. The ranching period left behind no significant historical structures.
Footnotes


2. Computed by F.D. Farnell from Coast and Geodetic map file T-55, 11th CG, L&P.

3. "Index of Transactions Affecting Interest in or Use of Coast Guard Property", June 28, 1966, 11th CG, L&P; Letter B. Herman, General Land Office to Secty. of the Interior, File 757E, 1911, RG 26, NA.

4. Willis Drummond, General Land Office to George H. Elliot, Lighthouse Board, Jan. 7, 1873, File 757E, 1911, RG 26, NA.


7. The leases are held in File California 3, RG 26, NA.

8. Holder, *op. cit.*., p. 188.


12. File 757E, 1926, RG 26, NA.

13. "Agreement, American Game Bird Company", 575E, RG 26, NA. The Johnson correspondence is in File 757E and in the Anacapa File, 11th CG, L&P.


Footnotes (cont.)


SECTION 11

SAN MIGUEL ISLAND: TITLE, LEASES AND RANCHING

11.1 THE SETTING

San Miguel Island lies 26 miles off Point Conception at one of the foggiest points off the California coast. Northwesterly winds coming off the point make for a rough sea and man's designation of the area as the graveyard of ships. The onslaught of the winds has turned the westerly end of the island into a giant sand dune with sand rivers blowing into the sea. A horse drawn sled, in fact, was for years employed as the most practical means of transportation in climbing with goods and baggage from Cuyler Harbor on the northwest side of the island. If we include Prince Island which lies at the entrance of the harbor, the island has fourteen thousand acres of land and is approximately four miles wide and eight miles long. Travelers in the 19th century who approached the island without proper warning complained that for days it was impossible to land at Cuyler Harbor due to the heavy swells caused by winds from the northwest; yet Cabrillo wintered at San Miguel thankful to have found a refuge from the seas pounding on the mainland just north of it. There are several springs on the island, enough to sustain life the year round.

11.2 NINETEENTH CENTURY OCCUPANCY

In spite of the island's potential for supporting life and archaeological evidence that aborigines lived there in good numbers, no Mexican applied for a land grant, and the island passed from the hands of the Mexican government to that of the United States as public domain in 1848. Squatters used the island even during the Mexican period. We do not know when sheep first came to the island and our only source of information regarding mid-century grazing is the narrative dictated by George Nidever, the mountainman and trapper, at 76 years of age. Nidever said he met
Captain Alden of U.S. Coast Survey and worked for him as a pilot on the Quickstep for about two weeks in 1850. Then Nidever recalled his sheep ranch on San Miguel:

Soon after buying my schooner in San Francisco, I bought out the interest of a man by the name of Bruce who had sheep on the San Miguel Island. In Feby. following, I took 45 head of sheep but was obliged to buy some to make up the number, for which I paid $10 apiece. I kept this Island about 17 years. From my original stock 45 sheep, 17 cattle, 2 hogs and 7 horses, I had in 1862, 6000 sheep, 200 cattle, 100 hogs and 32 horses. In the drought of 1863-4 I lost 5000 sheep, 180 cattle, a few hogs, and 30 horses. In 1865-6, Mr. Chaffee of Buenaventura offered me $10,000 for the Island, but finding that there was no purchaser to be found who would pay him in advance of from $2000 to $3000 on this sum he backed out. I afterward in 1870 sold it to the Mills Brothers for $10,000. I had no desire to dispose of the Island, but my sons persuaded me to do so as they had become tired of living there. I have not been to the Island for several years, but I am told that [it] is almost covered with sand.¹

Nidever's 89-page autobiography said only this of the seventeen years he ran sheep on San Miguel and called it his own. The adobe ruins of the house he is said to have occupied are in an arroyo up from Cuyler Harbor and were referred to by subsequent island residents as the old adobe. Nidever was primarily a hunter, and with his friend Carl Dittmann whom Nidever always referred to as Charley Brown, he hunted the otter. Nidever also hunted for sea gull eggs during the San Francisco egg boom of the fifties. He took his schooner over to San Nicolas for this purpose in April of 1852 and discovered the footprints of an old Indian woman who had been left on the island when the rest of the Indians were removed. In July of 1853 he returned there with Dittmann (Charley Brown) and they rescued the woman. Nidever
ROUTH MEASUREMENTS TAKEN OF THE NIDEVER ADOBE
SAN MIGUEL ISLAND, CALIFORNIA
AUGUST 26, 1963
by Charles E. Rozaire

The adobe ruin is about 300 yards west of the water well with the windmill on main path to Ranch House. Follow the double row of fence posts up hill to west of wind mill.
took the lost woman of San Nicholas to his Santa Barbara home where his wife cared for her until she died. From the above we learn that Nidever lived at least part of the time on San Miguel Island until 1870. Unfortunately, his personal narrative tells us nothing about his later life, and to this researcher's knowledge no other sources exist. We may assume that he lived for the rest of his years in Santa Barbara since he was there when interviewed by one of Hubert H. Bancroft's students in 1878. He died in 1883 at the age of 81. Carl Dittmann also narrated his life story for the Bancroft Library. He makes brief mention of Nidever's having stocked San Miguel Island and of his going there for the winter work while he, Dittmann, went to Santa Barbara. Nidever was a representative frontier type, and the adobe ruins of his home on San Miguel should be investigated, marked, and preserved. Draft nomination forms to the National Register of Historic Places accompany this report.

Nineteenth century history of San Miguel is still incomplete. Duflot de Mofras traveled along the coast prior to 1844 and reported that Boston ships frequently came to the islands to salt down their hides. Best, he wrote, was Catalina but also the northwest side of San Miguel. T.J. Farnham sailing along its coast in 1839-1840 called it barren and dry, marked here and there by a fire, and yet with fruitful spots and streams of water. Stehman Forney led a U.S. Coast Survey team onto the island in April, 1871, and wrote:

The summer seems unprecedented with gales of wind and fog. Out of 204 days from April 12 to October 31st 153/2 [sic] I was unable to make any progress from the constant strong gales day and night from the N.W. so violent that my tents could scarcely be secured, making it hopeless to attempt any field work.... San Miguel Island is entirely destitute of wood, not a tree upon it, there are several brackish streams and springs on it, but not fit for drinking or cooking purposes.... The island is covered with coarse grasses and capable of sustaining 4000 sheep.... [It is] destitute of wood or underbrush of any kind.
William Dall, also with Coast Survey, worked on San Miguel in 1873 and 1874. He collected some artifacts, wrote enthusiastically of his archaeological finds, and cited overgrazing and the lack of trees. A botanist, E.L. Greene, sailed to San Miguel in 1886 on a small sloop carrying a cargo of fence boards. One thing we do know, and that is that sheep grazed the island continuously from the time of Nidever.

11.3 CAPTAIN WILLIAM G. WATERS

In 1887 Captain William G. Waters bought a half interest in the island and the stock that were on it for $10,000 from "Mr. Mills", and thus for about six months Waters and Mills were partners. The ranch had 4,000 sheep, 30 head of cows and horses, some pigs, turkeys, chickens, one dog and two cats. The Waters and their adopted daughter lived on San Miguel from January to June, 1888, and Mrs. Waters' diary describes the island as a productive farm. For example, in January, 1888, the men commenced to plant 47 acres in barley. Later she wrote that all was planted but twenty-five acres. From these figures, we do not know how much was planted, but it appears to have been extensive. They grew their own vegetables, built a grape arbor, and churned butter. Dairy products and eggs and pigs to butcher were abundant although they did depend upon the supply boat for flour and fruit. In the winter during which she wrote, rain was plentiful, filling the rain barrels and evidently bringing forth good crops all around, as she wrote of following her husband to the grain fields in the spring and of the two of them cutting and stacking the hay. One day they went down to the old adobe house (Nidever adobe) and got boards.

When the Waters sat down to dinner, the household included Edith, age fifteen; a young male farmhand, Jimme; a woman helper, Ada; and the Waters. After dinner they played games such as Eucher, she sang, and they talked and read till their bedtime about nine. William Waters was hard at work early in the day building fences, harrowing the fields, and blasting out rocks to make a road. Mrs. Waters was frequently ill and many days stayed
United States Marshall Nicholas Covarrubias in July, 1896. Waters met the Marshall on the beach, protested their entry, but did not resist the order. He did, however, file a protest which was placed on file at the Surveyor General's Office in Washington. The following year, Waters, along with several Los Angeles men, formed the San Miguel Island Company and filed to incorporate with a capital stock of $50,000. Then, two rather misleading deeds were filed in the Santa Barbara County Recorder's office. On March 9, 1897, the Morning Press reported the following:

The first conveys from William G. Waters to Jeremih Francis Conway an undivided one-third interest in the island of San Miguel and all property thereon. The second conveys from said William G. Waters and J.F. Conroy to the San Miguel Island Company the whole of San Miguel Island, together with all the property now upon the island, which is enumerated as follows: Three thousand sheep and lambs, eighteen horses and mules, one otter boat, three skiffs, two small boats, one farm wagon, one cart, three plows, one harrow, five saddles and bridles, one set of double harness, blacksmith and other tools, household furniture and utensils, various buildings, sheds, etc.

On November 18, 1908, a clipping from the San Francisco Call, date-line Santa Barbara, related that title to the whole of San Miguel Island was at stake in a suit coming up the following day in Los Angeles. The case, it read, had been pending for four years. The island, it claimed, was transferred from Elias Beckman to W.G. Waters in 1892. Beckman now argued that the transfer was made only by a deed of trust, so he took the matter to court and sued so as to prevent a transfer of the land to the San Miguel Island Company. Waters and the Company argued that it was a complete transfer. In the last line the article included the information that the state also had a claim on the property. The outcome of the case is not known to us; however, subsequent correspondence demonstrates that the U.S. Government exercised its rights of ownership. The General Land Office was called upon for guidance, and in its correspondence it mentioned no leases and recited that the island was not
covered by any land claim. On February 9, 1911, Waters wrote to President Taft asking that he revoke the Executive Order he had issued in 1909 reserving the island for lighthouse purposes and instead allow him to stay on the island. He argued that he had come to California in 1877, bought an interest in San Miguel in 1887, and lived there ever since. He had made many improvements and had been a volunteer weather observer; and, since he was an old soldier having served at the front in the Civil War, it would be an undue hardship at his age to remove his buildings and leave. He had been informed that a lighthouse would be built on this island which he said was only good for sheep. A lighthouse, if any, he wrote, should be constructed on Richardson's Rock seven miles west of San Miguel. He then referred to his bout with the Survey team which had tried to land on the island during President Cleveland's administration. Then he argued anew that he had consulted his attorney and had been advised that no mention was made of the island in the treaty between Spain and Mexico.

A second letter from Waters in June described his improvements, and an excerpt of this is included in the Appendix. A formal brief supplied by attorneys for the Department of Commerce found Water's claim without any foundation whatever. Still, it pointed out, the Department was not under legal obligation to lease the island to the highest bidder or to solicit competitive bids, and a satisfactory disposition of the matter might be to issue Waters a revocable license to use the island for five years. On the other hand, the Department could dispossess Waters and lease the island to another party. Over the protests of other would-be lessees, Waters was awarded a five-year lease on November 1, 1911, at $5 a year. In signing the lease, Waters acknowledged ownership by the U.S. Government. In 1912 Lighthouse personnel came to inspect the water supply and to judge whether its rate of flow could furnish power for a future lighthouse. Waters took them around the island, graciously showing them springs, although the herders could not catch donkeys for them to use as transportation.

The fact that the island was overgrazed was so well known that a rancher in Montana wrote the Department in 1913 asking that he be permitted to take off the sheep and not restock it for two years, but spend $500
annually in planting grasses and hardy trees. The National Association of Audubon Societies asked that the sheep be removed from several Channel Islands including San Miguel, and the islands be turned into a bird refuge. The Lighthouse Inspector reported that the idea would serve no good purpose but to the contrary an injury would be suffered by the ranchers and by the community at large which derived certain benefits from the grazing industry. The Association, he advised, could have Prince Island. 9

Waters' ranch house and shearing shed was somewhere on the west shore of Cuyler Harbor. Sand covered it in 1906. 10 For at least ten years Mr. and Mrs. John Russell had been resident managers. Russell is credited with building the new ranch house, shearing shed and ranch buildings out of salvaged wood from shipwrecks and cargos of lumber schooners that had come to grief on San Miguel Island. For example, the J.M. Coleman had gone aground in 1905 just inside Point Bennett; Russell hauled the redwood lumber it carried up from the ship to the ranch house site with Mexican burros. Flour in twill bags washed ashore so Russell piled the bags of flour on top of the lumber before hauling it up the hill. The wet sacks sealed the flour tight, and he used the flour for years. Russell built the house double-walled to withstand the winds that blow almost perpetually and reach velocities up to 100 miles an hour. The house was 120 feet long. Later another leaseholder, Robert Brooks, and Russell built a fence erected at an angle to the westerly wind to shield the house from wind and sand. As lumber drifted ashore from ships like the Comet and the J.F. West, the house was rebuilt, fences and outbuildings repaired. 11

Russell used tongue in groove hardwood for the interior finish of the house and designed the north side so that it could resist the northwest winds although portholes afforded a view of the mainland. Numerous photographs of the ranch house are at the Monument Headquarters and descriptions of it may be found in Lester's work and in the "Historic Structures Report, Part I, Old Ranch House San Miguel Island, California". 12 Although the house was destroyed by fire in 1967, a draft nomination has been prepared to place it on the National Register of Historic Places. Waters was a member of the
Johnathan Clubs of San Francisco and Los Angeles and of other community clubs; he traveled to his island, stayed a month at a time, and took a shearing team over each spring. In 1916, Water renewed his lease, but the following January 9, because his lease contained no clause which specifically prevented a sublease, he entered into contract with the partners, R.L. Brooks and J.R. Moore. For $30,000 they received his livestock, improvements, and his lease which was good till November 1921. Captain Waters died following a stroke on April 26, 1917. Waters death brought to light the unfortunate relationship which had developed between father and daughter after the mother's death. In his will he left her but one dollar of his sizable estate, and Edith, the daughter, asked that the will be set aside. The Trials which followed brought up questions about money Edith's mother had supplied in starting operations at San Miguel. According to Mrs. Waters' diary, she had supplied the money. Captain Waters' brother had later been a financial partner in the sheep business. The four years Edith had spent on the island following her mother's death were miserable for her, and she described herself as a prisoner in a crude house built partially from railroad ties and on an island swept by perpetual gales. According to Edith, she finally fled on the boat of a man who gathered guano on the island and sold it on the mainland. Edith's life story does not interest us here; however, her account of hard work on the island and description of the house and of a bunk house for the ranch hands adds something to what we know of San Miguel in the early 1890s.13

11.4 ROBERT L. BROOKS

The Lighthouse Bureau objected to the Waters-Brooks-Moore contract and threatened to advertise for bids, but Brooks argued that he was spending money on the island so they let him keep it, but at $200 a year. In 1918 the ranch sheared 2,391 sheep. Both Brooks and Moore had served in the Army during World War I, and in their absence arranged for the Vail Brothers of Los Angeles to take over their stock. Moore was in Camp Zachary Taylor and Brooks overseas for 21 months, but upon discharge they turned their attention to the island.14 Holding that maximum production and island regeneration could only be accomplished with a long-term lease, they had a Bill drawn up
to place before Congress which would assign the Brooks and Moore partnership a twenty-five year lease at $400 a year. In return, they would invest $10,000 in improvements outlined in the Bill. Brooks argued that it set no precedent since the Howland Brothers already had such a lease on San Clemente Island. He claimed he had purchased 1700 sheep from Waters before his death, all Spanish Merino type, since mainland sheep would not live on the island. He described measures to control the 5,000 acre sand pit which ran across the island and the methods they would employ to replant grasses and save up to 2,000 acres. Under the five-year lease, they were required to remove all buildings and even the four miles of fencing they owned upon termination of the lease. The Bill would allow them to retain these and add a windmill, reservoirs, and a dock. The $400 per annum rental translated into heads of sheep would mean an annual cost of $.20 per sheep, more than average pay for public grazing land on the mainland. Brooks' progressive policy was turned down by Superintendent Rhodes who was asked to endorse the Bill. Rhodes claimed grazing cost $.01 a day per head on the mainland, the rental was too low, but he did assign the lease to the two men without giving outsiders a chance to bid. Their attempt to obtain an extension having failed, Brooks and Moore requested a new five-year lease at $200 a year beginning April 1, 1920, and received it. The award of the lease bothered other ranchers who wanted the island, and seven letters of protest came into the Bureau. John Russell continued to manage the ranch.

Robert L. Brooks was a mainland rancher and probably knew grazing costs as well as anyone. He was a handsome and colorful man who had first come to California as a result of an enforced year away from his studies at Yale University. During Easter vacation, 1911, he and some classmates had stolen a sailboat, gone down the river from New Haven, docked, had a good many beers, and decided they would never make it back in time for classes. One of the boys wired his Professor a flippant message to the effect that he should not hold up the class for his return, and all of the vacationers were dismissed for a year. During this year, Brooks came out to work on the ranch of an
older brother, Philip, in the Imperial Valley. While he was there he somehow heard of San Miguel Island and the system of leases, so after he finished at Yale he obtained the lease. In 1918 Brooks returned from service in World War I, had an office in the Van Nuys Building in Los Angeles, and began to invest in rural real estate and crops such as sugar beets and lima beans. Although he had had an inheritance which could have helped him get a start, this money was placed in the trust of another person during the war and was lost. Brooks seemed like the kind of man whose optimism and general good sense could take him anywhere he wanted to go. He probably borrowed money to get started, but before long he married and lived on Camden Drive in Beverly Hills. He did not spend any significant amount of time indoors and instead worked around Oxnard and in Ventura County. He bought a ranch in Camarillo in 1931, went into other deals with partners, and gradually developed two ranches on the mainland. In 1942, he brought his family to Hilltop Ranch in Carpenteria, and Mrs. Brooks still occupies the home today.

Brooks thrived on work, hard outdoor work where he rubbed elbows with the ranch hands. At the end of the day he loved to drink and talk and spin tales with them, and he kept pictures of himself and these friends. San Miguel Island contributed perhaps half of his annual income, but the island was far more important than income to Brooks. It supplied the romance he needed, a place to talk about, and a place to go with his workers at shearing time and work. Shearing time was a huge event, and the whole family got up in the middle of the night to see him off. His shearing hands consisted of several professional shearers and unskilled workers, the latter he referred to as "the bums of Santa Barbara". He cleared the County Jail of convicts each year and claimed the city fathers loved him for it. Then he took them out on Joe Castagnola's boat or Vail's Rio Grande, a tug, and dragged along a barge. The ranch had well constructed shearing pens, a wool house, and a blacksmith shop. But each year the old wharf had to be torn out and replaced because the waves damaged it badly. New chutes had to be built to bring the sheep down to the wharf where they were loaded on to the barge, 55 at a time, and taken to Port Hueneme, unloaded and transferred.
to Brooks' ranch at Camarillo. Sheep grazing on San Miguel went well. There were no predators on the island, lambing was considered 100%, and the tax records at Santa Barbara County indicate that none of the unsecured property on San Miguel was ever taxed. Only in 1923 did San Miguel suffer a drought. Brooks took all the sheep to San Nicolas where he got permission from E.N. Vail to run them in 1923 and 1924.

In March, 1925, Robert Brooks, bidding alone, made the highest offer to the Lighthouse Service. It was $3,000 for a five-year period. Lewis Penwell bid next at $2,550. In 1927 Brooks tried to buy the island. His letter described its drawbacks: tons of sand blown by the prevailing westerly winds onto the north shore and a poisonous weed that killed the sheep. In August, 1928, the Secretary of the Interior extended his lease which would have expired in 1930 to March 31, 1935. Brooks sent Lighthouse Superintendent Rhodes a lamb now and then in these years for which Rhodes was most appreciative. Resident Manager Russell left San Miguel in the 1920s, another caretaker may have followed, but in 1929 Brooks needed long-term help. He called on a friend he had made in the Army and convalesced with at Walter Reed Hospital, Herbert Steever Lester. Lester, an educated and traveled man, suffered from shell shock during the war. Although he was in most ways recovered, he wanted to flee from the incessant demands of civilization, and he found ranching on San Miguel completely satisfying.

11.5 THE LESTER YEARS

Herbert Lester made it his goal to acquire the island lease for himself and came to an arrangement with Brooks through which he would draw a small salary but accumulate capital at the same time toward payment on the island holdings. The next year, 1930, he brought his bride, Elizabeth, to the island and their legendary lifestyle persisted until his death in 1942. Lester dubbed himself king of San Miguel and wore makeshift ensignias to carry out the role. Mrs. Lester has recorded these years in a charming little book,
the title of which is included in the bibliography. Her writing provides a vivid picture of isolation on the island with their two children, made liveable through attention to things civilized: building and repair; food preparation for themselves, guests and the shearsers; educating the girls; and entertaining the famous and the plain people who came because it was San Miguel Island and because the Lesters themselves attracted them. Scientists came too during the Lester years. Ralph Hoffman of Santa Barbara lost his life on San Miguel while collecting data. The Channel Islands Biological Study of the Los Angeles County Museum of Natural History was the first attempt to study the complete biota of the individual islands, and Don C. Meadows was field executive. In 1939, on the Fourth Expedition, the team came to San Miguel Island and interestingly called the approach from Cuyler Harbor to the highland "Nidever Canyon".

A ruling held that two people should always be on the island, never one alone. When Herbert Lester was once hospitalized for a month and when Elizabeth came to the mainland for her pregnancies, a young man named Johannes Barthol came to stay on the island with the lone Lester. Barthol too wrote about San Miguel in these years, and his description of the physical features of the island recall to us his long rides around the island and offer vivid detail of what he saw. George Fisk Hammond, an old friend of Robert Brooks, made more trips to San Miguel than any of the other visitors. He liked to fly and made his first landing on the island on July 22, 1934. Taking off from his family ranch, Bonnymede, along the beach in Santa Barbara, he was airborne at just about the point where the Biltmore Hotel meets Bonnymede, a condominium complex, today. He shortly began to make regular trips to San Miguel taking groceries, supplies, and just plain treats the Lesters had been doing without. Hammond and Herbie, whom he described as astonishingly likeable, laid out markers on an improvised landing field, and when the U.S. Coast Survey team came over in 1934, they offered to put it on the map. Hammond Field appeared on Aeronautical charts until 1965 when its disuse and poor conditions prompted the Navy to have it removed.
The press made much of the Lester years, and stories of the Island were often printed on the front page. On June 23, 1937, the Santa Barbara News-Press carried an article headlined, "Man's Life Saved by Island King". Los Angeles papers followed along with the headline, "Millionaire's Life Saved by Crude Surgery on Island". Robert Brooks was the man and he would have hated the latter headline, since he thought of millionaires as men in black suits who conducted their lives in plush surroundings. He knew life as a working man, was land poor, and liked to feel that his everyday contact with the hardest aspects of ranch life identified him. He had, in fact, gone to the Island for the annual shearing, and two weeks prior to the news story had been tearing out the landing from which the lambs were loaded for market, preparatory to erecting a new one for the year's shipment. He stood on a slippery rock as he worked, lost his footing, and fell. As he fell, a rusted bolt extending from one of the piles caught his thigh and tore into his flesh. The wound had to be sterilized and closed or Brooks could have bled to death. Lester had no medical training, but he had army experience and knew the thread he would use had to be strong. Using a curved needle and fishline cleansed in boiling water and lysol, he stitched the wound closed. There was no anesthetic to ease Brooks' pain, so he simply bore it. Then came the problem of getting Brooks off the island, and since there was no radio, they hoisted the flag upside down to attract a passing ship. None saw the signal. The Vacquero approached two weeks later, four days ahead of its regular schedule. Thanks to Lester's medical care, no infection developed, and when Brooks finally visited a mainland doctor, there was little additional treatment needed. In fact, Brooks told his family that the doctor refused to take any pay as Lester had completed all the treatment necessary.

11.6 MUTINY ON THE BOUNTY

In 1935 Producer Irving Thalberg put his talent to work on one of the greatest sea stories ever filmed: Mutiny On The Bounty. To film it, he planned several locations. A camera crew went to Tahiti twice for the crowd shots and scenic background. The major scenes were shot in Catalina, and
for rough seas he used the waters off San Miguel Island. He sent out an old 200 foot three master with the outside reworked to match the period and shot footage for a storm sequence; but the pitch and toss of the angry ocean was not convincing. Then someone suggested that they build a smaller model of the Bounty so that the contrast with the large waves would produce more drama. The result was the Baby Bounty, an 18 foot exact replica, just big enough to hold two men to steer it. It was towed to sea by the mother ship, and all the crew was sworn to secrecy so that the public would never know the difference. Finding heavy seas off San Miguel was no problem, and they began to shoot; but the rough seas soon separated Baby from the larger Bounty and the small ship could not even be found. Afraid to call the Coast Guard because it would get into the newspapers, Thalberg hired several private ships to comb the waters. Two nights later the Baby Bounty and its two occupants were rescued.

Thalberg was particularly alarmed by this event because he had already lost an assistant cameraman while they were shooting a scene on the barge. The barge was a good-sized affair with a replica of the aft end of the Bounty built on one end of it. By taking on ballast at the other end, they could cause the partial replica to tip up and down as if it were about to sink. The cameraman, Glen Strong, was working with his camera on a tripod when the barge was suddenly swamped by a wave which washed his equipment and some valuable footage overboard. In attempting to save the equipment, Strong was drowned. Mrs. Lester recalls some Tahitian scenes being shot on the island, but this was not part of the original production schedule. Using San Miguel's waters for the rough-water shots helped in the production of a memorable sea film and led to the award, Best Picture of the Year, 1935.

11.7 TRANSFER TO NAVY ADMINISTRATION

Franklin Roosevelt transferred the control and jurisdiction of San Miguel Island and Prince Island from the Secretary of Commerce to the Secretary of the Navy for naval purposes on November 7, 1934 (see Appendix 7). The Order reserved for use by Commerce sites to be selected for aids to
to navigation and for incidental facilities. The following year Brooks signed a lease with the Navy at $600 a year. The Navy, under pressure for the overgrazing on the island, placed a limit on the number of sheep to be grazed: in 1938, it was 1200, but it was later reduced to 1000.

On January 5, 1939, Newton B. Drury, Director, National Park Service, Washington, requested a study of San Miguel. The resultant report summarized the overgrazing in these words:

...The present number of sheep (1100) would undoubtedly represent a conservative stocking under normal conditions, nature now is forcing man to pay the penalty for gross malpractice committed many years ago. For this reason, 1100 sheep now are destructive of the remnant of the island's resources, although originally such a number might have been pastured there indefinitely with little or no harm.23

As a result of the report, recommendations to transfer the island to the National Park Service and stop the grazing were submitted in 1939, but no action was taken by the Washington NPS Office until November 5, 1941. On December 7 the Japanese bombed Pearl Harbor. Action finally came in response to a request for information by Regional Director, NPS, John C. Merriam. The Director, NPS, stated that San Miguel was considered worthy of monument status but that the Navy declared it already protected, and that secondly any transfer in status at that time was extremely doubtful, in fact foolish, even to discuss. In January, 1942, the NPS summarized the report recommendations of 1939 and sent them to the Navy Department. They included removal of all livestock, all cats, and a well thought out program of replanting; however, grazing continued for twenty-five more years. In 1942 the reign of Herbert Lester came to an end when he died and his family moved from the island.24
11.8 **FINAL RANCHING LEASE**

Brooks hired an old sailor (he sailed from Norway) and his wife, Ulmar and Rae Englund, to manage the sheep ranch after Lester's death. When they left, Al and Rosie (last name unknown) came to live and work at San Miguel. The last had an Army surplus jeep and were serviced by a twin-engine supply plane. Brooks arrived regularly with the sheering team. In 1947 he brought along several college boys, and in 1948 and 1950 Donald Butler, Brooks' son-in-law, went along to build the dock and help with the roundup.

In 1948 the Navy revoked its lease and told Brooks to take his sheep and other property off and leave so that they could place guided missile and bomb targets on San Miguel. He had 72 hours to accomplish this. Brooks hauled in camping supplies by plane and set up camp for a party of men who covered the island by foot or by horseback looking for sheep in the rugged barrancas. Sheep were driven down to the Cuyler Harbor dock and into the barge. Some furniture was moved out of the ranch house, but the time was too short. Brooks had to leave over 500 sheep and four horses behind. He later sued the government for his losses, but the good years had run out. His lawyer died before the suit went to court. Brooks was 58 when he was forced to evacuate the ranch. Soon after leaving San Miguel he went out to dig up a broken pipe line at Hilltop Ranch in Carpenteria and suffered a heart attack. He survived it, but was never the same. In June, 1950, he got permission to return and remove his stock. Every other day they had enough sheep collected to ship them off by barge. But again in the time allotted, every sheep could not be rounded up and they would graze the island unattended for another eighteen years.

11.9 **COMMENTS AND RECOMMENDATIONS**

Two structures of the ranching period on San Miguel Island deserve recognition: the Nidever Adobe and the Ranch House built by John Russell. The Adobe is in critical need of preservation. An arroyo has cut through the original structure, sand has blown over it for a century, and subsequent ranch
dwellers carried off lumber from it. Still, photographs of the 1940s
showed a wall of at least ten courses of brick above ground. Dr. Charles
Rozaire fortunately made a floor plan of the structure in August of 1963
and it is included here. Following this he wrote to National Park Historian
Lionel J. Bienvenu recommending careful excavation, search for a nearby
dump, and diversion of the stream channel. A field survey by this historian
in March, 1978, disclosed that only the stubs of two walls and four
protruding floor boards remain. The remnant of a third adobe wall on the
northwest stream bank recorded by Rozaire is either covered by mud or
has been eroded away. His suggestions should be followed.

George Nidever is the best example we have of an outstanding his-
torical type on any of the three subject islands. He was an Indian fighter,
hunter and trapper, and was in the first wave of Americans who poured into
California. The story of his life is the story of San Miguel in the nine-
teenth century, both from the viewpoint of trapping and of ranching, and
the adobe could be used by the Park Service to focus upon this.

The site and ruins of the 120 foot long Ranch House dating from 1900
and built by John Russell is the subject of a draft nomination for the
National Register of Historical Places (1972) as the San Miguel Island Ranch
House. At least two other ranch houses preceded it in addition to the Nidever
Adobe. The ruins of the two chimneys barely rise above ground level, founda-
tion lines are faint, and this resource has in fact been almost reduced to
the classification of a site. Its former physical appearance is documented
by many photographs, and in 1963 Dr. Charles Rozaire made drawings and
measurements of it. In 1965 Charles S. Pope, Supervisor Architect of Historic
Structures, advised that in the best interests of the general preservation
program, which was costly, that this building should be stabilized or pre-
served but not added to the Historic Structures Inventory as it had little
architectural value and would not be visited by historically minded people.
Superintendent Tucker at the Cabillo and Channel Islands National Monument
Headquarters agreed but had a photographic and structural record made by
historian Lionel Bienvenu, "Historic Structure Report, Part I". Bienvenu
recommended that the Ranch House should be allowed to stand until destroyed
by natural elements. It burned in 1967 and in 1972 photographs showed a single
stone chimney but not other part of the house. Ruined objects and features of the ranch complex have been continuously vandalized, objects brought to the site from other parts of the island, and the historical value of the features steadily diminished. The only research potential now lies in two chimney foundations, two cisterns, and the trash landfill spots. The Navy bulldozed an area near the Navy barracks at the Ranch House site for its trash during World War II. The site should be monitored for disturbance by visitors coming onto the island. In addition to the Historic Structures Report referred to above, Appendix No. 5 offers William G. Waters' description of the house and ranch complex in 1911. The subject house was used by island lessees William Waters and Robert Brooks to house their ranch managers: John Russell, Herbert Lester, Ulmar Englund, and the last ranch residents, Al and Rosie (last name not known). The house was vacated in 1948 when the Navy revoked the Brooks lease.

Today the ranch house site remains as a symbol of island ranch efforts and the lonely existence of people who lived removed from society at large. Participants in the era refer to the ranching period as the good years; however, the damage resulting from sheep grazing is documented by photographs and these leave an historical record of their own.

The long Brooks lease needs further research, and with the papers and bank receipts he kept there is a good possibility that the business side of sheep grazing for this period might come to light. This would require the consent of the Brooks family.

Mrs. Waters' diary is an astonishingly honest documentary of island life in the 1880s. It merits the attention of a trained historian who can place it in the larger picture of United States and women's history and publish a useful short book. It could be sold to Monument Headquarters visitors and thus provide a first hand account of Island ranch life in the late 19th century.
Footnotes


5. Mrs. Wm. G. Waters, Diary, 1888, R.S. Brooks Collection; The following is based on the Diary and on Stella Haverland Rouse, "The Waters Family of San Miguel", Noticias, XXIII, 3. (Fall, 1977), p. 45. Material above is from same source; Lighthouse Board Correspondence, 1901-1910, File 9358, passim, RG 26, NA.


8. Lighthouse File 252, 1911, RG 26, NA.


14. This material is drawn from Lighthouse correspondence, File 1614, RG 26, NA.

15. Interview, Robert Moore Brooks, March 1, 1978, Hilltop Ranch, Carpenteria. The following is drawn from the interview and from photographs and papers seen at the ranch and Interview, Cris de Alba, Ranch Foreman, 3-1-78.
Footnotes (cont.)

16. Search with Mr. Kapp, County Office.


18. Letter, Rhodes to Brooks, January 7, 1932, Brooks Papers; Lester, p. XVI.


20. Interview, George Hammond, January 12, 1978; Lester, XI, XII.


22. Lester, p. 62.


24. Lester lost two fingers in a wood chopping accident in early 1942 and was treated with sulpha drugs. These affected his sight and brought on a depressive state. Although a second doctor took him off the drug, the side effects persisted leading Lester to believe they were permanent. After he almost cut his hand while shearing on June 18, 1942, he took his life. Popular articles have attributed this act to lingering shell shock and to World War II activities planned for the island. These claims are unfounded. Interview, Mrs. Lester, January 12, 1978.

25. Letter, Donald Butler (Brooks' son-in-law) to Dr. Weinman, April 3, 1978.

12.1 ENEMY ATTACKS ON THE WEST COAST

Bombing of Pearl Harbor on December 7, 1941, was followed by enemy attacks on the shores of the Pacific frontier. The first incident in the southern California sector occurred December 24, 1941, when at 6:30 a.m. a torpedo was fired at the freighter Barbara Olson near Point Vicente. It missed and exploded after passing the ship. Close by, the crew of the S.S. Absaroka and shore observers had seen a Japanese submarine with a false fishing boat superstructure rise from the water and torpedo the 5,696 ton freighter Absaroka. One seaman was killed. The freighter was kept afloat by the lumber on board and was towed to port. Scores of people on shore saw the attack and observers said the submarine remained on surface for fifteen minutes after launching its two torpedoes. The next day at about 2:00 p.m., a slow moving submarine was seen finding position about 4000 yards off shore of the Redondo Beach Pier. A 75 mm gun was brought to the Pier and emplaced so that it could open fire but limited visibility made firing impossible.

On February 23, 1942, a Japanese submarine approached the California coast west of Santa Barbara and fired thirteen rounds at a range of 2500 yards at the Elwood Oil Field area. The surfaced submarine was sighted by civilians and police.¹

These submarines, anti-personnel bombs, and balloon attacks brought World War II to American soil and caused the Navy to establish a coastal lookout system immediately with stations on each of the three islands under study.

12.2 COASTAL LOOKOUT STATIONS

The Coastal Lookout Organization was established to provide a system of coastal surveillance over the coastline from Point Arguello to the Mexican
boundary by visual lookout; and to maintain communications with Joint Operations Surface Control Center, Headquarters, Eleventh Naval District, San Diego. The Section Base was located in San Pedro. It reported to the Shore Establishment, Local Defense Forces, 11th Naval District. The 11th Naval District worked with Joint Army and Navy Plans, Southern California Sector, and they in turn with the Army's Western Defense Command, the Fourth Air Force, and the Western Sea Frontier, the latter headquartered in San Francisco. The earliest reference to the San Miguel Station was on December 13, 1941, when the weather observer on the island was informed that effective that date a temporary radio call had been assigned: Naval Lookout Station, San Miguel Island - 292. However, by the end of December "Naval" was replaced with the word "Coastal" which was then used throughout the war. Coastal Lookout Stations (CLS) were manned by Coast Guard and Navy personnel. Each CLS had a staff of seven men on 24 hour duty once the organization was completed. ²

The Coastal Lookout Stations, Offshore Patrol, and Inshore Patrol which made up the Local Defense Force communicated through an operational battle circuit. Each Station was allotted one portable radio, a transmitter to be placed on a roof or tower, and one receiver. By December 30, 1941, the Inshore Patrol had twelve vessels and the Offshore Patrol three. Among the latter was the Hermes, which had long patrolled the islands and served as free transportation for island dwellers. During the war it was credited with sinking a submarine outside San Pedro Harbor.

The Anacapa Light was extinguished and some of the personnel detailed to the Coastal Lookout Station established there. During the war the Coast Guard moved from the Department of Treasury to the Department of the Navy. Anacapa was manned by Coast Guard personnel throughout the war. Watch was maintained in the watchroom of the tower. ³

In January, 1942, Coast Guard Inshore Patrol Boat 411 carried Commander H.O. Hill, Officer in Charge, Coastal Lookout Stations, on a tour of the
Channel Islands to reconnoiter and to plan development of the Stations. Of the several islands he visited, San Nicolas and San Miguel gave the most trouble in landing their 17 foot surf boat. This experience convinced him that all provisioning would have to be done in summer months. At this time San Miguel had no pier and Hill envisioned that building equipment, provisions and men would be landed through the surf at Cuyler Harbor. Hill wrote that the "island had a passable airplane landing field about 1800 feet long. It is well marked and has the standard wind sock." The field was smooth, he reported, and because of the forceful winds, airplanes of a fairly large size could land. Hill chose 830 foot San Miguel Peak, the highest point on the island, as the new site for the Lookout Station, which at the time of his visit was temporarily situated in the Ranch House. He recommended that a road be built from the Ranch House to the planned site and described it as a simple matter. Hill also wanted the road leading from Cuyler Harbor to the top of the mesa resurfaced as the Lester's sled road would not do to transport supplies and equipment of any great weight. A request for permanent structures at the Lookout Stations was turned down in February, 1942, so locally manufactured prefabricated buildings were used throughout the war. San Miguel received a two-room barracks building with glass windows which was set up near the Ranch House. Photos show a shack beside the observation tower.

When Hill visited San Miguel, the Lesters were billeting Navy men at the Ranch House. They climbed to the roof to stand their watches and had a 25 watt radio transmitter and a receiver. Hill mentioned that it was possible to reach the planned new site by automobile even without the road. He had perhaps ridden in the Lester's old Ford given to them by a newspaper publisher. Hill was impressed with Lester, a man he described as "distinctly of a high type of intelligence".

Eventually a bulldozed road from the ranch to the wooden lookout tower and on to Point Bennett and power lines completed the basic improvements of the San Miguel Lookout Station. Service men called the road the Road to Mandalag.
The Navy completed construction of the Santa Barbara Island Coastal Lookout Station on August 12, 1942: a wooden tower, Antenna pole, a transmitter and roads. On May 27, 1942, a state of emergency was declared throughout the Western Sea Frontier, and a special line of patrol boats was established well to seaward to guard against surprise attacks. By this time, Lookouts were located at ten island stations:

- Anacapa Island
- Santa Barbara Island
- Pyramid Head, San Clemente Island
- Wilson Cove, San Clemente Island
- Sedge, San Clemente Island
- San Miguel Island
- San Nicolas Island
- Santa Catalina Island
- Santa Cruz Island
- Santa Rosa Island

Anacapa's radio telegraph call sign was NSK1, San Miguel's NPK4. San Miguel by then had a 100 watt transmitter. All CLSs were supplied with side-arms and/or rifles and binoculars, and their personnel were trained for night lookout and for recognition. San Miguel and the other islands had no gun emplacements, a fact brought home by a map in the Fort MacArthur Library published by their Engineer's Office. It showed batteries and search lights up and down the coast, but the Channel Islands were not even drawn on the map. After the Battle of Midway, June 1942, our leaders were pretty well convinced that the west coast was not in danger. This thinking is reflected in the Lookout Stations: development up to that date but none after.

Patrol boat reports throughout the war recorded the logistic support they provided for the Stations: relief of personnel, medical aid, and deliveries of supplies. No station activity beyond the routine disturbed life on the islands according to the messages sent to the Section Base in San Pedro. While some of the Coastal Lookout Stations extended their activities to Army flash reports and San Clemente transmitted vessel reports, neither Anacapa, San Miguel, or Santa Barbara Islands were assigned these duties.
The single tragedy on San Miguel was an aircraft accident. In 1942 a B-24 crashed on the north side of Green Mountain. Evidently, it flew too low, struck the island, and the wreckage spread over an area of two to three acres. As the crash site was at least two miles from the barracks, no one heard the impact. The wreckage could have been seen from the Navy lookout Tower, but probably due to weather they never saw it. Mr. Brooks came on it a year later when he was gathering sheep near Green Mountain. 12

The Coastal Lookout System was abolished July 1, 1945. 13 On July 17, 1945, the Commandant of the 11th Naval District at San Diego took thirteen Lookout Stations out of service. These stations included seven island stations, among them San Miguel, Anacapa and Santa Barbara Islands. The installation on Santa Barbara is discussed below. The order asked for deletion of radio call signs and transfer of radio equipment to San Diego. San Miguel, however, received a new call sign for official weather reporting. 14 Coast Guard Cutters including the Hermes, which had so long served the islands, resumed regular peacetime activities. 15 The poles and wire of the power line installation at San Miguel were removed from the island, but the tower and temporary buildings near the Ranch House were still on the island after the war. Several CLS sites had both Coastal lookout Stations and Army observation posts, but the subject Islands were not among these.

12.3 SANTA BARBARA ISLAND: NAVAL RANGE FINDER MARKER AND AIRCRAFT EARLY WARNING OUTPOST

In April, 1936, the Commandant of the 11th Naval District requested permission to install and maintain one range finder marker on Santa Barbara Island. This authority was granted by the Lighthouse Service under the date of July 10, 1936. The Navy built a tower about ninety feet high at a high point on the westerly side of the island which was 635 feet above sea level. [See Appendix 6] It was painted in twenty foot sections alternately orange and black. No obstruction lights were judged necessary to safeguard aerial navigation in view of its isolated location. 16
Superintendent Rhodes suggested to the Navy that they use the landing on the easterly side of the island and the two small shacks near it which had been built when the island was leased for grazing purposes. He described the shacks as small and delapidated. They dated from the Hyder lease. The Navy rebuilt one of them to use as a barracks and destroyed the other.

Mr. Paul Foster, Airspace Liaison Officer at the Pacific Missile Range, Point Mugu, described a range finder marker tower as a prominent echo return source for a surface search radar. If the distance from the reflector to our radar antenna is known, the indications on the radar scope is provided.

When the war broke out in 1941, radar was still a closely guarded secret. Even the word radar was not used, and instead such words as special equipment, aircraft warning equipment and derax were used. Few people even knew that experiments were ongoing at Signal Corps laboratories, or knew that there was any association between radio, electronics, and aircraft warning. On December-7 certain aircraft warning troops were at San Francisco awaiting embarkation to the South Pacific. These units were equipped with the then highly secret SCR-270 radars equipped with two antennas radiating at different frequencies for height finding. They also had a few SCR-268s. The personnel of the units had been given as little information as possible about the equipment they were required to use. Several days after the outbreak of the war, these units were all reassembled and assigned to the Commanding General, Fourth Air Force, who was under the command of the Commanding General, Western Defense Command and Fourth Army. The Fourth Air Force deployed these aircraft warning sets, which numbered under twenty, up and down the Pacific Coast. They were under the direct control of the Fourth Interceptor Command, later the Fourth Fighter Command, Riverside, California. Throughout 1942 the seaward screen was augmented so that overlapping coverage was provided from the Straits of Juan de Fuca to the Mexican Border. Santa Barbara Island became one of the Pacific Coast Aircraft Warning Radar Stations in 1942 and was equipped with an L-35 type SCR-588 radar. The 588 was already in production when war broke out; it operated
Tramhoist: A hoisting unit for the tram car was located at the top of the bluff at the upper station of the rail tramway. The prime mover was a Ford V-8 engine. The hoist was equipped with about 250 feet of $\frac{1}{2}$" steel wire rope. The free end of the rope was attached to the tram car.

Tanks: There was one steel tank of 500 gallon capacity, 9' 9" in diameter by 6' high, and one pine tank 12' 6" in diameter by 10' high of 10,000 gallon capacity. These tanks were connected to the water system. The filler pipe, $1\frac{1}{4}$" in diameter, ran from landing to tank. There was a total of about 500 feet of $1\frac{1}{4}$" galvanized iron pipe.

Buildings, except Garage: Two barracks buildings 16' X 36' made of plywood with tongue and groove floors were supported on three sills 4' X 6" each. The sills were set on 6' 6" posts. The roofs were composition over sheathing. These two buildings were joined together by a short hall of about 4' wide at the middle of the 36' sides. There was also a galvanized iron building 7' 3" by 11', a small generator building 6' X 6' and an outside head. At the high point of the island (as described above) approximately one mile from the landing was the glassed observation tower with a small generator building and outside head.

Garage: A 12' by 14' garage was constructed of old packing cases. It was used to house a piece of automotive equipment and a trailer.

Other Equipment: There was a trailer with iron wheels. Electric power and telephone lines ran from the landing to the watch tower. The electric light line ran from the watch tower to the north light.

The Coast Guard concluded after an inspection of the above that the portions of value to them were the landing with all its equipment, the rail tramway, including car and hoist, the garage building, and the iron wheeled jeep trailer. However, it recommended that all the buildings be left in
their present locations for the time being and that a jeep be procured for the use of the light tenders and kept in the garage.

12.5 COMMENTS AND RECOMMENDATIONS

The role of the islands in World War II will be of great interest to the visitor. The early attacks by the Japanese, because they are still not entirely believed by the general public, should be made an important part of any interpretive program as they were partially responsible for the urgency given to setting up the island lookout stations in the early years of the war. Key sites and the few remaining structures on Santa Barbara Island included the quonset hut; the landing; and the site and ground anchor remains of the observation tower. It stood on the westerly high point near the site of the South Light. At Anacapa, the site of the station is identical to that of the Lighthouse complex. San Miguel Peak is the site of the Station on that island.

The islands saw no action during the war. In the Western Sea Frontier War diaries of the Navy, Signal Corps historical works, and in the Unit and Command Histories of the Western Defense Command, they are not mentioned by name and at best appear on maps. Neither indices to shelf records of Army and Navy Construction projects nor the Air Force archives at Maxwell Field, Alabama, list the islands. Archivists at Maxwell searched thoroughly for records of installations on the islands and found none. The March Field historian, MSgt. Gazaway, also spent a day with this historian searching for clues to documentation. As the Lighthouse Service was vitally interested in its own property, it kept island data. Records of the 11th Naval District still extant were also helpful. A thorough search of records, that is, going beyond the indices and shelf lists and looking at all documents in files in the United States relative to the activities that took place on the islands would be extremely expensive and time consuming. The data, if found, would probably be quite routine. A summary of military offices visited and contacted is included in the report for the use of historians in future research.
on this subject if the Park Service should decide to pursue it. Since the islands were but observation posts, we do not recommend going further with such a study. No site or structure employed in the Coastal Lookout Station system is judged to merit historical marking.

The collapsed tower remains at San Miguel Peak and lumber from the shack lies nearby. As the trail-walks along the bulldozed road (Ranch House - San Miguel Peak - Point Bennett) are developed by the resident Park Ranger, something should be done about this unsightly heap.
Footnotes


4. Report, Hill to Commander, San Pedro Section, A4-3, Marine Orders, Operations, 1941-44, Box 196664, L. Nig.


7. R.S. Holmes, Naval Activities to Commandant, April 24, 1942, A6-3, Operations, 11th Dist., L. Nig.

8. Map seen at Los Angeles County Museum, Office of the Historian. Pierce, Inshore to Com. 11th, Feb. 16, 1942; Lassing to Com. 11th, Sept. 10, 1942; Bureau of Ships to Bureau of Supplies, N.D., 11th Dist., L. Nig.

9. Western Sea Frontier, War Diary, 1942-45, Center Naval History.

10. Interview, Clark.


13. W.H. Lassing, Operations to District Coast Guard Officer, July 2, 1945, CGR-304, ET 14, Box 196685, 11th Dist., L. Nig.

14. Lassing to Commander, Western Sea Frontier, July 17, 1945, ET-14, 11th Dist., L. Nig.


20. Lundy E. Smith, Mechanical Engineer, "Inspection of Buildings and Equipment Transferred From the Navy to the Coast Guard on Santa Barbara Island", July 18, 1945, 11th Dist. Coast Guard, L&P.
ANACAPA ISLAND: POST WORLD WAR II

13.1 POINT MUGU: NAVAL AIR MISSILE TEST CENTER

Point Mugu began to figure prominently in the history of the Northern Channel Islands after World War II, thus a brief summary of their post-war activities is essential to this report. The Navy's efforts in missilery date back to the early 1920s, but budget considerations, as in all branches of the armed forces, held back development. The World War II V-1 and V-2 rockets of the Germans generated a new attitude and in 1944 the Navy's Bureau of Aeronautics recommended that a missile test center be established for the Navy. Gathering together men who had been working with rockets during the war, the Navy set up what they called a Pilotless Aircraft Unit at Mojave, California and acquired land at Point Mugu. The first missile launched at Point Mugu was the Loon. It crashed into the surf seconds after leaving the launch pad on January 7, 1946. Ten months later the Navy established the Naval Air Missile Test Center (NAMTC) with an adjacent Sea Test Range stretching thousands of miles out over international waters. Radio gear was taken to San Nicolas Island, and $70 million went into laboratories and a communications network. Late in 1946 the first of a group of German scientists arrived at Point Mugu and were integrated into the organization. Expansion in 1947 was slight, but on May 1 the Loon was tested again, this time launched from a submarine, the first launching of this kind.¹

On May 7, 1947 the Navy Department's Bureau of Yards and Docks asked the Coast Guard for permission to establish an observation post on Anacapa Island for tracking test missiles launched from the then Naval Air Missile Test Center, Point Mugu, California. 1.5 acres of land were needed for the observation post. The parcel of land lay on the southerly side of East
MAP 13.1
U.S. Navy Reservation
Anacapa Island, Established 1947
Anacapa roughly between the U.S. Coast and Geodetic Survey Triangulation Station "Anacapa Light" and the Pacific Ocean. The Navy requested a permit to use the area together with the dock and equipment and to be permitted to improve the dock and lifting gear so as to permit safe handling of five ton loads. The Navy asked also for the right to use and to maintain roads connecting the site with the dock. Permission was granted by the Coast Guard and with the same provisions required by their leaseholders: that all equipment be removed and the property restored to its original condition after it had served its purpose. Attention was called to the logistics of water supply. The Navy could use the tanks and facilities. To pump 20,000 gallons and retrieve the hoses required four hours. No Coast Guard housing was available for the Navy. The permit was signed on September 25, 1947. (See sketch map "U.S. Navy Reservation, 1947.")

The Island Facilities Officer at the Naval Air Station, Point Mugu, set up a temporary theodolite station and Dallas hut on the site. This was a station for a phototheodolite, a device which takes a series of pictures of an object traveling in space and accurately gives its position in space relative to time. In 1947 the device was manually operated. The person tracking the target would look through a high-powered telescope to be sure the phototheodolite was directed toward the proper object. It was time synchronized, giving an accurate record of the time and direction in which each picture was taken. In 1949 plans went forth for sorely needed expansion at the site. Island Facilities asked for buildings and tracking instrumentation estimated to cost $215,000, but the fact that the project had low priority and the outbreak of the Korean War caused its disapproval. In 1951 the complement of the site averaged only two men from the Range Instrumentation Department who did their own housekeeping as well as technical work. Radar installations were not essential on Anacapa because the longer ranges available with the newer radars on the mainland and Santa Cruz Island made it possible to cover the necessary area from those sites. The 1947 permit was renewed in 1952 with a provision to build a temporary tower, and was renewed again in 1957 and 1962. However, by 1964 the instrumentation had been
removed from the island, leaving the then Naval Air Missile Test Center (see below) with theodolite stations only on San Nicolas Island and at Point Mugu.  

13.2 PACIFIC MISSILE RANGE

The Naval Air Missile Test Center was reorganized to become the Pacific Missile Range and Naval Missile Center on June 16, 1958. In the spring of 1958 Camp Cooke had been divided. The northerly sixty-five thousand acres became Vandenberg Air Force Base. The southerly twenty thousand acres became the Naval Missile Facility, Point Arguello, California and a component of the ever expanding range facilities of Point Mugu. The Sea Test Range extended from Point Mugu over international waters to Kwajalein. The Secretary of the Navy assigned the Range a mission:

To provide range support for the Department of Defense and other designated government and civilian agencies engaged in guided missile, satellite, and space vehicle research, development, evaluation and training programs.  

The mission is quoted here as it defines the responsibility of Point Mugu in regard to San Miguel Island in accordance with the Departments of Navy and Interior Agreements of 1963. The Pacific Missile Test Center has historically retrieved recoverable jet powered targets in the vicinity of Anacapa Island. From March 27 to May 31, 1964 the Navy was granted permission by the Channel Islands National Monument to conduct tests on the southwest side of Middle Anacapa. Targets were attached to parachutes 300 yards offshore and missiles were launched. Some missiles landed on the Island as a result of misfire and were retrieved. Also, some personnel came on the Island for photographic assignments. Impact holes created by missiles were hand-covered. Anacapa has suffered limited impact from Range activities, and Point Mugu has turned instead to the other Channel Islands under its direct authority.
13.3 **THE COAST GUARD LANDING FACILITIES AND BUILDING COMPLEX**

The Navy placed a cement plug in a sea-eroded tunnel under the landing and braced a rock cliff above the lower hoist house in 1943. In 1961, the Coast Guard modernized the Station by converting to AC power, replacing the fog signal system, and furnishing with electrical appliances. But in 1962 a new plan was outlined to convert Anacapa Island Light Station to an unattended operation in two phases and to establish a rescue facility at Point Hueneme Light Station.

A major reason for the change was missile firings from Point Mugu. Experience had been gained at Point Arguello where personnel were often required to spend many hours a week in a shelter. Such confinement was particularly difficult for dependents. Thus in phase one the dependents would be removed from Anacapa Island and the complement of men reduced to five. In the final phase the radiobeacon would be moved to Point Hueneme Light Station, all personnel would be removed, and equipment for an unattended operation would be employed. The 30-foot utility boat used at the Station would be transferred to Point Hueneme and in its place the Station would be assigned an 18 foot launch. Automation of the station would cost over $70,000 but save many multiples of that in the years to come.9

The Civil Engineering Structural Alteration request issued February 4, 1966 called for radio and generator changes, for extension of the boom at the upper hoist, and for security fencing around the Fog Signal and Light-house. The removal order included the following: Radiobeacon tower and equipment, lower hoist, and the demolition of all buildings with the exception of the Fog Signal Building, Light Tower, Oil House, and upper hoist house. The Commander, 11th District Coast Guard approved the order with minor changes, and plans went ahead to demolish three of the dwellings, the engine equipment building, shops, and water tank house during Phase One.10
Work orders went out to San Pedro's Terminal Island Coast Guard Base and in May 1967, the Base Industrial Crew demolished three of the houses. With a target date of November 15, 1968 for completion of Phase Two, orders were drawn up for work to begin October 7, 1968 on such tasks as burning the hoist house on the lower landing, disposing of the lower derrick and hoist equipment, burning the Service Building, converting the power building to emergency quarters for servicing personnel, and burning the Quarters building. On September 24, 1968 N. S. Merrill, Coast Guard, received a call from Superintendent Donald M. Robinson, Channel Islands National Monument. Merrill informed him of the Phase Two schedule, and Robinson said the National Park Service (NPS) would like to assign personnel to the Island and to use the buildings then scheduled for destruction. Merrill explained that in the original review of the Board of Survey for the three quarters buildings (Spanish style residences), the Department of the Interior, U. S. Navy, and other agencies had been contacted and none of the agencies showed any interest in Anacapa. Robinson replied that the administration had changed and that the NPS was now very interested in maintaining personnel in those quarters at Anacapa. Meetings began, the Coast Guard pleased that the NPS would be on the island to afford their equipment there greater security. On February 3, 1970 a "License and Agreement" between the NPS and Coast Guard was signed and put into effect. 11

The NPS and Coast Guard would have joint custody and use of the un-improved land areas of East Anacapa, of the wharf, hoist house and hoist. The NPS would have exclusive occupancy of the quarters (residence) and the service building, the east portion of the power house, and could use the living quarters portion (the west) when the Coast Guard did not occupy it. The NPS would have custody and use of the entire water and sewage systems including the water tank building once scheduled for destruction. These and other aspects of the agreement may be seen in the document which is in the Appendix. The three-bedroom stucco residence had been vacant since 1962, although occupied for thirty years prior to that. It, like the other
buildings in the complex, had been allowed to fall into disrepair. The plaster was badly cracked and nearly all the picture windows had been shattered by passing boatsmen armed with high-powered rifles in need of a target, any target. On October 29, 1969 Superintendent Donald Robinson, an electrical engineer, and several rangers reviewed the utility facilities at East Anacapa and made an estimate of the cost of putting them in useable condition. The residence needed most repair, and this eventually took the form of an asbestos shingled exterior. The dock facilities were in only fair shape, the iron rails and steps requiring the most rehabilitation. Classified Structure Field Inventory Reports executed for the buildings in 1976 showed all but the tank house and derrick building to be in good condition. 12

13.4 COMMENTS AND RECOMMENDATIONS

Conservationists seem to have the edge in Park literature. The military, while doing their job, have a hard task in overcoming the image of destroyers. Island rangers will have to know both sides of the story and present a balanced view of island use to park visitors. As the Monument facilities grow and interpretive talks to the visitors increase, it might be useful to invite Navy and especially missile testing personnel to talk to the public about the Sea Test Range and about fleet squadrons who have found the islands unique and vital to their programs. Mr. Al Frascella, Public Affairs, Pacific Missile Test Center, Point Mugu would be a good person to contact on this matter.

The Anacapa Coast Guard Lighthouse, Foghorn, and building complex is under nomination as a District for the National Register of Historic Places. Other buildings mentioned in this section were temporary and without historical significance.
Footnotes


5. See Renewal Permits in 11th C. G., L & P; Interview, Foster.


8. White to Yards and Docks, San Diego, March 27, 1964. CHIS.


14.1 **BOMBING RANGE ESTABLISHED**

In 1948 San Miguel Island was administered by the Commandant, 11th Naval District, San Diego. Robert L. Brooks held a revocable grazing lease on San Miguel Island, the one he had held continuously for 33 years. In July, 1948, the Navy exercised its right to revoke and gave Brooks 72 hours to remove his sheep and other property from the island. He was told the Navy would begin immediately to use the island as a bombing range. On December 22, 1948, Secretary of the Navy W. John Kenny wrote the Secretary of the Interior that Navy had granted the Air Force permission to use San Miguel Island "for military purposes of a confidential nature". The letter explained that for this reason sheep grazing permits had been terminated. ¹ March Field served as Headquarters for the 12th Air Force at the time, and it was using San Clemente Island jointly with the Navy for bombardment exercises. The need for a second island bombing range was obvious. Lt. Colonel Albert P. Halloran, USAF, Intelligence Division, 22nd Bombardment Wing, March Air Force Base described an Air Force Radar Bombing Range to this researcher and the effect it would have had on San Miguel Island.²

Gun laying radar was developed from an aircraft tracking radar. The visual sighting used prior to this was ineffective in that the ground operator had to measure the speed of the enemy aircraft, measure how high he was, and compute that with how fast his own shell would travel, all in about ten seconds! The gun-laying radar measured the aircraft's altitude, its speed, computed a point of intercept for the gun, and then moved the gun to the proper firing angle. This gun-laying radar was converted to a Radar Bomb Scoring Range device by reversing the whole procedure. The pilot received a twenty second warning and released his bomb. The Radar Bomb Scoring Range could be used at night or in any kind of weather. The aircraft released a tone at the second it would normally release a
bomb. The radar on the ground picked up the tone break of the aircraft and converted it to a marking pen on an electronically controlled plotting board where the down time of the simulated bomb, minus the trail distance, was plotted. This simulated point of impact was then measured against the proposed target to derive the miss distance. The target itself required no installation, and of course, received no impact. An island such as San Miguel could have five or six designated targets (e.g., A, B, C, etc.). The Radar Bomb Scoring device could be in a trailer twenty or thirty miles away; for example, it could have been on Santa Rosa Island which had a full Air Force Defense Command installation at the time. It recorded the accuracy of the pilot by tonal messages. If this radar tracking site was used on San Miguel Island, it probably did not serve as a target for large strategic bombers, but for the B-26 used by the 22nd Wing. Attack aircraft or fighter-bombers would have found it useful for their exercises.

Fighter groups training with the Strategic Air Command, 22nd Wing cannot be disregarded as users of San Miguel for impact. The 22nd Bombardment Wing moved to March Air Force Base in September, 1949. Its summary histories of base activities were studied from that date through 1953 for mention of San Miguel Island without success. This does not rule out the good possibility that they used San Miguel as a target. Local records are destroyed each year and these would have included the range scheduling. Squadron records, if kept, are at Maxwell; Alabama. At the same time, the 27th and 94th Fighter Squadrons using Sabre jets, the 1st Fighter Group, and the 2nd, 19th, 22nd and 33rd Bombardment Squadrons were all tenants at March Air Force Base. They commonly dropped an inert bomb called the Blue Whistler. It was a 100 pound bomb with a fin at the back which made a whistling sound. The round blue casing was filled with sand, was about three feet long and 12 inches in diameter. It had a five-pound powder charge which made a puff and a mark when it impacted. If the powder charge did not go off on impact, it could be dangerous. Although pilots missed target by half a mile, the Blue Whistler could hardly be charged with skimming across the terrain and ruining vegetation. A Blue Whistler dropped from a height of 1000 ft. or above impacts anywhere from the 45° to 80° vertical. At its
terminal speed, the bomb invariably imbeds itself at least partially into the earth, regardless of soil hardness.

14.2 JOINT USE: NAVY AND AIR FORCE

The San Miguel Island Bombing Range Danger Area appeared in the Coast Guard Notice to Mariners December 17, 1948, and in the following year was subject to joint use by both Air Force and Navy. Pressure on it was so heavy that scheduling had to be made on a weekly basis even though squadrons were asking for use on an indefinite basis. Moffett Field found it most satisfactory for its squadrons which required the use of a high altitude target. Castle Air Force Base at Merced wrote that the practice bombing they conducted at San Miguel included dropping of 4,000 pound light case bombs at altitudes up to and including 30,000 feet. Given the research time, we might be able to identify the squadrons that were training at bases such as Castle, take that data to the Center for Naval History in Washington, D.C. and, with luck, find squadron histories which could tell us more about the bombing exercises and the part they played in fulfilling curriculum needs.

Drawing upon the 11th Naval District records, correspondence there on targets is largely related to reports of surface craft "fouling the waters surrounding San Miguel Island" and interfering with the bombing missions. For example, in October 1949 unauthorized boats around San Miguel were so frequent that the commanding officer of the 93rd Bombardment Wing stationed at Castle Air Force Base complained they almost prevented use of the bombing range. Fishing craft ignored attempts of the pilots to signal them out of the area and the planes would return to base, at great cost in dollars to the American public. To solve this the Coast Guard was asked to include San Miguel in its patrol pattern but it had no forces available for such patrols on a regular basis.

Squadrons had to resort to red flares for range clearance or to dropping message blocks close aboard the surface craft. The Bombing Range users were particularly annoyed because range time came on a priority basis, and once lost had to be rescheduled. We know from the correspondence that live bombs were used by fleet squadrons. Acting Commander Harper of Composite
SAN MIGUEL ISLAND: POST WORLD WAR II

Squadron Five, Naval Air Station, Moffett Field wrote that even when they attempted to warn boats away by low passes with bomb bays open the signal was not understood by boats. Composite Squadron Six at Moffett Field, practicing high altitude bombing, used Prince Island as an aiming point for radar bombing and dropped 100 pound General Purpose type bombs. The commanding officer observed that most violators were in Cuyler Harbor. Four of his planes had to circle the area for over an hour before they were able to clear the area of a pleasure craft and begin to carry out their mission. In April 1950 the San Miguel Island bombing range was included in the Permanent Danger Area by Coast Guard in its "Notices to Mariners" which was issued in addition to the weekly Notice. Further, warning signs were posted on the island. 

To make matters worse for the training stations, San Miguel Island Bombing Range was closed June 16, 1950 to July 9, 1950 so that Robert L. Brooks could come out to the island and remove his livestock. The curator of geology and anthropology at the Santa Barbara Museum of Natural History, Dr. Philip Orr, his assistant Richard Finley, and Mr. David Gray volunteered to herd sheep in order to study the natural history of the island. Don Butler and the Brooks ranch hands combed the hills and ravines on horseback driving the sheep into corrals and to the loading pier. On June 25, 1950, and while the range was closed, the Korean War broke out thus giving cause for greater impact on scheduling time for the island bombing range. Carrier based squadrons such as those stationed at North Island were prime users.

14.3 ISLAND CONDITION: 1961

Bombing continued through the 1950s, and when scientists came on the island in the early sixties they reported finding shrapnel and bomb casings all over the island. E. R. Blakeley, who was there in April, 1961, said they landed their plane on the air strip near the Ranch House. During World War II, the army had graded the strip and used it for big planes, but in 1961 it had large trenches across it, one especially large and dangerous. The observation tower on San Miguel Peak still stood, and the wreckage of a B-24 Bomber that had crashed in 1942 lay north of Green Mountain. Both burros and sheep roamed the island, but they were being run down and shot whenever possible by Naval personnel.
An enterprising flyer from Santa Paula was flying in people to pot hunt. When Blakeley encountered the group, they claimed they were looking for Cabrillo's grave and when the Navy got wind of it, they drove them out. The Ranch House was beginning to leak, but vandals had not really gotten to it as books and china were in place and people lived in it now and then. The wall next to the house had fallen down. Blakeley found the walls papered with newspapers interesting to read. The barn was partially standing and the Navy pre-fabricated barracks of two rooms was good enough to stay in.\textsuperscript{6}

14.4 PACIFIC MISSILE RANGE ADMINISTRATION AND USE

In 1961 the Navy refused to give up San Miguel Island to a National Park plan, then being drafted for several of the channel islands. A letter in 1962 from Kenneth E. Be Lieu, Assistant Secretary of the Navy, to Secretary of the Interior Stewart Udall clarifies why they would not release it in the foreseeable future:

One of the most important aspects of the operations conducted from the facilities of the Pacific Missile Range is the launching of missiles into polar orbit. Flight paths go directly over and adjacent to San Miguel Island. The easterly impact limit of the azimuths required for these launches passes just west of Santa Rosa Island. All the area west of this line is subject to impact by missile pieces as a result of destructive action during missile launching operations. The Pacific Missile Range safety policy requires that all civilian and non-operating personnel be evacuated from within this danger area during southerly launchings. The current number of launchings already makes joint use impracticable and their number is increasing rapidly.\textsuperscript{7}

In 1963 the Department of the Navy transferred all the plant account and security responsibility for San Miguel Island from the Eleventh Naval District to the Commander, Pacific Missile Range. This was the same year that Navy and Interior signed the agreement to jointly protect natural values and historic and scientific objects on San Miguel and Prince Islands. They both recognized priority of military uses. The agreement appears in the Appendix.
The following year, 1964, the Pacific Missile Range (PMR) began some Land Mass Background studies and employed San Miguel Island. The first was to test radar guidance systems. They were testing surface-to-air and surface-to-surface weapons. The missile would be on a boat in the channel and launched southerly over the island into the defined range area to see how the radar guidance would react to land clutter. PMR made two launches of the Talos missile with this in mind in 1964. One missile used an active radar seeker in its final guidance phase. The problem lay in its being confused by a land mass. For example, the Russian Komar submarine would run in near an island and the radar on Talos would lose the Komar and try to hit the island; thus PMR was trying to improve the radar guidance so it would not leave its target when it made the test launches over San Miguel Island. Since the tests, the instrumentation has been improved. The radar locks onto a moving target and the land mass in the background will not cause it to break lock. PMR only ran two operations of this type but probably several rehearsals. The fact remained, however, that the requirement might arise for upcoming weapons and San Miguel had a unique location for such launches. Secondly, it could easily be cleared of people by the National Park Service.

A second use for San Miguel by PMR was that of testing land fall when a ship target was anchored in front of it. Exercises were carried out to see if a missile could distinguish between the land (San Miguel Island) and the target. If the background confused the missile then it was not useful. Thirdly, the island served to test airbourne systems. Radar has different characteristics over land than it has over water. PMR wanted to know if San Miguel's land mass would confuse the missile electronic systems and the radar of a plane that was pursuing another aircraft over ocean and then over land.

February and March, 1965, San Miguel, San Nicolas and San Clemente Islands were used in a major fleet exercise involving eighty ships and 70,000 Navy-Marine Corps personnel. By this time the Navy had installed a series of range poles to guide aircraft in sighting, and these poles are still in use.
On May 3, Channel 13, KCOP-TV carried a program on "The Secret of San Miguel" and by its nature it encouraged people to go out to the island and search for buried treasure. This alerted PMR to the fact that no public announcement had ever been made to the public that there was a danger of unexploded ordnance on San Miguel. Captain H.S. Bergman suggested that the Navy would be in a better position to deal with such TV programming if it made a sweep for bombs, made a public announcement, and then wrote to the TV programmers. PMR proceeded rapidly with plans to sweep bombs from San Miguel, and during the period May 17 to May 21, 1965, ordnance decontamination was conducted. The search was reported as a 100% surface coverage, but due to the continuous high winds and shifting sand it was believed additional items of ordnance might be revealed. The island was considered safe for personnel occupancy, but personnel should be advised of the hazards associated with unexploded ordnance. During the week of June 17, 1965, Bullpup missile operations started on the island. Initial Bullpup firings were aimed at a barge anchored in Cuyler Harbor 700 yards Southeast of Bat Rock. Range officials reported that the island's "varied terrain permitted targets to be concealed and protected as they would be in actual combat." Use of the tactical firing area on San Miguel was intended to provide Navy and Marine Corps pilots with experience in the use of the Bullpup missiles against combat type targets. PMR recited that in selecting sites for the land targets they had avoided areas of any archaeological and zoological interest. Before each mission, the island would be cleared of people and warning area notices would be issued to mariners and airmen. The first press releases mentioned five-hundred pound live ordnance, but either due to public pressure or tactical changes, this terminology was deleted from releases on June 16, the day before the firings began. As a tactical target area for fleet training, San Miguel was perfect. Planes could approach the target area from any direction at 0-20,000 feet using various attack modes. A launch aircraft with a chase plane made the attack and called the hit based on visual observation. A helicopter or other aircraft performed surveillance and took photographs of the missile impact. Both practice and live warheads were approved.
The Navy was as anxious as the environmentalists in 1965 to find out where archeological sites were so that they could avoid destroying them when they set up targets for tactical bombing missions. A Navy helicopter flew Charles Rozaire and George Kritzman out to San Miguel August 19-27, 1965 to map Archeological sites, and it was obvious from Rozaire's report that the Navy had habitually taken care of his transportation and made the photo lab at PMR available to him. Rozaire kept the Navy informed about the conditions of buildings and presence of vandals on the island. In that trip he found the Navy barracks or shack much deteriorated, the no trespass signs torn down, and the roof of the Ranch House down. In 1963 Rozaire had measured and made diagrams of the Ranch House and the Nidever Adobe. In September, 1965, while out on the island recording sites, he measured two rooms of the Ranch House he had not had time to complete in 1963, and took pictures of the inside. The Navy barracks had been shot up with a 22 caliber gun since his August trip and a tally kept on the door of "Foxes Killed." The tally accounted for nine deaths.\textsuperscript{12} Judging from photographs in the Robert M. Brooks collection of other out-buildings, all improvements were in very poor condition by this time. The play house given to the Lester girls by the Edward Vails and used as a school had disappeared.

14.5 DANGER ZONE, 1965

The Navy eventually got tired of small boat owners who would not heed notices to stay out of San Miguel waters during tactical exercises and of vandals who came on the island and tore down metal signs bolted to steel posts, shot up the buildings, and used the seals for target practice. It was not the general public, but as one official put it, a small cantankerous group. August 12, 1965, the Navy applied to the U. S. Army Corps of Engineers, which regulated navigable off-shore waters, for a designated danger zone around San Miguel Island. Accordingly, October 11, 1965, Major Robert T. Ojendyk, Corps of Engineers, established a zone at the east end or half of the island plus a three-mile off-shore area on all sides involved. According to the regulations the danger zone was to
be open to fishing and general navigation except during firing. Anchoring or loitering of vessels was prohibited within the zone. Landing or going ashore was prohibited without prior permission of the Commander, PMR. Firing information was made available and paid public notices were inserted in local newspapers (see map, "San Miguel Danger Zone"). Letters opposing the establishment of a danger zone flooded the desk of Major Ojendyk: fishermen, abalone hunters, boaters, zoologists, archaeologists, Western Oil and Gas Association, the Sierra Club, the Department of Fish and Game, Yacht Clubs, and State Senator Alvin C. Weingard (D) of Santa Barbara. Only the City of Santa Barbara, it seemed, had no objection. The Sierra Club and the Santa Barbara Yacht Club wanted a radical solution: take San Miguel out of the Navy's control. Gas and oil interests desired drilling sites uninterrupted by hazardous operations. Conservationists wanted the public wholly excluded. Fishermen desired unlimited fishing. Yachtsmen wanted to anchor and go ashore. Thus, a solution for one group would offend another. PMR answered each group, emphasized that the zone was closed only during times of actual firing, and retained the zone.

In 1966 PMR utilized San Miguel Island for fleet pilot training and for proficiency training in the BULLPUP, FFAR (folding fin aircraft rocket), bombs, the ZUNI Missile, and 20mm cannon weapons. Island use during fiscal year 1956 was as follows:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Operations</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombs</td>
<td>22</td>
<td>250 + bombs</td>
</tr>
<tr>
<td>FFAR, ZUNI</td>
<td>11</td>
<td>numerous, uncounted</td>
</tr>
<tr>
<td>BULLPUP</td>
<td>21</td>
<td>80 + missiles</td>
</tr>
<tr>
<td>20mm</td>
<td>2</td>
<td>24,000 rds.</td>
</tr>
</tbody>
</table>

All missiles used were inert.

In September, 1966, PMR was preparing a training area on San Miguel for the WALLEYE, CONDOR, and other systems. It had a NIKE target and inflatable BULLPUP targets on shore. Simulated truck convoys, SAM sites, tanks, and revetted aircraft targets were being installed on the southeastern portion of the island between the escarpment and the beach. The latter was primarily for the aircraft squadrons of the First Fleet. Additional targets such as
bridges and RF radiating equipment were planned for the near future. PMR reported to Naval Air Systems Command in Washington that installation of land targets would create increased use of the island by Fleet squadrons, also U.S. Marine Corps squadrons, who preferred the land targets to the barge targets. In 1966, Fleet missile firing ships were requesting shore targets for surface-to-surface missile testing and pilot spotting training. PMR correspondence argued that there were no practicable alternatives to the use of San Miguel Island. Com. R.N. Sharp, PMR, wrote on September 9, 1966:

Areas such as San Nicolas Island, San Clemente, Chocolate Mountain, El Centro, Yuma, Twenty-Nine Palms, Mojave B. and the Naval Ordnance Training Station, China Lake are either already overly scheduled, contain populations which must be evacuated, lack adequate instrumentation or area, permit no offset firing, restrict approaches to one or two prescribed headings at fixed altitudes, or require ground control of aircraft at all times. While these areas are quite adequate for the purposes for which they were designed, they are unsuitable to the purposes now required for missile testing and practice firing. Among other things, the circumstances of firing are so artificial as to lack the realism necessary for much needed pilot training. San Miguel, on the other hand, is both unique and ideal. Situated as it is at the westerly end of an island chain, wholly unimproved and unpopulated, it presents a minimum safety hazard, while offering maximum security. With targets available onshore, just offshore, and 10 to 15 miles offshore, it provides realistic practice in a well-balanced instrumented area. No other target areas in the United States allow for attack by two or more aircraft at once, or permit pilots to determine their own altitude, range, angle, and release position. Logistics problems are non-existent, at least from El Toro, Alameda, Lemmor, also the Fleet. The area is accessible without the need to overfly populated areas. In final substance, it is the last such area left.
As Captain H. S. Bergman pointed out in preparing the draft for the above, squadrons were coming to PMR from Norfolk and from Cherry Point only so that they could use San Miguel. Many young pilots preparing for a tour of duty in Vietnam were firing for the first or second time and needed realistic practice with the variability of approaches only San Miguel could offer them. The money spent by the American public on missile testing and on tactical missions was so great that to give up or curtail the use of San Miguel in the program seemed irresponsible.

14.6 THE END OF SHEEP GRAZING

The 1960's finally brought an end to sheep grazing on San Miguel. Grazing had been much restricted since 1948 when Brooks removed most of his flock, but the restrictions were too late. Once the sheep had removed the protective ground cover, San Miguel suffered the most severe wind and water erosion imaginable. The verdure, trees, and brush hinted at by Cabrillo's log on the islands was gone, but in 1967 some recovery had taken place, a result of the 1948 and 1950 sheep removals. A breeding nuclei remained. In June, 1966 the Director, NPS sent the Navy Department "A Suggested Plan for the Management and Protection of Values of San Miguel Island." It stated that the most pressing need was total elimination of the sheep, so the Navy made an all out effort from July 17-20 to do away with all of the sheep. Research Biologists, James K. Baker, of Joshua Tree National Monument flew over with a ranger and Navy personnel who hunted down the sheep. By the last day 148 sheep had been sighted through aerial search at near ground level up and down canyons and by criss-crossing the Island from one end to the other. All were disposed of bringing to an end 127 years or more of continuous sheep grazing on San Miguel Island.16

In November, 1967, the Ranch House burned. Reportedly a Navy aircraft dropped a flare to warn off unauthorized visitors during hazardous naval operations and inadvertently set off the fire.17 We have no documentation on this. No one is able to supply exact details, but the house is gone.
14.7 PACIFIC MISSILE RANGE IN THE 1970s

A second major reorganization occurred on July 1, 1975 merging the Naval Missile Test Center and the Pacific Missile Range into a single body, the Pacific Missile Test Center (PMTC). The following year the Departments of the Navy and Interior Agreement regarding San Miguel Island was amended to allow the National Parks Service greater administrative latitude. San Miguel Island lies in a strategic portion of the PMR's Sea Test Range, within that area designated W-289N. On land, targets are no longer listed, and in 1976 the only Pacific Missile Testing Center asset on the island was an automatic weather station; a non-instrumented target barge is anchored approximately one mile south of the Island's eastern tip. The weather station is powered by a twenty-five watt generator. This small device is protected by sturdy fencing from the ever-present threat of vandals on the island. During tactical exercises, all boats and people are warned to stay out of the surface danger zone which surrounds the eastern half of San Miguel, but they may remain on the west end of the island.

According to a representative of the Pacific Missile Test Center, air to surface exercises have numbered as many as 600 a year in the past. More recently, 200 a year are scheduled and nothing of a high explosive nature is expended. Both the Point Mugu area and San Nicholas Island are heavily instrumented, thus defining the southwesterly geographic quadrant extending seaward from Point Mugu as essential to the Navy mission. The Department of the Interior has leased the oil industry about 33 square miles of the sea area southeast of Santa Rosa Island. If Navy squadrons are deprived use of the San Miguel Island area, 100 enroute miles would be added to 80% of all training sorties planning to use the San Miguel target. Further, and of greater importance, it would place the training squadrons in direct competition with vital RDT&E programs for use of that mission essential area previously described, thus derogating both efforts. Squadrons come from Miramar, North Island, Lemoore, Moffet Field, and other bases. An Operations Officer at Lemoore stated that Attack Squadron 122 is currently scheduling operations at the Pacific Missile Test Center. The plane they use is the A-7, a single-engine
jet, land or carrier based. Lemoore opened in 1961 at which time all training squadrons used the A-4, a single-engine jet. In either case, students needed the type of training the San Miguel Island tactical mission provided to fulfill their syllabus work. Their training manual recited that live ordnance could be used only on San Clemente Island, so Naval air strikes at San Miguel are with inert ordnance; a watersand filled thin shell twenty-five pound blue bomb with a spotting charge. The blue indicates inert. 20

San Miguel could also be defined as a strategic site for the installation of a tracking radar or a radar for tracking test missiles launched from PMR. Another use would be for a telemetry station to receive radio signals from a missile in flight to measure certain parameters such as acceleration, control angles, pressures and temperatures. If San Miguel is eventually used for this purpose, it would be one permanent installation, not necessarily manned. The requirement may come for this, and San Miguel's unique location will keep it valuable in the eyes of the Navy for years to come. 21

14.8 SQUATTERS, FINDINGS, AND JUDGMENT RELATIVE TO TITLE

Although squatters such as Captain George Nidever have occupied San Miguel on and off since the time it came into the possession of the United States, only on two occasions has the government chosen to assert its rights, only once through the courts. The last pertained to Defendants Joe Dean Rozar, et al. In December, 1964, John H. Kimberly, Joe D. Rozar, and Russell Vreeland entered the island, established a camp, posted a sign reading San Miguel Land and Cattle Company and stated their intention to remain on the theory that the island was open territory belonging to no country. Harold Gold, Counsel for the Bureau of Yards and Docks, Department of the Navy requested that the United States Attorney take appropriate action to evict the three men from the island. Meanwhile, the men filed grant deeds to the property in Santa Barbara County. A complaint was lodged by the United States of America against the three men in the U. S. District Court which found that San Miguel Island was public
Archeologists and environmentalists are concerned about Navy activities on the island. Archeologist Roberta Greenwood found a missile warhead on San Miguel in December 1977. She was warned that the flares her team could run across had enough charge in them to be dangerous and that the black powder marker charge in the practice bombs could take her arm off. She saw wing tanks and various unidentified places of ordnance. Little remains of the historical resources on San Miguel, but the foundation lines, the ruins of the Nidever abode, and Ranch House remains should be made known to all Navy personnel using the island. A better understanding of Naval use and particularly, of the role the Pacific Missile Test Center has played in both island administration and in national security, is vital to the alliance of all parties concerned. It should be noted that San Miguel Island in past years was impacted routinely by various types of ordnance. Anyone locating any unexploded ordnance on San Miguel Island should immediately clear the area and report the finding to the PMTC, Command Duty Officer.
Footnotes

1. Box 202302, NPS Records, Bruno:


3. Letter, Com. 11th Coast Guard to Com. 11th Naval Dist., 20 April 1949; other correspondence in QT "Bombing Targets", 196693, 11th Naval Dist. Records, L. Nig.

4. QT "Bombing Targets" 196694, L. Nig.


9. PMR News Release, 11 June 1965, Public Affairs Files, PMR. Material that follows is from same file, related correspondence.


11. "Program Description and Approval", San Miguel Fleet Weapons Firing, signed Edward G. Rhoades, PMR, Public Affairs, PMR.


14. Letter, R. N. Sharp, Commander, PMR to Commander, Naval Air Systems Command, Washington, D. C., 9 September 1966, QT, Com. 11 Records, L. Nig. also see penciled draft notes by Bergman at Public Affairs, PMR.

15. Ibid. Sharp.


18. "San Miguel Island", Public Affairs Files, PMR.

19. Interview, 12-5-77, Point Mugu

20. Interviews Operations (names withheld) 12-13-17 and 1-9-78, Lemoor Naval Air Station.

21. Foster, Interview

22. U. S., Joe Dean Rozar, Filed May 27, 1965, Naval Engineering, Real Estate Files, San Bruno

23. For example, the General Records of the Navy, Secretary of the Navy's General Correspondence 1930-1942 in the National Archives could be used in an exhaustive study of this pre-war period.

15.1 FORMATION OF THE CHANNEL ISLANDS NATIONAL MONUMENT

In the spring of 1932, the Bureau of Lighthouses brought Santa Barbara and Anacapa Islands to the attention of the National Park Service (NPS), Washington D.C., and proposed that the islands be turned over for national park purposes. Lighthouse explained that they customarily leased the islands for five-year periods and that the leases they had would soon expire. Before renewing the leases or releasing them again to private individuals, they wanted to see whether they could be put to some public good. Superintendent Rhodes was clearly behind the move and at the same time pressed for leases by private hunting clubs and by groups interested in exploiting the islands for gas and oil. At this time the NPS did not have a chance to come out and investigate the islands and hence suggested that they were probably more important from a State standpoint than from a national standpoint. NPS advised Lighthouse to introduce legislation at the next session of Congress to have the islands transferred from the Department of Commerce to the State of California for park purposes without cost. There is no evidence that anyone followed up on this.

Lighthouse contacted the National Park Service again in March, 1937, to advise that the greater part of Anacapa Island Lighthouse Reservation and the major part of Santa Barbara Island were surplus to the needs of the Lighthouse Service. The National Park Service answered in May and asked for detailed information of the land available for transfer and the nature of outstanding grazing leases. Correspondence continued on the matter, and in September, 1937, Dr. H.C. Bryant, Assistant Director of the National Park Service, came out to the coast. He made a trip to the Channel Islands accompanied by an assistant regional director.
Bryant actually visited only Santa Cruz Island. Then he examined several of
the other islands from the boat with field glasses. None of the government­
owned islands, he reported, appeared qualified or desirable for National Park
status. From the vegetation standpoint some of the values might warrant
protection from the grazing, and National Monument status would give this.
He listed plant species, some of them rare. He found none of the plants
spectacular, but of value only because of the limited range that they occupy
in the world. The small government-owned islands he saw through the field
glasses, if at all, were, he wrote, "barren of these rare species, and covered
only with grass, annuals or coast live oak."

In contrast to this guarded recommendation for Monument status was the
enthusiasm poured into the investigation by Professor Theodore D.A. Cockerell
of the University of Colorado. This biologist had been collecting specimens
on the islands for some years and gathering data from other scientists. In
1937 he visited the three subject islands, wrote an article, planned a book,
and tried to get his publications into the hands of people to explain why the
islands were considered of unusual interest. He was impressed with the
extraordinary importance of the islands for natural history studies and urged
the Park Service to take them. He particularly opposed transferring them to
the Navy. He wrote to Bryant and sent him his article. Although the chain
of events is not entirely clear, Cockerell's role in educating the Washington
office of NPS cannot be overlooked. In 1938 the Park Service made the
decision to take the Lighthouse property in excess and ask for National Monu­
ment status.

Some of the island property had to continue in reserve for Lighthouse
purposes. On Santa Barbara it was delineated as Parcel A at the northwesterly
side of the island; Parcel B at the southwesterly side of the island; and
Parcel C, a right-of-way between the two, for the purpose of transporting by
vehicle all necessary equipment for servicing the established lights (Appendix
6). Parcel C was later exchanged for simple rights of ingress and egress from
Parcel A and B and from and to any feasible landing place on the island.
On Anacapa Island, Lighthouse retained four parcels of land:

1. All of the land comprising the east island of the group lying eastward of West Longitude $119^\circ 22' 38"$ comprising 106.88 acres, more or less.

2. All of the land comprising the middle islet lying between West Longitude $119^\circ 23' 21"$ and $119^\circ 23' 30"$ and South of Latitude $34^\circ 00' 14"$ North comprising 7.68 acres, more or less.

3. All of the land comprising the west islet lying westward of West Longitude $119^\circ 26' 10"$ comprising 46.72 acres, more or less.

4. The entire area of Cat Rock, which lies off the southern extremity of the west islet comprising 0.5 acres, more or less.

These four plots comprise a total of 161.78 acres.

On April 26, 1938, Franklin D. Roosevelt signed a Proclamation setting apart Anacapa and Santa Barbara Islands, except for the Lighthouse lands, as the Channel Islands National Monument. The first words of the opening paragraph explained why the land warranted preservation, and read:

WHEREAS certain public islands lying off the coast of Southern California contain fossils of Pleistocene elephants and ancient trees, and furnish noteworthy examples of ancient volcanism, deposition, and active sea erosion, and have situated thereon various other objects of geological and scientific interest....

The document is included as Appendix 7. President Roosevelt believed that gradual recovery of the islands' natural characteristics could only be effected by a good management plan, one the National Park Service was obliged to carry out in accordance with its traditional duties to preserve resources in their natural condition. Geology received special mention in the Proclamation.
Officials of the Department of the Interior on the east coast were impressed with the fact that these land fragments represented peaks of mountain masses submerged beneath the sea and that the submergence had taken place so long ago and so gradually that much of the animal and plant life originally common to the entire area had survived and had time to evolve differently. Birds, plants, and mammals were unique. In early 1939 the Park Service sent out a biologist to make a report on the condition of these rare species.

15.2 THE SEQUOIA YEARS

15.2.1 Initial Inspections

E. Lowell Sumner, Jr., Regional Wildlife Technician, submitted a report on the biology of the Islands on June 28, 1939, and made several recommendations for their management:

1. To place the monument under the administration of one of the existing national parks on the mainland;

2. To secure the assistance of the Coast Guard Service and the State Division of Fish and Game in patrolling the islands and adjacent waters;

3. To post the island, informing visitors that it was a National Monument and thus discourage shooting and, in particular, any further slaughter of the sea-lions;

4. To remove the hordes of exotic house cats on Santa Barbara Island and the smaller number of Belgian Hares; and

5. To allow a certain Mr. LeDreau to remain on Anacapa and to give him a position as a minor custodian. 3

The Washington office placed the Channel Islands National Monument (hereinafter referred to as CHIS) under Superintendent E.T. Scoyen at Sequoia National Park.
Sumner had discussed the pros and cons of methods to exterminate the cats which he claimed had been there for over thirty years. Introduction of male bobcats or coyotes was considered, as was the use of poison, since no other mammal would be involved. The problem was referred to Jack C. von Bloaker, Jr., Curator of Mammalogy, Los Angeles Museum of History, Science and Art. He had visited Santa Barbara Island in May with his colleague, Dr. Jack A. Comstock, to make scientific collections. In August, 1940, Jack von Bloaker visited Anacapa with a team of scientists which included Christopher Henne and Don Meadows, entomologists, Meryl B. Dunkle, botanist, and George Kanakoff, zoologist. Then von Bloaker set up a similar eight-week study trip for 1941.

In his report, Regional Wildlife Technician Sumner described the familiar cycle of overgrazing, especially on Santa Barbara Island: destruction of native vegetation, introduction of large numbers of noxious weeds, soil erosion and scarring. He counted approximately a thousand sea lions on Santa Barbara and two thousand pairs of California brown pelicans on Anacapa as well as three or four pairs of American eagles. In March, Mr. Meryl B. Dunkle of Long Beach, then doing research for his doctoral thesis, visited Santa Barbara Island with the Los Angeles Museum Biological Survey. He covered the island very thoroughly and saw one adult sea otter and two sea elephants. The rabbits were about extinct. On visiting the Pelican colony, he discovered that most of the eggs had been destroyed or carried off and felt this related to the recent visit of a fishing boat. Superintendent Scoyen asked for minimum patrol services from the Coast Guard, and in May set out for an official inspection of the islands himself.

In Scoyen's preliminary report to the Director of Park Service in Washington, he admitted that until the trip he did not have a very high opinion of the Channel Islands National Monument. But his personal contact completely reversed this attitude. From his many years in the Service, he wrote he had never spent such an interesting day from the wildlife standpoint. Summing up, he declared, "Boy! We've got something out there in the Channel Island."
During 1941 progress at CHIS was held up by the fact that it had no appropriation and, of course, no representative located at the Monument. The Sequoia staff made two inspection trips aboard Coast Guard boats along with members of the Regional Office and of the Soil Conservation Service. Poaching and other destructive influences continued to deplete the unique plants and animals which had furnished the original justification for establishing the Monument. Fishing parties and poachers landed at will. At Santa Barbara Island high power rifle shells were strewn on the cliffs above the rookeries where sea lions bred and where it was hoped the sea elephant and sea otter would return. The islands were posted against hunting; but without an actual patrol during the breeding season, the so-called "sportsmen" on the cliffs could take aim unmolested. Biologist Sumner put forth a modest estimate of $605 for a minimum patrol for the years 1942 and 1943, but even this was not approved by the Budget Bureau. Dr. Comstock, from the museum, continued his biological survey at both islands in March, 1941, and Ranger Fry spent considerable time attempting to eliminate the feral cats that remained on Santa Barbara. In August, Scoyen was transferred to Kings Canyon National Park and some thought the administration of CHIS should go with him. The Monument, however, did remain with Sequoia and fell under the administration of the new superintendent, John R. White. Scoyen took over the duty again when Sequoia and Kings Canyon were placed under one administrator. John White visited the islands in September. The main wildlife attraction for him was not on CHIS but at the west end of San Miguel Island where he saw literally thousands of sea lions and sea elephants and even touched the latter. He sent General Foreman Hugh Parkes and Assistant Superintendent Tobin to CHIS during October. Above all, they wanted protection in the waters adjoining the Monument islands where the seals and sea lions were a nuisance to fishermen and thus in the most danger. The boundary for CHIS was at the high water mark which made protection very difficult. At Santa Barbara Island they implanted signs, grumbled about mouse infestation at their tent, and ran across two men on the island who had used it as their lobster base for
ten years. They also saw University of Southern California equipment which scientists were using for an ongoing project.  

15.2.2 Park And Concessionaire Development

During World War II no one from Sequoia Park visited CHIS. When the war was over, the Navy declared many of their boats excess and the Regional office suggested to Superintendent White that he take one for CHIS. White replied he could hardly use a boat when he had no permanent custodian or a place to house the boat. In 1945 three Los Angeles men asked for a permit to operate a sightseeing boat service to Santa Barbara Island, install wharfs, piers, eating facilities, and arrange for hiking trips. When told that there was no public need for opening up the islands and that fossils and other features had to be protected, the three men said they had never seen or heard of any on this island they apparently knew quite well. Again, the lack of funds had to be put forth as the reason for almost everyone's ignorance of the island's resources. With funds the Park Service could study and report on these matters. Lowell Sumner, Park Planner at this time, would have accepted the plan for facilities if it could have been under the close supervision of a resident ranger.

15.2.3 Resort Facilities On Anacapa

Requests to establish fish camps on Anacapa Island came in regularly and were routinely refused since they clashed with NPS basic policy to protect wildlife and marine life. Francis T. Weighill began his overtures for a lease of this type on West Anacapa on November 22, 1949. Weighill was President and principal stockholder of a corporation called Hueneme Sport Fisheries, Inc. He had been operating a sightseeing and fishing trip service from Port Hueneme in and about the Channel Islands for some years. He argued that the Santa Barbara Channel was trecherous, that winds blew up quickly, and that often small boats could not get back to the mainland and had to seek shelter at the islands. People sometimes had to stay for several days without
food or water or housing since the Lighthouse personnel had no equipment to help boats in distress nearer than Santa Barbara. As an example, Weighill might have mentioned the woman reported in the Los Angeles Times, March 18, 1946, who was marooned on Anacapa for fourteen days after a sudden squall sank the 50-foot fishing boat she had gone out on with her husband and a friend. The latter two drowned, and she survived, in part, because the Coast Guard had stocked Frenchy LeDreau's cabin with emergency rations.

Weighill requested permission to make a landing place for small craft, build shelters or huts, and bring in fresh water and a radio-telephone. Superintendent Scoyen, Sequoia and Kings Canyon National Parks Headquarters, made a trip to Anacapa Island on Weighill's S.S. Vellron, a 98-foot boat, and came away with the feeling it was worth trying. In the first place, it would provide extensive sports fishing off the coast. Then, too, it would provide day sight-seeing cruises around the island. Weighill explained that he wanted to buy a surplus ship, beach it at Frenchy's cove, and thus provide housing facilities for those caught in a storm or who desired to stay overnight. Regional Director O.A. Tomlinson liked the idea, and on May 27, 1950, NPS announced that Weighill had a five-year permit. According to Weighill, the government would cut trails, level off mountain peaks for observation points, and possibly establish an aquarium. The principal recreation area would be West Anacapa's central portion. Within a month Weighill had formed the Anacapa Island Company and began to sell shares at $500 a share. The Oxnard Chamber of Commerce wrote to NPS asking for information with which to supply investors. Regional Director Tomlinson answered that Weighill's permit forbade him to grant any interest in connection with the permit to another party. In fact, Weighill had never discussed the formation of a company. Assistant Superintendent Carlson met with Weighill, and Weighill explained that since he needed more operating capital he had formed the new company. It would raise $500,000 and then be absorbed into the older corporation. Envisioning the many people involved as stockholders and managers, the NPS handed the matter over to their Concessions Division for investigation. On July 7, 1950, Scoyen
suspended the permit. The Korean War broke out June 25, 1950, and Weighill advised that war conditions made it impossible for him to expand his business; in fact, he suspended his whole sports fishing operation at the end of the summer. During 1952 Weighill set forth a new set of plans. His concession permit (still not cancelled) ran until December 31, 1954, but his ideas were grandiose and he lacked the funds to carry them out. Analysis of his concession permit showed the land assigned to him on Middle and West Anacapa and interestingly it included "one temporary government structure on West Anacapa Island consisting of frame building approximately 14' X 18' and containing no equipment". The building is no longer there and no other documentation in reference to it has been seen. Regional Director Lawrence C. Merriam cancelled the permit February 28, 1953. That May, Lowell Sumner, Park Biologist, made an inspection tour of Anacapa and observed that it offered possibilities as a unique marine exhibit. For that reason, he counseled, the Park Service should keep the door open to the right kind of concession operator who could provide transportation and simple shore facilities so that the public could enjoy the island's natural features.

Proposals continued to come in to develop the Frenchy's Cove area near the northeast end of West Anacapa. In 1957, Park officials went into considerable discussion over plans to seek out concessionaires to provide a dock, broadwalk, ferry landing, dwelling, and warehouse facilities. In a pilot study of the island in 1959, Frenchy's Cove was selected for a headquarters since it was a site that had been established as a development area under MISSION 66 (see under "San Diego Years"). Seasonal rangers arrived on Anacapa on June 15, 1959, and went to work setting up the area so that it resembled an area under the protection of the Park Service. Debris at Frenchy's Cove was piled on the beach and burned: about 1½ tons of debris and 1,000 pounds of cans and bottles were punctured and hauled out to sea about a mile and dumped. Of the four shacks, one was completely demolished since it was judged an eyesore. Usable lumber from it was used to construct an outhouse. The
Game issue permits to oil exploration interests in the zone. Thus, explosive seismic operations within CHIS areas would not be permitted.

The enlargement also brought under park jurisdiction the offshore kelp beds. The Park Service had been interested in kelp beds around the islands even before they administered the Monument. In 1933 Thomas Vint had written Dr. W.A. Setchell, Professor of Botany, University of California at Berkeley, asking for information. Setchell replied that the giant kelps of the Pacific coast had no counterparts elsewhere in the Northern Hemisphere and that they had been mapped. Anacapa had thin beds, San Miguel had very heavy beds grading down to thin. Certain areas, he advised, should be set aside, converted into a National Monument, and preserved. In 1933 Philip R. Park, Inc. of San Pedro had a lease from the Division of Fish and Game to harvest kelp in an area of 2.70 square miles around Santa Barbara Island. Regulated kelp farming had been approved for the open bed kelp area off Anacapa Island in June of 1941.

With proper harvesting methods, the tops of adult plants, which would die and rot eventually, are removed allowing sunlight to penetrate to depths of up to ninety feet, thus stimulating continuous growth. Growth is extremely rapid. Trimming or harvesting is done at the water surface, seldom more than four feet down so that only surface floating fronds are cut, and plant stems are not pulled loose from the rocks by the harvester. We have many varieties of seaweed, but kelp on the other hand, grows outside the breaker area and in water 40 to 90 feet deep. It requires strong currents and will grow on the ocean side of the coastal islands or where there are heavy seas, but not in calm waters. It thrives in areas such as the west end of San Miguel where strong currents bring in a constantly renewed supply of the nutrients necessary to sustain the giant plant. The industry sells kelp for its potash, iodine, acetone and in particular the algin, but the Division of Fish and Game keeps tight control over the beds so as not to deplete the submarine groves.

In the summer of 1950, Mr. Sumner stated his views on the subject and they guided NPS Policy for the Monument when it was set forth to the California Division of Fish and Game by Regional Director Tomlinson.
Kelp beds are very important in quieting the breakers and rough sea surges around the islands. They are a vital shelter for the sea otter and other marine mammals against bad weather and natural enemies, making quiet water along the shoreline where the animals can gather and sun themselves. Marine migratory birds also forage in these kelp beds. In view of the importance to kelp to wildlife, we would be unable to permit its harvesting, but we feel the prohibited area is so small that the effect on the kelp industry will be negligible. 11

On the question of commercial fishing within the Monument area, deep sea fishing would be permitted. The State Division of Fish and Game would license such operations, but they would be subject to exclusion from Monument waters at the request of the Regional Director. The Monument would not permit gathering of abalones or any other seashore and tidepool life. 12

The one-mile area around the Monument islands enhanced protection but did not solve it. In order to determine the protection problems, an investigation was started in February, 1953. Groups who would possibly use the islands or who would be concerned with NPS regulations at the islands were contacted. Interviews with the following agencies and persons took place:

1. United States Coast Guard. From them it was learned that leaving a small boat on Santa Barbara was not advisable due to vandalism. Coast Guard then had a small storage building, an old car, a winch and track, and a road on Santa Barbara they used for servicing the lights. Coast Guard could transport park personnel in their large boat.

2. Mr. Dean Vannice, President, Inglewood Rod and Gun Club; Mr. Robert Ketchum, President, Ocean Fishing Protective Association; Mr. D. E. Clark, President, Kelco Company (kelp); Mr. William Barrada, Chairman, Council of Skin Diving Clubs. Possible conflicts of interest were discussed and amicable relations established.
3. California Fish and Game. Opinions were expressed on size of boats, kelp farming and traps and harpoons used within the Monument boundary. NPS learned that firearms were carried by all fishing boats for sharks and seals and that their own regulations on shooting seals might have to be modified. Fish and Game claimed:

Seals and sea lions are shot by all groups of users and probably by lighthouse personnel adjacent to Anacapa. These mammals move with the fish so that local reduction in numbers has no lasting effect. They are felt to be plentiful, a nuisance, and nowhere in danger of extermination. It will be almost physically impossible to stop shooting of seals and sea lions. 13

As a result of the study NPS decided that protection would be difficult at best. It was recommended that the low tide line be set as the limit of control over marine life on both islands. Outside that line, fishing could be continued under the present conditions. Recommendations were made on boats and hoist for Santa Barbara. The Coast Guard would be encouraged to remove its car from Santa Barbara and all buildings, telephone lines, and other structures, except the lookout tower. In closing, it was noted that even with the latest speedboats and radar the Marine Patrol could only stop the wholesale violations. When patrols were gone, sportsmen did as they pleased. Public relations would go further in obtaining NPS goals. Finally, the study recommended that the Superintendency of CHIS be stationed at Cabrillo National Monument and the two areas administered together. The staff should include in addition to the Superintendent a ranger and a seasonal ranger for the islands.

In 1971 some regulations to protect shipwrecks and to eventually phase out abalone and lobster fishing in the Monument waters were adopted. A special use permit would be required of all commercial fishermen and passenger-carrying vessels operating within the Monument. Commercial fishermen had complained about the closure of the north side of Anacapa Island and west...
side of Santa Barbara Island for the taking of lobster and abalone. Commercial fishermen and sports fishermen are still at issue over the question of which use is doing the most damage to the marine environment.

15.2.5 Rabbits On Santa Barbara Island

Records of the Western Region, National Park Service, for the year 1941 include a number of letters, reports, and memos addressing the problem of non-native rabbits on Santa Barbara Island in that year. During the war, NPS did not visit the island, and when inspection trips were resumed in 1946 exotic rabbits were not mentioned. In fact, even in 1950 over-population by rabbits was not a matter for discussion in the monthly reports, and the coreopsis was reported to grow to a height of ten feet. When Biologist Lowell Sumner filed his Inspection Report on CHIS on May 27, 1953, the picture had changed dramatically. The native vegetation was destroyed almost to the point that sheep had formerly destroyed it. Sumner wrote:

It is typical of such irruptions that they begin unobtrusively but after several years commence to snow-ball in their effects. The present one has now reached disastrous proportions. The rapidity with which such biological changes can take place on small islands where predators are largely absent illustrates the danger of allowing several years to elapse between biological inspections. Also illustrated is the manner in which the military, when unsupervised, can erase without a thought fifteen years of conservation efforts by our Service.

It is widely believed that the Navy Coastal Lookout Station personnel introduced Red New Zealand rabbits during World War II. Other sources suggest that the Army personnel at the Aircraft Early Warning Outpost brought them on the island. These explanations may be correct. However, if the rabbits were a problem in 1941 it casts a shadow on the military's role in introducing them during 1942-1945.
By 1953 there was a serious decline in native vegetation, and Sumner advised that action was imperative. Park personnel claimed there were so many rabbits they had no thickets to hide in and sat crouched all over the island on the bare ground.

October, 1954, the rabbit removal program began. The Division of Fish and Game provided transportation while Park personnel did the work. Each fall the control program was continued. In 1955, 2,500 rabbits were killed when the Coast Guard flew Biologist Sumner and other Rangers over the island dropping poisoned bait. The next year, 600 were killed and in 1957 another 500. Rabbit foraging of native plants caused the ice plant to spread, and in 1958 ice plant covered over half of the island. Ice plant was also planted by the NPS to control erosion. Since the rabbits could not penetrate the ice plant, they were forced out into the open. Sumner reported that the fall eradication program begun in September, 1958, was so successful that only ten of the some 6,000 rabbits estimated in 1953 remained. That year, a team of ten personnel had gone out and dropped poisoned carrots on all parts of the island and even over the cliffs. In 1961 Biologist Richard Prasil made the fall rabbit inspection and observed but three rabbits. Concern over the rabbits still keeps Park personnel on the lookout and they are ready to destroy any rabbit seen on the island. 16

15.2.6. Santa Barbara Island Naval Structures

When a party of Park personnel, including Superintendent Scoyen, visited Santa Barbara Island in May of 1953, they found Navy structures dating back to World War II in bad repair (see section on World War II). The inclined railway was almost useless. The winch was intact but the motor gone and the winch shack demolished. What remained of the two Navy barracks was nearly obliterated since vandals had burned the structures. The Coast Guard shack was standing but the door blown off. The observation tower and shack on the high point of the island still stood. On December 31, 1957, the Corps of Engineers, Los Angeles, asked to use the island for radar tests. During a 60-day period they would bring on trucks, trailers, and eighteen men. The
request was denied on the basis that the island had been set aside as a national monument and to preserve wildlife and marine life.  

15.3 THE SAN DIEGO YEARS

15.3.1 Inspections, Studies And Plans

When Superintendent E. T. Scoyen, Sequoia and Kings Canyon National Parks received a recommendation for a headquarters at San Diego for the combined Cabrillo and Channel Islands National Monuments he reacted positively. In discussing this with the Regional Office they were inclined to approve it as well. The following year the Regional Director outlined a policy to get control out to the areas involved and for their administrators to work directly under the Regional Office. Appropriations were discussed, and July 1, 1957 Channel Islands National Monument Headquarters were moved from Sequoia and Kings Canyon National Parks to Superintendent of the combined monuments at San Diego. January 15, 1958 Donald A. Robinson became Superintendent, a ranger who had worked at Cabrillo since shortly after World War II.

The custom in the 1950's was to make quarterly inspections of CHIS by Coast Guard aircraft. Contact with the islands remained occasional except during the summer season when a ranger was in partial attendance on Anacapa Island. Visitor counts for the season which opened July 2 and ended September 10 moved from 962 people in 1959 to 1,718 in 1964 when the island had a full-time ranger during the summer. Santa Barbara was rarely discussed in the monthly reports, although a fire in 1959 denuded two-thirds of the island. It burned the northerly light structure and as we can speculate, the observation tower and shack as well. When the Park Historian Francis R. Holland visited it November 8, 1963, he reported much vandalism. Most of the equipment turned over to the Park Service had been wantonly destroyed. The same year a Mr. Joseph Saint-Denis was injured while seal hunting on Santa Barbara Island. The Coast Guard picked him up. In 1965 the June
inspection trip to Santa Barbara Island revealed a sweep of senseless vandalism over the whole of the island. Some persons had devised a sort of railway car, loaded it with generator parts, building material, and a refrigerator, and in attempting to lower it down the steep track had lost control so that it all went into the deep water. Other vandals placed explosives in a refrigerator which was inside the remaining quonset hut. The blast destroyed not only the appliance, but also part of the hut, so it was dismantled. The island jeep was pillaged of all removeable parts, and thieves took the plywood floor sections out of the hut. Dead seals and sea lions lay on the beaches and on high rocky ledges where they had been victims of fun seekers using high powered rifles. It was speculated that some charter boat operator might have brought them out.  

Research and publication on the Monument and San Miguel showed an upsurge in the 1960's. Francis Holland had been recruited from Morristown National Park, the first historian to be assigned to Cabrillo. In 1961 he produced a History of San Miguel Island which stirred interest, and in 1964 he developed a narrated film on CHIS. Numerous scientific studies were begun on the islands during the years CHIS was administered from San Diego. A history of those studies is beyond the scope of this report. Michael A. Glassow, however, has written an overview of archeological projects and it is hoped that similar overviews will be forthcoming in geology, paleontology and the other disciplines. The Monthly Reports coming out of San Diego in the 1960's devoted some 80% of their space to Cabrillo National Monument and Headquarters affairs, the remainder to CHIS. However, in the early 1960's, Francis R. Holland in collaboration with several of the Park Rangers produced a MISSION 66 Master Plan for the Channel Islands which summarized activity on the islands to that date, and informed Park Officials on the East Coast about the Monument, and created a design for the future.

MISSION 66 was initiated in 1956. Some fifteen years of national emergencies had held back improvements of roads and visitor facilities in the national parks. At the same time visitors had doubled and staff fallen
behind. Magazine articles such as Bernard De Voto's "Let's Close the National Parks" in Harpers alarmed the public. Out of the uproar of complaint came the NPS 10-year development and conservation program. Laws handed down by Congress pertaining to the parks were brought out and re-examined, and CHIS developed a book-length manuscript defining how the MISSION 66 program would be implemented at the Monument. The program goals included a system of trails, visitor accommodations, interpretive service, water and sanitation systems, and permanent personnel. Importantly the manuscript set down the geological, biological, and historical values of the monument for MPS planners to see. It drew attention to the little-known Monument, and as we can see today many of the goals were met.

15.3.2 Santa Barbara Island Photo Tracking Station

In the early 1960s the Naval Ordinance Test Station, China Lake installed a photo tracking station on Santa Barbara Island to record the flight of test rockets. The Navy constructed two quonset huts and three cement camera pads, installed two water tanks with a pipeline to the shore, extended the existing railway, and enlarged the previous trails to road size. The new road extended from one side of the island to the other so that jeeps could travel between the camera pads and to the quonset huts. The road included over a mile on predominantly flat terrain but also inclines with differences in elevations of up to 300 feet. When the Navy left the island it surplussed the camera pads, eight to ten generators, and the two large quonset huts to the National Park Service. A Park Ranger noted that numerous items of Naval equipment were dropped into the water from a high point on the southeasterly side of the island.

15.3.3 A Channel Islands National Park

Further emphasis came for Monument development from another source. In February 1961 President Kennedy sent a special message to Congress about natural resources. He observed that "America's health, morale and culture
have long benefitted from our national parks and forest but they are not now adequate to meet the needs of a fast-growing and more mobile population." He urged Congress to "enact legislation leading to the establishment of seashore and shoreline areas" and urged the Secretary of the Interior Stewart Udall to conduct a survey to determine where additional seashore parks should be proposed. The Santa Barbara News Press printed the President's remarks and among other backers recommended the Channel Islands for a National Park. Editor Thomas Storke urged California Senators Kuchel and Engle to lead the way and opened correspondence with an old friend of his, James K. Carr, Undersecretary of the Interior. Included in the Park would be Santa Barbara, Anacapa, Santa Rosa, Santa Cruz, and San Miguel Islands. The problems were Naval authority over San Miguel and private ownership at Santa Rosa and Santa Cruz. Carr put forth a "Days of the Dons" idea which would make the Park a living museum. No automobiles, no motorcycles but only cattle and sheep would roam the island hills. In the coves would be replicas of the galleons and caravels of Cabrillo's day. Tourist accommodations would be authentic reproductions of the posadas: adobe walls, red tile roofs, and patio gardens. Park personnel would dress as Dons and carry guitars. The idea even appealed to Ed Stanton, owner of Santa Cruz, who at one time had responded to a park idea with, "I don't want all the bums running wild on my island and a park would mean just that." Conrad Wirth, Director of the National Park Service, made plans to come out to Santa Barbara in May. Storke dined with the Chandlers of the Los Angeles Times to educate them, and he reminded his old friend Chief Justice Warren of a hunt they had made together on Santa Rosa. Both Stanton and Ed Vail, the latter a part owner of Santa Rosa, favored the sale of their lands to NPS in May 1961, and as Stroke explained to James Carr, the project should move quickly since property values moved upward so rapidly that in five years NPS might not be able to come up with the money. The plan did not move quickly. California already had one bill pending on a Point Reyes National Seashore proposal and the possibility of getting two bills in one session was remote. Finding
the right time to move in Washington combined with the difficulty of finding an agreement with the owners of the two islands put off submission of the bill till 1963 when Engle backed a bill for a Channel Islands National Seashore; Seashore rather than Park, since in this way the government would not need to acquire all of the private property. No action was taken. Then Carr retired and Engle died. In 1966 five bills came before the House on the matter; in 1970 two before the Senate. Momentum slowed as the debate moved into the decade of the 1970's, although a bill is again in the hopper at this writing and public interest in the Islands and Park idea at a new high.

15.3.4 San Miguel Island and National Park Status

The Navy declined transfer of San Miguel to the NPS from the time of the initial overture in 1963. It needed the island to test guided weapons systems, for fleet squadron practice, and for on-land instrumentation. Creation of a Park would have an adverse effect on the required readiness training of fleet aviation units. A park would attract the general public into the nearby hazard area which had to be kept free to assure maximum range scheduling. In short, the position of the Commander, Pacific Missile Range was that there was no objection to the proposed Park provided San Miguel Island was excluded until it was no longer desired for Navy purposes. The Navy also wanted unrestricted access to and use of existing improvements on the two privately owned islands.24

In 1948 biologist Lowell Sumner had made an air inspection of CHIS and the northern Channel Islands after which he recommended nominal transfer of San Miguel Island from Navy to NPS. If that could not be done, he urged that the Navy should stop the destructive sheep grazing.

In July of 1957 Sumner conferred with regional specialists on seashore survey at the subject island and then wrote the Regional Director that he was still of the same opinion he had in 1939: the scientific features of San Miguel Island were so outstanding that it warranted every effort at preservation. It was approximately 14 times as large as Santa Barbara and had a correspondingly greater wealth of unique biological
features. He noted that the federal government had, through its continuance of sheep grazing, permitted destruction on San Miguel; thus it should be up to the government to restore the land. A few days later the Regional Director wrote to the Director of NPS in Washington asking that San Miguel Island be added to CHIS. He wrote that no NPS representative concerned with biological and other natural resources had been on the island since 1939. The only activity on the island or around it in 1957 was commercial.

The Navy could not give up San Miguel, yet preservation experience lay with the Park Service. During 1962 the Western Regional Office, NPS, and the Navy drew up a series of interim agreements and put forth plans for the future management of San Miguel Island. NPS pointed out that they had been criticized for the lack of protection they offered on the islands they already controlled, but that lack of funds, transport, and personnel was the reason. The Navy was concerned about a need for launching missiles and the need to close down the island temporarily to continue the launches. Navy discussed using San Miguel and San Nicholas for a Naval petroleum reserve, and this was fought by local conservation groups who urged national monument status for San Miguel instead. Letters went to President Kennedy urging his support for conservation.

On May 7, 1963 an agreement between the Departments of Navy and Interior relating to "Protection of Natural Values and Historic and Scientific Objects on San Miguel and Prince Islands, California" was signed. The agreement recognized the Islands' unique scientific values, need for preservation, and the role of the Department of the Interior in protection. Interior agreed to take inventory, to promote recovery or reintroduction of rare and locally extinct plants and animals, and to cooperate with the Navy in its rules and management of the islands. It was understood that the Navy had paramount use of the islands as a missile test range and that in the future it could even be a Naval Petroleum Reserve. Both Departments recognized the priority of military uses (see Appendix 9).
As a result both departments would share responsibility for preservation and management. San Miguel and Prince Islands would not be open for public recreational purposes. Also, the Island was owned by the Navy. These facts made it unlawful for the NPS to spend its funds there.

15.3.5. Administrative Change

In September, 1963, Superintendent Robinson was transferred to Crater Lake National Park, and Thomas R. Tucker became Superintendent at Cabrillo National Monument and thus Superintendent of CHIS. In May, 1967, the Channel Islands National Monument headquarters moved from San Diego to Oxnard and Donald Robinson was called upon to be the Superintendent where he served until February 1974. John Cook acted briefly as Interim Superintendent till the arrival of Superintendent William H. Ehorn, June 23, 1974.

Two major agreements have been negotiated and signed in regard to San Miguel Island since Superintendent Ehorn took office. The first, signed in 1976 was an amendment to the agreement between the Department of the Interior and the Department of the Navy which relates to protection of natural values on San Miguel. The amendment further recognized that the National Park Service could expend appropriated funds on the island to enforce NPS regulations and to develop a tightly controlled visitor program. Public access was to be confined to daylight hours and importantly tied to spending of funds at the island. See Appendix 12. As a result of this a tent has been set up in the arroyo south of Cuyler Harbor and serves as temporary Park headquarters. A ranger, Mike Hill, has been assigned to the post. It is hoped that he can accompany all visitors who come onto the island and want to take to the trail which follows the road bulldozed during World War II. In 1977, a Statement for Management was drawn up for San Miguel and Prince Islands by the Park Service as well as an agreement between the National Marine Fisheries Service and the Park Service for management and protection of the pinnipeds on San Miguel Island. A recent decision by the United States Supreme Court gave the State of California control over these tidal lands, not the National Park Service.
15.4 COMMENTS AND RECOMMENDATIONS

Unlike other topics covered in this report, the history of CHIS is well documented and the data easily obtainable. However, the pressure exerted by other topics did not allow for thorough research and writing and instead the overview above is presented. CHIS has been in existence for forty years and yet park development on the islands is minimal. A recapitulation of all the scientific studies which bring to light in layman's terminology the marine environment, pleistocene fossils, geology, and unique natural resources is needed. The prime values at CHIS for the modern period do not lie in historic structures although there are a few to be preserved. Prime values, as NPS well knows, are in natural resources. Narrative historical overviews of the scientific discoveries of the period have, to date, been left to journalists and to others who contribute short articles to yachting magazines and pamphlets for tourists. A professional synthesis would serve as a source book for interpretive programs, and with the boom in local history and nature conservancy, sell at the book store. Laurel Johnson, Museum Book Shop, Santa Barbara Museum of Natural History, reports that people come in regularly asking for a book on the Channel Islands. She has nothing suitable for the lay public. She needs a good basic book that will encompass the islands and cover all the disciplines.

Structures associated with Park headquarters are limited to the quonset hut on Santa Barbara Island and the Coast Guard Lighthouse complex at Anacapa Island. The latter is in the process of nomination as a District, National Register of Historic Places.
Footnotes


2. See Santa Barbara File and Anacapa File, 11th Dist. C. G., L & P.


4. See NPS correspondence, 202302, Interview, Don Meadows, Santa Ana, 2/21/78.

5. Scoyen to Director, May 20, 1940, 202302.

6. NPS Correspondence, 202302.

7. Memo, O. A. Tomlinson, Regional Director, Oct. 9 and 24, 1945, 202302.

8. "Analysis of Concession Permit I - 36 np - 175". All the Weighhill Permit correspondence is in File 900; Part II, NPS Records, Bruno.


10. Setchell to Vint, Feb. 9, 1933, 20332.

11. Tomlinson to Fish & Game, August 17, 1950, 202302.


13. "Protection and operation study Channel Islands National Monument", March 31, 1953, p. 6. 202302. The data above is drawn from the same source.
14. See for example: Memo, Director Western Region, NPS to Superintendent, Sequoia National Park, Sept. 11, 1941, 60A512, 202302, NPS Records, Bruno.


23. Engle to Storke, June 1, 1961; Storke to Carr, May 26, 1961, 73/72c.


25. Sumner to Regional Director, July 26, 1957; Regional to Director, July 30, 1957 and other correspondence in 428947, NPS Records, Bruno.
HISTORICAL BASE MAPS

Map 1 - Anacapa Island
Map 2 - Santa Barbara Island
Map 3 - San Miguel Island East
Map 4 - San Miguel Island West
HISTORICAL BASE MAP
ANACAPA ISLAND
CHANNEL ISLANDS NATIONAL MONUMENT

Historical Resources:
1. Cement Lighthouse
2. Lighthouse Complex
3. Shelter Cabin, Boat Storage, Comfort Station
4. Frenchy's Cove
5. East Fish Camp Rockwell
HISTORICAL BASE MAP
SANTA BARBARA ISLAND
CHANNEL ISLANDS NATIONAL MONUMENT

Historical Resources
1. Light Tower
2. Lookout Tower Site
3. Quonset Hut
4. Cement Slab, Signal Peak
5. Cistern Site

Scale 1:24,000

SANTA BARBARA ISLAND
SANTA BARBARA CO.
N33°26.5'-W118°07.5'/ANG

Prom, edited and published by the Geological Survey
SAN MIGUEL ISLAND EAST
CALIFORNIA
Mapped by the Army Map Service
Edited and published by the Geological Survey
Scale 1:24,000

HISTORICAL BASE MAP
SAN MIGUEL ISLAND EAST

Historical Resources
1. Cabrillo Monument
2. Nidever Adobe Ruin
3. Old Ranch House Site (?)
4. Mills-Waters Ranch House Site (?)
5. Ranch House built by John Russell (Site & Debris)
6. Windmills
7. Piers (2) Cuyler Harbor
8. Herbert Lester grave
9. George Hammond Field (airstrip)
10. Lookout Tower - Site and Debris
11. Lighthouse
12. Automated Weather Station
13. Cuyler Harbor

SAN MIGUEL ISLAND EAST, CALIFORNIA
Historical Resources
1. Cabrillo Monument
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9. George Hammond Field (airstrip)
10. Lookout Tower - Site and Debris
11. Lighthouse
12. Automated Weather Station
13. Cuyler Harbor
SAN MIGUEL ISLAND WEST, CALIFORNIA
Mapped by the Army Map Service
Edited and published by the Geological Survey
Scale 1:24,000
<table>
<thead>
<tr>
<th>HISTORICAL RESOURCE</th>
<th>LOCATION</th>
<th>TYPE</th>
<th>DESCRIPTION AND STATE OF PRESERVATION</th>
<th>CONSIDERATION FOR NOMINATION TO NATIONAL REGISTER (NR) OR RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>--- ANACAPA ---</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lighthouse complex</td>
<td>East Anacapa</td>
<td>District</td>
<td>Good. Good condition.</td>
<td>District nomination to NR accompanies report.</td>
</tr>
<tr>
<td>4. Frenchy's Cove</td>
<td>Northwest end of West Anacapa</td>
<td>Site</td>
<td>Narrow beach, home and resort--fishing facility of Island squatter and informal park ranger Raymond LeDreau.</td>
<td>No historical significance. Use in park interpretive program.</td>
</tr>
<tr>
<td><strong>--- SANTA BARBARA ---</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lookout Tower</td>
<td>Signal Peak</td>
<td>Site</td>
<td>Eyebolts remain of this World War II structure.</td>
<td>No marking; lacks historical significance. Include in interpretive program.</td>
</tr>
<tr>
<td><strong>--- SAN MIGUEL ---</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.Adobe Ruin</td>
<td>Approximately 300 yards East of present Park Headquarters in Cuyler Harbor Arroyo</td>
<td>Site and ruins</td>
<td>Two wall stubs and four rafters exposed. In critical need of stabilization. Third stub visible in 1963 now gone or covered.</td>
<td>NR Nomination Forms accompany report. Ruins must undergo immediate study for preservation. Stream channel now going through it should be diverted, but excavations for garbage heaps and outbuildings would precede this so as to avert their destruction. The covered walls could be excavated, measured, photographed, and recovered. A reconstructed adobe in this area could provide an exhibit center for wilderness life in the 1850s.</td>
</tr>
<tr>
<td>HISTORICAL RESOURCE</td>
<td>LOCATION</td>
<td>TYPE</td>
<td>DESCRIPTION AND STATE OF PRESERVATION</td>
<td>CONSIDERATION FOR NOMINATION TO NATIONAL REGISTER (NR) OR RECOMMENDATION</td>
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<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>12. Automated Weather Station</td>
<td>San Miguel Peak</td>
<td>Modern facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Marine Fisheries Hut</td>
<td>Point Bennett, on high ground</td>
<td>Structure</td>
<td>Good. Modern housing for scientists studying pinnipeds.</td>
<td></td>
</tr>
<tr>
<td>See Report Section 7 for various wrecks.</td>
<td>See Section 7.8 for map and sites</td>
<td>---</td>
<td>---</td>
<td>Requires further study by marine archaeologist. Significant wrecks such as Winfield Scott should be included in interpretive program.</td>
</tr>
</tbody>
</table>
1930s, Herbert Lester at Nidever Adobe, San Miguel Island; from E.S. Lester, *Legendary King of San Miguel*. 
PHOTOGRAPH #2

March 24, 1978, Nidever Adobe Ruins as viewed from the North with revitalized spring flora thanks to a decade free of grazing. W.E. Roberts.
PHOTOGRAPH #3

PHOTOGRAPH #4


PHOTOGRAPH #5

1930s, Sled mounting road from Cuyler Harbor to Ranch mesa. R.M. Brooks collection.
1940s, Robert S. Brooks, second from right, with working companions, San Miguel. R.M. Brooks collection.
1946, Robert S. Brooks and companions loading sheep at a pier they rebuilt each year. R.M. Brooks collection.
PHOTOGRAPH #8

PHOTOGRAPH #10

PHOTOGRAPH #11


1940s. San Miguel Peak Lookout Station: Tower and Shack. R.M. Brooks collection.
PHOTOGRAPH #18

PHOTOGRAPH #19

B-24 Wreckage at Green Mountain. Note revitalized soil and flora.
Old cistern at San Miguel Ranch. Auxillary water supply except when mice fell in. Only structural remains of Ranch House aside from two chimneys and newer cistern.
PHOTOGRAPH #22

Old Ranch House, San Miguel Island. B. Roberts.
ABBREVIATIONS

ARCHIVES AND RECORDS

1. BRUNO  San Bruno National Archives and Record Center
2. 11th C.G.  Headquarters, 11th Coast Guard District, Long Beach
3. 11th C.G.L & P  The same, Logistics and Property Files
4. L. NIG.  Laguna Niguel National Archives and Record Center
5. MUGU  Pacific Missile Range, Public Affairs Files, Point Mugu
6. NA  National Archives, Washington D.C.
7. SUITLAND  National Archives and Record Center, Suitland, Maryland

LIBRARIES

1. BANC  Bancroft Library, University of California, Berkeley
2. CHIS  Channel Islands National Monument
3. CSULB  California State University, Long Beach
4. HUNT  The Huntington
5. LA CO. M  Los Angeles County Museum of Natural History
6. LAD  U.S. Army Corp of Engineers, Los Angeles District
7. NPS, S.F.  National Park Service, San Francisco
8. S.F. MARITIME  San Francisco Maritime Museum
9. SBCC  Santa Barbara City College
10. SBM  Santa Barbara Museum of Natural History
11. SB PUB.  Santa Barbara Public Library
12. UCB, DOE  University of California, Berkeley, Doe Library
13. UCLA  University of California, Los Angeles
14. UCSB  University of California, Santa Barbara
15. V CO. M  Ventura County Museum
GOVERNMENT ARCHIVES


Center for Naval History, Washington, D.C. Local Defense Forces, 11th Naval District War Diary, Western Sea Frontier.

Channel Island National Monument Headquarters Files.

Department of the Navy, Western Division, Naval Facilities, Engineering Command, Real Estate, San Bruno, California, 94066.

Federal Archives and Records Center, Laguna Niguel, California. Records of the 11th Naval District.

Federal Archives and Records Center, San Bruno. Records of the National Park Service.


National Park Service, Western Region Files, San Francisco.


Public Affairs Office, Pacific Missile Range, Point Mugu, California.

United States Army Corp of Engineers Chief's Office, Washington D.C.

United States Coast Guard 11th District Office, Long Beach, Logistics and Property Branch. Files: Santa Barbara Island, Anacapa Island.

United States Department of Transportation, Coast Guard, Washington D.C., Logistics and Property, and Aids to Navigation Files.


United States National Archives, Washington D.C. Cartographic Archives, Record Group 23, U.S. Coast and Geodetic Survey Correspondence and Superintendent's File. Record Group 26, Lighthouse Service and Coast Guard Archives. General Records of the Navy, Secretary of the Navy, General Correspondence, 1930-1942.
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Heye, George G., CERTAIN ARTIFACTS FROM SAN MIGUEL ISLAND, CALIFORNIA. Indian notes and monographs. Ed. F.W. Hodge. VII, 4. New York: Heye Foundation, 1921. Forward: Mrs. Thea Heye, New York City furnished funds for an archaeological expedition to San Miguel Island in 1919. Ralph Glidden of Avalon was in charge. They exhumed 343 skeletons. Geography: Greater part of the Island is sandy waste. Due to sands and wind, some skeletons were less than one foot under ground.


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E.G. Blakeley; Santa Barbara, California; January 10, 1978.
Robert Moore Brooks; Carpenteria, California; March 1, 1978.
Commander (Ret.) U.S. Coast Guard William Clark; Pacific Palisades, California; February 14, 1978.
Cres de Alba; Ranch Foreman; Robert Brooks; Carpenteria, California; March 1, 1978.
Walter Evans; Chief, Logistics and Property Branch; Long Beach, California; October 13, 1977.
Paul Foster; Airspace Liaison Officer; Point Mugu, California; December 5, 1977.
Roberta Greenwood; Archaeologist; Pacific Palisades, California; March 11, 1978.
Col. Halloran; Chief of Intelligence Division, 22nd Bombardment Wind, March AFB; January 24, 1978.
George Hammond; Santa Barbara, California; January 10, 1978.
George Kritzman; Archaeologist; Los Angeles, California; January 25, 1978.

Lemoore Naval Air Station; December 13, 1977 and January 9, 1978; names withheld.

Elizabeth Lester; Santa Barbara, California; January 10, 1978.

Richard H. Levensky; Deputy Command Historian, March Field; January 24, 1978.

Richard Main; Biologist, Former Park Ranger; Chicago, Illinois; March 13, 1978.

Les Maland; Operations; Point Mugu, California, October 21, 1977.

Don Meadows; Biologist; Santa Ana, California; February 21, 1978.

Ron Morgan; Photographer; Santa Barbara Island, California; January 30, 1978.

Vincent Transano; Historian, Naval Facilities Engineering Command; Port Hueneme, California; December 19, 1977.

Harold Wilson; Head, Range Support Division; Point Mugu, California; December 5, 1977.
APPENDIX #1

SAN MIGUEL ISLAND, "DESCRIPTION OF STATIONS"

HARBOR (STATION)
Looking North from Cuyler's Harbor, the station is on the highest peak in view, and the highest on the end of the Island. It is on the very summit of the hill, and from it you can look down upon the water and the sand beach to the right. The hill is covered with low black sage bushes and cactus. The station point is marked by 4 stubs with a copper tack in top, bearing about N.S.E. & W. and in a line with the centre and all equidistant from it. The pole is supported by 4 braces.

CAPE
Looking from the anchorage in an Easterly direction is a conspicuous rocky peak and upon this the signal stands. It is the first point below the anchorage. The little Island at the mouth of the Harbor bears about EN.E. from it. The signal stands near the bluff, which to the Eastward is very abrupt. A large pile of stones is placed around the foot of the signal and will identify the spot - 3 braces support the signal pole. Station point is marked as at "Harbor."

SAN MIGUEL
The signal stands upon the highest hill upon the island and about the middle of it. The above will serve to identify its locality. In looking at the hill from a distance its appearance is smooth and even, but on approaching it it is covered with low sage brushes and cactus.

The station is upon the summit of this hill. The △ is marked with 4 stubs bearing approx: N.S.E.&W. equidistant from the centre and in line with it. These each have a copper nail in the top. The pole is supported by 4 braces.

CCP
APPENDIX - Continued

GREEN MOUNTAIN

Looking from "Harbor" or "San Miguel" stations is seen a ridge; running apparently N. & S. -- presenting a green appearance, and differing in this respect from any other on the island. This ridge does not connect with any other but stands alone. The station is not on the highest point of this ridge, but to the northward of it about 200 metres. By ascending to the top and following it down northwardly it cannot be missed. Station point marked as at "San Miguel."

CACTUS

The station is on the South side of the Island and near the bluff. It is on a smooth piece of ground, without bush or undergrowth of any kind and near the boot of the hill as it slopes from station "San Miguel." A small patch of cactus is at the eastward of the station and a short distance from it. Station marked as at "Harbor."

BLACK POINT

Looking from Green Mt. to the Southward and Westward is a dark undefined point and from this and near the bluff the station is located. At this point the ground is covered with dark looking bushes. To the East of the station is a large cactus which makes up in the direction of "Green Mt." The Station is marked as at "San Miguel" and the pole supported by three braces.

BROCKWAY

The Station is on the West point of the Island but not at the extreme point. Looking from "GreenMount" is seen a strip of white sand drift and the station is nearly in a range with this. It is near the bluff and on the north shore of the island. The pole is supported by three braces and the station marked as at "Harbor."
NORTH BASE AND SOUTH BASE

The location of Base is on the East arm of the Island. The ground gradually slopes from station "San Miguel" to the eastward until at this point, when the inclination becomes less and forms a sort of plateau, but still sloping slightly towards the east. There are no distinguishing features near either terminus, or, on the line, but following the east slope of the hill on which "San Miguel" station is located, and described previously, the terminus of the base line can be found. The line preserves merely a mean elevation above the ocean.

It is more fully described in volume of Horizontal measurement on "San Miguel" Island. The termini are marked with Red sandstone monuments with the letters \[ \text{US} \] on the top, and those again marked with 4 stubs ranging N.S.E. & W. with copper tacks in their tops in a line with the centre and equidistant from it.

The Signal poles rest on these monuments and are supported by 4 braces.

PRIMARY STATION - "NEW SAN MIGUEL" SAN MIGUEL ISLAND CALIFORNIA -

O. H. TITTMAN, SUB. ASSIST., 1873

This station was established by me on "Green Mountain" San Miguel Island. It is on the highest part of the mountain approximately 808 feet above high water and about 177 meters to the S. East of the tertiary point "Green Mountain".

The station is marked by a rectangular brick pier whose foundation is laid about 2\(\frac{1}{2}\) feet in the ground. Set into the foundation is a smooth stone about 8x8x8 inches in size taken from the beach having in its centre a leaden bolt and copper tack to mark station point.
APPENDIX #2

Description of Signal for 1. △ Y erected on Santa Barbara Id. Coast of California - - February 19, 1871

This signal is erected on the highest point of the Id. and on the western knoll or hill. The base is 547 feet above the level of the sea (H.W.) on the N. Eastern Knoll the remains of a signal formerly erected by the C. S. (Coast Survey) were found. This knoll is 517 feet above the sea, therefore lower than the Western one.

The station point is secured by a granite block buried until only an inch projects above the surface of the ground. This block has the letters U.S.C.S. carved on the surface and a \( \frac{1}{2} \) in. hole drilled in the center. An iron spike in the center of the signal pole fits into this hole.

The pole is a spar of oregon pine rounded 32 ft. long 10 inches in diameter. 3 heavy spars and braces well anchored at the foot secure the main stick. These braces are bound together by cross braces of heavy timber well spiked and secured. The top of the signal is seen mounted by a 40 gallon oak barrel with galvanized iron hoops. This barrel is securely spiked to the stick. Signal, braces, barrel, all painted black.

As this signal stood the day after its erection, the heaviest S.E. storm known on the coast for 5 years it will probably last until the wood decays.

Readings were taken from the station point on all the natural objects within range and will be found accompanying this paper.

CCP
ANACAPA

The Island of Anacapa is the next east of Santa Cruz, barren and desolate without wood and water [original script without edited notations]. There are three Islands forming Anacapa Island, the signal is on the middle Island and nearest the East end of it. (ed. "not on the highest point").

There are two landings on the middle Island, one in the north, the other on the south side at either of which it is practicable at times to land and not very difficult to get up. The north side is the best anchorage and probably most practicable to get to the signal.

At present there is the remains of an old house just at this landing and a trail from here will lead you up the slope of the hill. Follow this it will take you to the highest point from which the signal is in full view. The sketch below will give you a full idea of its precise location.

It was erected September 28th. It is a white pine pole some 30 feet long supported by three braces covered with white cotton at junction of braces and pole, the pole itself is painted black. The usual notices in English and Spanish are tacked to the pole. There is a wooden cap at top of braces, painted black.

The centre of the station is marked by four stubs ranging N.S.E.&W. and three c 31 feet from it.

The readings on the following page were taken with Recon. Tel. No. 41.
Typical Lease of Lighthouse Reservation Land on the Channel Islands:
Secretary of Commerce and C. Fay Chaffee

This indenture made and entered into on the 15th days of March A.D., 1932, between Acting Secretary of Commerce, for and in behalf of the United States of America, and by virtue of the authority conferred by Act of Congress approved March 3, 1879, (U. S. Statues, Vol. 20, page 383) of the first part, and C. Fay Chaffee of the City and County of Ventura, State of California, of the second part,

WITNESSETH: That the said part of the first part for and in consideration of the rent and conditions hereinafter mentioned, leases to the said party of the second part for a term of five (5) years commencing April 1st, 1932, the middle and western islands of the Anacapa Island Lighthouse Reservation, Calif., which was reserved for lighthouse purposes by Executive Order of September 11th, 1854, subject to the following conditions:

That the said party of the second part for himself, his heirs, executors, administrators and assigns shall pay for the use of the land herein leased the sum of Seven Hundred Sixty and no/100 Dollars ($760.00), in annual installments of One Hundred Fifty Two and no/100 Dollars ($152.00), payable in advance on the first day of April of each year during the term of the lease.

That the premises hereby leased shall be used only for grazing and farm purposes.

That there is reserved by the United States of America a right of way in any direction over the land herein leased and such site or sites as may be required for the establishment of aids to navigation, roads, rights of way and landings.

That the Government shall have the right to take such timber, rock, sand, or other materials as it may require for construction purposes, and to grant permits to other parties to take timber, rock, sand, and other materials from the leased premises with the understanding that such permits will not be granted if, in the opinion of the Government or its representative, the
Granting of such permits would interfere with the rights of grazing and farming of the party of the second part under this revocable license.

That the lease shall be subject to revocation by the Secretary of Commerce at his discretion at any time prior to the expiration of the term of five (5) years for which the lease is made.

That the premises hereby leased shall not be sub-let in any event, and that no assignment of this lease shall be made without the consent of the Secretary of Commerce being first obtained in writing.

That no permanent building shall be erected by the lessee upon the grounds leased, and that all buildings or structures or other property of any kind which may be erected or placed by the lessee, his heirs, executors, administrators and assigns, during the said term of five (5) years, either upon the grounds leased or in the water in front thereof, shall be removed within two (2) months from the date of the expiration of this lease, or within two (2) months from the date of the receipt of notice of revocation, and the grounds and adjacent waters shall be left in as good condition as when occupied by the lessee, his heirs, executors, administrators, and assigns. All buildings or structures or other property not thus removed within the limit of time above mentioned shall become the property of the United States of America.

That no excavation other than for necessary building purposes shall be made on the land herein leased, and no soil, rock or other material whatsoever shall be removed from the lighthouse reservation, nor shall any trees or standing timber thereon be cut down by the licenses.

That the lessee on the last day of the term of the lease, or if it is otherwise revoked, shall and will peaceably and quietly leave, surrender and yield up unto the United States of America all and singular the said leased premises of the lighthouse reservation.

That the Superintendent or his representative shall at all times have
the right to enter on the land leased for the purpose of inspection or of constructing aids to navigation on the land herein leased and to obtain and use necessary materials and water on the islands as may be required in the construction of aids to navigation or other Government work.

That the lessee will not employ or permit the presence of any undesirable or suspicious persons on or around the reservation.

That the licensee shall in no event make or suffer to be made, any claim or demand upon or against the United States of America for any matter, cause or thing whatsoever arising out of or in connection with the said land, or the use thereof, pursuant to the permission hereby granted, but will protect and keep harmless the said United States of America, its officer and Departments, of and from any and every action, cause of action, claim or demand, either on behalf of the licensee or any person or corporation, by, because or through any matter, cause or thing happening upon said land, or in any way or manner connected therewith.

IN WITNESS WHEREOF, the said party of the first part and the said party of the second part have hereunto set their hands and seals to this and two other rescripts of this instruments in three (3) sheets, the date first herein before written.
William G. Waters Description of Improvements on San Miguel, 1911.

I have thereon quite a band of sheep, mules, cows, chickens, ducks, etc. I have built a very comfortable house 16 ft. wide by 120 ft. long, with water and set bowls in all the sleeping rooms, also bath room and toilet. There are five sleeping rooms, two dining rooms, one of which is for the shearers, a large kitchen, wash room, milk room, and meat room. The main building runs east and west. I also have an "L" running north and south, which is 14 ft. wide and about 90 feet long. In this building I have a store room, carpenter shop, blacksmith shop, harness room, cow barn and storage room for wagons and tools. I also have a separate house for the chickens and ducks. I have a wool house where I do my shearing, which is 16 x 60 ft., with sheep shed 18 x 90 ft.

On the beach I have a warehouse, although not in good condition at the present time, owing to the weight of sand that came upon it. I have three barges, two of which are 7 x 16 ft., asphaltumed and water tight. I also have one barge 12 x 16 ft. which needs repairing.

I have built a nice road from the beach up to the high lands, which is the only place available for a road. I have good well water 16 ft. deep and a windmill with force pump to force the water up to the house 125 ft. on higher land. I have several fields fenced in to be used during shearing time. All these improvements, besides several others such as filling in canyons with stone to prevent their being washed out deeply have been made after I had entered my protest against the Government when they during President Cleveland's administration wished to survey the Island.

Source: Letter, Water to 18th Lighthouse District, June 17, 1911.
APPENDIX #7

EXECUTIVE ORDER

Transferring To The Control And Jurisdiction Of The Secretary Of The Navy Certain Lands Off The Southern Coast Of California

CALIFORNIA

By virtue of and pursuant to the authority invested in me by the act of June 25, 1910 (ch. 421, 36 Stat. 847), as amended by the act of August 24, 1912, (ch. 369, 37 Stat. 497), and as President of the United States, it is ordered that San Miguel Island and Prince Island, California, between longitude 120°18'30"W. and 120°27'00"W. and latitude 34°00'50"N. and 34°04'40"N., containing 9,122 acres, more or less, which were reserved for lighthouse purposes by Executive Orders No. 1066, of April 23, 1909, and No. 2750, of November 5, 1917, be, and they are hereby, transferred from the control and jurisdiction of the Secretary of Commerce to the control and jurisdiction of the Secretary of the Navy for naval purposes; there being reserved, however, for the use of the Department of Commerce sites to be selected by that Department on which to erect and maintain such aids to navigation and incidental facilities as the Secretary of Commerce may consider desirable.

This order shall continue in full force and effect unless and until revoked by the President or by act of Congress.

FRANKLIN D. ROOSEVELT

The White House,
November 7, 1934
APPENDIX #8

CHANNEL ISLANDS NATIONAL MONUMENT - CALIFORNIA

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS certain public islands lying off the coast of Southern California contain fossils of Pleistocene elephants and ancient trees, and furnish noteworthy examples of ancient volcanism, deposition, and active sea erosion, and have situated thereon various other objects of geological and scientific interest; and

WHEREAS it appears that it would be in the public interest to reserve such lands as a national monument, to be known as the Channel Islands National Monument:

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, ch. 3060, 34. Stat. 225 (U.S.C., title 16 sec. 431), do proclaim that, subject to all valid existing rights, the following described lands in California are hereby reserved from all forms of appropriation under the public-land laws and set apart as the Channel Islands National Monument:

All of the part of the Anacapa Island Lighthouse Reservation, a group of three islets known as Anacapa Island, approximate area 700 acres, reserved by Executive Order of September 11, 1854, except the following described parcels of land:

PARCEL I. All of the land comprising the east islet of the group lying eastward of West Longitude 119° 22' 38" (North American Datum 1927) comprising 106.88 acres more or less.
APPENDIX #8 (Continued)

PARCEL II. All of the land comprising the middle islet lying between West Longitude 119° 23' 21" and 119° 23' 30" and south of Latitude 34° 00' 14" North comprising 7.68 acres more or less.

PARCEL III. All of the land comprising the west islet lying westward of West Longitude 119° 26' 10" comprising 46.72 acres more or less.

PARCEL IV. The entire area of Cat Rock, which lies off the southern extremity of the west islet comprising .5 acre more or less.

The area reserved for the national monument on Anacapa Island contains 538.22 acres more or less.

All of Santa Barbara Island, area 638.72 acres, reserved for lighthouse purposes by Executive Order of August 24, 1905, excepting the following described parcels of land:

PARCEL I. Beginning at a point in the high water line at the northwesterly side of the island which bears 258° 50' true azimuth from north, a distance of 525 feet more or less from the center of Santa Barbara Island North End Light tower; thence 110° true azimuth from north a distance of 1000 feet more or less to the intersection with the high water line at the northeasterly side of the island; thence along the high water line around the northerly point of the island to the point of beginning comprising 16 acres more or less.

PARCEL II. Beginning at a point in the high water line at the southwesterly side of the island which bears 223° true azimuth from north a distance of 300 feet more or less from the center of Santa Barbara Island South End Light tower; thence 90° true azimuth from north a distance
of 800 feet to a point; thence $330^\circ\ 30'$ true azimuth from north a distance of 2150 feet to a point; thence $270^\circ$ true azimuth from north a distance of 800 feet more or less to the intersection with the high water line at the westerly side of the island; thence southerly along the high water line to the point of beginning comprising 40.96 acres more or less.

The area reserved for the national monument on Santa Barbara Island contains 581.76 acres more or less.

The reservation made by this proclamation supersedes as to any of the above-described lands affected thereby the withdrawal made by Executive Orders of September 11, 1854, January 26, 1867, and August 24, 1905. However, the lands excepted in the above descriptions shall remain under the jurisdiction of the Bureau of Lighthouses of the Department of Commerce, as provided by the Executive orders referred to. The Bureau of Lighthouses of the Department of Commerce shall have the right of ingress and egress as to any part of Santa Barbara Island for the purpose of transporting all necessary equipment for servicing the established lights.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument, and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this monument as provided in the act of Congress entitled "An act to establish a National Park Service, and for other purposes," approved August 25, 1916, 39 Stat. 535 (U.S.C., title 16, secs. 1 and 2), and acts supplementary thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.
DONE at the City of Washington this 26th day of April in the year of our Lord nineteen hundred and thirty-eight, and of the Independence of the United States of America the one hundred and sixty-second.

FRANKLIN D. ROOSEVELT.

By the President:

SUMNER WELLES,
    Acting Secretary of State.
APPENDIX #9

ENLARGING CHANNEL ISLANDS NATIONAL MONUMENT, CALIFORNIA

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS Channel Islands National Monument, comprising all of Anacapa and Santa Barbara Islands off the coast of southwestern California, except a few small parcels of land reserved for lighthouse purposes, was established by Proclamation No. 2281 of April 26, 1938 (52 Stat. 1341), issued under authority contained in Section 2 of the act of June 8, (34 Stat. 225, 16 U. S. C. 451), and

WHEREAS Proclamation No. 2281 did not include several small islets and rocks in the vicinity of Anacapa and Santa Barbara Islands, the control of which is essential to the proper protection of the objects of geological and scientific interest, including marine life, for the preservation of which the Monument was established; and

WHEREAS it appears that it would be in the public interest to extend the boundaries of the Monument to include the areas adjacent to Anacapa and Santa Barbara Islands:

NOW, THEREFORE, I, Harry S. Truman, President of the United States of America, under and by virtue of the authority vested in me by section of the act of June 8, 1906, supra, do proclaim that, subject to valid existing rights, the arm within one (1) nautical mile of the shoreline of Anacapa and Santa Barbara Islands and as indicated on the diagram hereto attached and forming a part hereof, is reserved from all forms of appropriation under the public-land laws and added to and made a part of Channel Islands National Monument.
APPENDIX #9 (Continued)

The reservation made by this Proclamation shall not affect the lands included in existing reservations for lighthouse purposes, and the right of ingress and egress thereto, as particularly described and excepted in Proclamation No. 2283 establishing the Monument.

Warning is hereby expressly given to any unauthorized persons not to appropriate, injure, destroy, or remove any feature of this Monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this Monument as provided in the Act of Congress entitled "An Act to establish a National Park Service and for other purposes," approved August 25, 1916 (39 Stat. 535, U. S. C., title 16 secs. 1 and 2) and acts supplementary thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 9th day of February in the year of our Lord nineteen hundred and forty-nine, and of the Independence of the United States of America the one hundred and seventy-third.

HARRY S. TRUMAN

By the President.
DEAN ACHESON
Secretary of State.
APPENDIX #10

Agreement Between Department Of Navy And Interior Relating To San Miguel Island.

MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF THE NAVY
AND
THE DEPARTMENT OF THE INTERIOR
RELATING TO

PROTECTION OF NATURAL VALUES AND HISTORIC AND
SCIENTIFIC OBJECTS ON SAN MIGUEL AND PRINCE ISLANDS, CALIFORNIA

On this 7th day of May, 1963, the Secretary of the Navy and the Secretary of the Interior

ACTING in pursuance of, or in furtherance of the purposes of, the Acts of September 15, 1960 (74 Stat. 1052); June 8, 1906 (34 Stat. 225; 16 U.S.C. 431); June 23, 1936 (49 Stat. 1894; 16 U.S.C. 17k); and August 7, 1946 (60 Stat. 885; 16 U.S.C. 17j 2 (b), and

RECOGNIZING: (1) that San Miguel and Prince Islands contain archeological and paleontological remains, unique species of animal, bird, and plant life in unusually ecologic relationships, which provide excellent opportunities for scientific investigation of the biologic, ecologic, and geologic processes;
(2) that preservation and study of these natural values (which are in danger of destruction or impairment due to natural environmental conditions), would be in the public interest; and (3) that the Department of the Interior, being experienced in the preservation and interpretation of such outstanding resources, should share responsibility for the protection and study of these priceless national possessions; DO HEREBY AGREE, that the following shall govern the protection and investigation of the above mentioned resources on San Miguel and Prince Islands, in the Channel Islands, State of California:

ARTICLE I. The Department of the Interior hereby agrees:
APPENDIX #10 (Continued)

(a) to undertake an inventory of the ecologic, paleontologic, archeologic, historic, and geologic features of the islands and to conduct, or supervise the conduct of programs of scientific research or investigation relative thereto;

(b) in cooperation with the Department of the Navy, to promulgate and administer such rules and regulations for the preservation of the scientific and other natural resources of the islands and to undertake such protective measures as are not inconsistent with its use by the Department of the Navy as a missile test range or other military use;

(c) to establish a registry of Department of the Interior visitors to the islands to be controlled through a designated local naval command. This registry shall not include persons engaged in activities conducted by or for the Department of the Navy;

(d) to promote the recovery or reintroduction of unusual, rare, or locally extinct plants and animals through appropriate management measures; and

(e) to coordinate immediate evacuation of Department of the Interior personnel and visitors when directed by a designated local naval command.

ARTICLE II. The Department of the Navy hereby agrees:

(a) to permit Department of the Interior personnel and persons authorized by the Department of the Interior to study and manage the scientific and other natural resources of said islands in a manner not inconsistent with its use by the Navy;

(b) to assist in the preservation and management of such resources and to restrict access to the islands to persons authorized by the Department of the Interior through the Department of the Navy to enter thereon for the exercise of responsibilities vested in our respective Departments;

(c) to authorize personnel of the Department of the Interior and Persons authorized by the Department of the Interior, in furtherance of the purposes of this Agreement, to utilize transportation and other facilities of the De-
APPENDIX #10 (Continued)

department of the Navy for the protection, study and management of the scientific and other natural resources of San Miguel and Prince Islands, to the extend that such use will not interfere with the purposes or programs of the Department of the Navy; and

(d) to provide as much advance notice as possible in connection with personnel evacuation of the islands as required by Navy programs.

ARTICLE III. It is further understood and agreed:

(a) that the paramount use of the islands and their environs shall be for the purpose of a missile test range, May 7, 1963, and all activities conducted by or in behalf of the Department of the Interior on such islands, shall recognize the priority of such use;

(b) that the islands have for many years been set aside by Executive Order for naval purposes, and it is foreseeable that future use of the islands may include other military uses such as, but not limited to, a Naval Petroleum Reserve, and in such event, it is understood that thereafter, all activities conducted by or in behalf of the Department of the Interior on such islands, shall recognize the priority of such military uses;

(c) that the Department of the Interior may enter into agreements with research institutions, scientific organizations, and other Federal agencies in carrying out its responsibilities under this Agreement, and shall coordinate the research activities of such other persons or institutions;

(d) that the Department of the Interior, within three years from the date hereof, shall submit to the Department of the Navy a report on the resources of the islands, together with recommendations for their continued protection and management;

(e) that our Departments, to assure consistent and effective administration of San Miguel and Prince Islands, will coordinate the administration of their respective responsibilities under this Agreement or otherwise;
APPENDIX #10 (Continued)

(f) that implementation of the understanding reached in this Agreement subject to the availability of funds for such purposes; and

(g) that no permanent facility or utility construction by the Department of the Interior shall be installed unless specifically permitted by separate use agreement, and that the Navy will not be required to protect or repair any facility or utility against damage which might result from the use of the islands in connection with missile test range or other military uses.

ARTICLE IV.

(a) The Commander, Pacific Missile Range, Point Mugu, California, is designated as the local command through which access, evacuation of personnel and all other matters in this Agreement will be coordinated.

(b) The Superintendent, Cabrillo and Channel Islands National Monument San Diego, California, will coordinate and administer the provisions of the Agreement for which the Department of the Interior is responsible.

This Agreement shall remain in effect until terminated or modified by mutual agreement.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the day, month, and year first above written.

Secretary of the Navy

Secretary of the Interior
APPENDIX #11

Agreement between National Park Service and Coast Guard, 1970

LICENSE AND AGREEMENT
BETWEEN

UNITED STATES DEPARTMENT OF THE INTERIOR,
NATIONAL PARK SERVICE

and

UNITED STATES DEPARTMENT OF TRANSPORTATION,
UNITED STATES COAST GUARD

WHEREAS:

A. The United States Coast Guard formerly maintained a manned Light Station upon East Anacapa Island, Channel Islands, California, and had personnel stationed upon said island to maintain and operate said Station;

B. The Coast Guard has automated said Light Station upon East Anacapa Island and has withdrawn the personnel formerly stationed there;
C. Most of the buildings and facilities upon East Anacapa Island formerly occupied by the Coast Guard personnel stationed there remain intact;

D. The Coast Guard has only limited need for said buildings and facilities but is desirous of preserving and maintaining some of them in servicable condition;

E. Much of the land area of East Anacapa Island remains unimproved and will not be required for Coast Guard purposes in the foreseeable future;

F. The National Park Service is desirous of opening the undeveloped land areas of East Anacapa Island for recreational use by the general public;

G. The National Park Service is also desirous of obtaining for its own use certain of those buildings and facilities upon East Anacapa Island which are presently not being fully utilized by the Coast Guard and of sharing with the Coast Guard the use of certain other buildings and facilities which the Coast Guard does not require for its exclusive use;
APPENDIX #11 (Continued)

H. It would be to the mutual benefit of the Coast Guard and the National Park Service for National Park Service personnel to occupy certain of the buildings upon East Anacapa Island formerly occupied by Coast Guard personnel and for the National Park Service to maintain and operate certain of the facilities upon said island formerly maintained and operated by Coast Guard personnel and to administer and regulate use of the unimproved land areas of the island by the general public.

THEREFORE, it is agreed:

1. The National Park Service shall have joint custody and use together with the Coast Guard of the unimproved land areas of East Anacapa Island and may, in its discretion, permit members of the general public to enter upon and use said unimproved areas for recreational and educational purposes;

2. The National Park Service shall not permit any use of land or facilities on East Anacapa Island which would interfere with any Coast Guard function and shall take proper precautions to prevent vandalism or accidental damage to any Coast Guard property before admitting members of the general public to the island;

3. The Coast Guard shall have exclusive occupancy of the Fog Signal Building and the Lighthouse, labeled respectively B and C on the attached Coast Guard Plot Plan. Drawing Number 534-S, dated 2 November 1955;

4. The National Park Service shall not, without the express permission of the Coast Guard, permit anyone to approach the foregoing Fog Signal Building beyond the sign, located approximately 500 feet west of said Building, warning of possible hearing damage from the Fog Signal;

5. The National Park Service shall have joint custody and use together with the Coast Guard of the Wharf, the Hoist House and hoist, labeled respectively D and F on the attached Plot Plan, and the stairway between the upper and lower landings;

6. The National Park Service shall maintain the facilities mentioned in the foregoing paragraph 5 in good repair;
7. The National Park Service shall have exclusive occupancy of Quarters C and the Service Building upon East Anacapa Island, labeled respectively J and L on the attached Plot Plan;

8. The National Park Service shall have exclusive occupancy of the eastern portion of the Power House, labeled K on the attached Plot Plan, and shall have use of the diesel generators therein for supplying its electrical power needs upon the island;

9. The Coast Guard shall have exclusive occupancy of the living quarters in the western portion of said Power House;

10. The National Park Service shall have exclusive use of the Fuel Tanks, labeled P on the attached Plot Plan, for storage of fuel;

11. The Coast Guard shall have exclusive occupancy and use of the Oil House, labeled O on the attached Plot Plan;

12. The Coast Guard shall supply all fuel required by its own or National Park Service operations upon East Anacapa Island and shall bill the National Park Service for fuel supplied to the National Park Service;

13. The National Park Service shall have custody and use of the entire water and sewerage systems upon East Anacapa Island, including the Water Tank Building and the Concrete Watershed, labeled respectively M and N on the attached Plot Plan, and all pipelines in connection therewith, and shall maintain said systems in good repair, except that the National Park Service may but shall not be required to maintain the Concrete Watershed in operating condition;

14. The National Park Service shall at all times maintain a supply of fresh water in the Water Tank Building sufficient to supply the reasonable requirements of the sanitary and bathing facilities in the living quarters occupied by the Coast Guard in the Power House;

15. The National Park Service shall provide fire protection for all buildings and facilities upon East Anacapa Island;

16. The National Park Service shall at all times keep the Helicopter Landing Area and the Concrete Watershed clear and free from all obstructions which would interfere with their use for helicopter landings;
17. In the event the National Park Service establishes radio, telephone or telegraphic communications channels with its personnel upon East Anacapa Island, the National Park Service shall allow the Coast Guard reasonable access to such channels of communication and shall cause its personnel upon the island to cooperate in every reasonable manner with the Coast Guard in determining whether the automated Aid to Navigation is functioning properly and what defects, if any, exist in said Aid;

18. The National Park Service shall notify the Coast Guard Station, Port Hueneme, California, whenever East Anacapa Island is to be physically occupied by any of its employees, or anyone else it so authorizes;

19. In the event this License and Agreement is terminated or allowed to expire without renewal, the National Park Service shall, upon request of the Coast Guard, demolish Quarters C and the Service Building, remove the Fuel Tanks from the island and return all other facilities used or occupied by it to the condition existing as of the date of this License and Agreement;

20. The National Park Service shall make no permanent alterations or improvements upon the land, buildings or facilities upon East Anacapa Island without the prior written consent of the Coast Guard;

21. The National Park Service shall, upon demand of the Coast Guard, promptly repair any damage caused to facilities of the Coast Guard upon East Anacapa Island by the operations or negligence of the National Park Service;

22. This License and Agreement shall continue in effect for five years from the date hereof and may be renewed annually thereafter but is subject to cancellation at any time by either party upon 90 days notice to the other party;

23. Nothing in the License or Agreement shall be construed to grant the National Park Service anything more than a mere revocable license to use the land, buildings, and facilities of the Coast Guard upon East Anacapa.
APPENDIX #11 (Continued)

Island, and title to said island and all improvements thereon is and shall remain in the Coast Guard free of any and all liens, leases or easements in favor of the National Park Service.

FOR THE NATIONAL PARK SERVICE

December 29, 1969 DATE

ACTING REGIONAL DIRECTOR

FOR THE UNITED STATES COAST GUARD

January 26, 1970 DATE

CHARLES TIGHE
Rear Admiral, U.S. Coast Guard
Commander, Eleventh Coast Guard District
INTRODUCTION

It has been determined that it would be in the mutual interest of both parties to amend the agreement signed May 7, 1963, in order to better protect, preserve and administer San Miguel and Prince Islands.

FURTHER RECOGNIZING: That the current Memorandum of Agreement between the Department of the Navy and the Department of the Interior relating to protection of natural values and historic and scientific objects on San Miguel and Prince Islands, California, and dated the 7th day of May 1963 has been in effect in excess of twelve years; that the interest of the Scientific Community and others, in the study of archeological, and paleontological remains, unique species of animal, bird, and plant life in unusual ecological relationship has during this interval steadily increased; that the National Park Service is desirous of assuring preservation of the scientific and other natural resources of San Miguel and Prince Islands, and in providing the means of such assurance, and to otherwise enhance these Islands in consideration of future generations, while recognizing continuing Navy requirements for priority use of these Islands and the surrounding area as essential to the operational mission and training capabilities; that it would be in the Navy interest for the National Park Service to expend appropriated funds to enforce National Park Service regulations and other applicable laws, and to exercise tight visitor control.

Now therefore the Memorandum of Agreement between these Departments related to San Miguel and Prince Islands, California, dated the 7th day of May 1963 is herewith amended as specific in ensuing paragraphs; those paragraphs not specifically amended remain in full effect.

ARTICLE I. The Department of the Interior hereby agrees:

I. (a) Is amended in full to read: To conduct or supervise programs of scientific research, or investigations relative to the ecologic, paleontologic, archeologic, historic, or geologic features of San Miguel or Prince Islands.
I. (b) Is amended to add after the last word: and to enforce all applicable laws and regulations.

I. (c) Is amended in full to read: To provide for the preservation and protection of the scenery and the natural and historic objects, and the wildlife therein, and to provide for the enjoyment of the same, in such manner and by such means as will leave them unimpaired, for the enjoyment of future generations.

I. (d) Is amended in full to read: To allow for public access to San Miguel Island through a "controlled Reservation System" which shall assure preclusion of conflict between such controlled access, and planned Navy operations on San Miguel Island or in the surrounding Warning Area (W-289N) or Surface Danger Zone: it being further understood that the continuing effective status of Warning Area 289N, and the San Miguel Island danger zone is essential to Navy operational requirements. It is further understood and agreed that any and all public visitors to San Miguel Island shall at all times be under the supervision of the National Park Service, and that any public access shall be confined to daylight hours.

I. (e) Is amended in full to read: The Department of the Interior agrees to coordinate and assure immediate evacuation of Department of the Interior personnel, personnel of other Federal, state, or municipal agencies, and others from San Miguel Island, Prince Island, or portions thereof, when so directed by the designated Department of the Navy Agent identified in ARTICLE IV (a) of this Agreement; such direction of evacuation of personnel from San Miguel Island or Prince Island will be provided to the local office of the Channel Islands National Monument Superintendent, allowing when possible 24 hours lead time, but in no instance less than four hour lead time. The Superintendent or his designee shall report the personnel evacuation status to the Department of the Navy Agent representative at times stipulated in an evacuation request.

ARTICLE III. It is further understood and agreed:

(b) Is amended in full to read: That the Islands have for many
years been set aside by Executive Order for Naval purposes, and it is foreseeable that future use of the Islands may include other military uses and in such event, it is understood that thereafter, all activities conducted by or in behalf of the Department of the Interior on such Islands, shall recognize the priority of such military uses; however, in the event the Department of the Navy determines it no longer requires the use of the Islands, the Department of the Interior, National Park Service shall seek authorization for the Islands, to be preserved and protected indefinitely, as units within the National Park System.

(c) Is amended in full to read: That the National Park Service may enter into agreement with research institutions, scientific organizations, and other Federal agencies in carrying out its responsibilities such other persons or institutions; the National Park Service will have an Agreement with the National Marine Fisheries Service to permit it to continue management and research of the pinnipeds on the island.

(h) Article (h) is added: That the National Park Service, within one year of date of signing this Amendment, shall submit to the Department of the Navy a statement of management including land classification for the preservation and use of the island. The plan will be subject to concurrence and approval by the Department of the Navy.

ARTICLE IV.

(c) The Commander, Pacific Missile Test Center, Point Mugu, California, is the designated agent with responsibility for all matters within the terms of this Agreement for the Department of the Navy.

(b) The Superintendent, Channel Islands National Monument, Ventura, California, is the designated authority with responsibility for all matters within the terms of this Agreement for the Department of the Interior.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals this ______________ date of ______________

ACTING SECRETARY OF THE NAVY

ASSISTANT SECRETARY OF THE INTERIOR
XVII. SUMMARY OF RECOMMENDATIONS FOR MANAGEMENT

Recommendations for management are summarized in this section. Most of the recommendations have been mentioned by discipline elsewhere in the body of this report, and have been discussed at greater length. In a very few cases, recommendations are mentioned here for the first time. The section is organized as follows: first, general recommendations; second, those that concern all three islands; and third, those that concern Santa Barbara, Anacapa, and San Miguel Islands specifically. The reader is also referred to Chapter XV, Design of Future Research, for other recommendations.

It is our conviction that the general recommendations be implemented at once. Also, programs to eliminate the European Rabbit, Black Rat, and feral cat (if present) should begin immediately. Beyond these recommendations, we have chosen not to express priorities. Priorities should not be established by us in isolation, but rather should be developed as a result of continuing dialogue with the staff of the Channel Islands National Monument.

A. GENERAL RECOMMENDATIONS

1. Advisory Committee.---Establish a Research Advisory Committee to review the implementation of management plans for the Park Service, and to review all research and collecting that are proposed by scientists, interns, and Park Service staff. This would be a safeguard for the Park Service, plus it would avoid conflicting research projects, several of which were identified during the course of this study. The committee should review management and research projects before the work begins and at least once while work is in progress, calling in additional trained biologists, geologists, archaeologists, historians, and other specialists, as needed. The Committee should also advise on scientific collecting regulations and permit procedure.

2. Research.---Actively encourage scientific research by institutions of higher learning and scientific establishments such as museums and botanic gardens. Such research can only aid the Park Service in making management decisions and implementing management strategies and policies. Regional repositories for plant and animal specimens should also be established.
3. Publications.--Distill from the natural and historical information available, a brochure for the public, that explains the geological, biological, archaeological, and historical resources of the Channel Islands National Monument. Include general statements on the Monument's restrictions and regulations and how they relate to the protection and conservation of the natural resources on the Islands.

Prepare a more detailed booklet for the rangers which includes illustrations (drawings or photographs) of all the rare and sensitive species (snails, plants, etc.) for identification purposes and where these species occur. If the rangers are to police and protect these resources, they ought to know what they look like, their habitat preferences, and where they occur.

Establish a training program for the rangers, preferably in conjunction with the Museum, Botanic Garden, and University of California at Santa Barbara. Such a program should be designed to introduce the natural history of the islands for interpretive purposes. It would also serve to introduce the rangers to some of the research activities on the islands and to regional personnel and other pertinent information.

B. RECOMMENDATIONS CONCERNING ALL THREE ISLANDS

1. Establish small weather monitoring stations on all islands. Accumulated data on (at least) rainfall, temperature, humidity, and wind velocity, duration and direction would be valuable to science and management.

2. Shift or abandon trails and camping areas as needed to reduce erosion and "over-use" of sites.

3. Minimize any soil erosion or deterioration of native vegetation. Erosion control should be carefully planned to avoid changing drainage patterns that could adversely affect plants and animals. Numerous cases have been discovered that link important animal species to vegetation characteristics, and vegetation to soil structure.

4. In addition to the protection of endemic and legally "rare" organisms, work to insure preservation of all island biological communities, including Coreopsis populations, bunchgrass habitats, and sea cliff communities.

5. Reduce introduced iceplant (Mesembryanthemum crystallinum, M. nodiforum, and M. crassifolium). This can be accomplished, first, by removal of new seedlings in new areas and at the edge of established populations. Large-
scale eradication should only follow on-site studies to develop procedures that will minimize erosion and the impact to native animals, especially snails. Other introduced species, such as oats (Avena), are too widespread to eliminate, and the native Iceplant (Carpobrotus aequilaterus) is not to be removed.

6. Eradicate new weeds when they become established.

7. Use seeds or stock from the specific island involved, in any revegetation programs, to avoid contamination of unique gene pools.

8. Prohibit the transport of pets to the islands and actively educate the visiting public on the dangers of introducing non-native species. Feral cats pose a particular threat to nesting sea and land birds and to native mice. They may also compete with the Island Fox (on San Miguel). Dogs would pose a similar threat. Animal waste from pets may contribute to disease and parasite loads for native animals.

9. Establish animal-proof outhouse facilities and refuse containers (wherever these are used) to prevent access by mice, rats, foxes, and gulls. New structures should also be of rodent-proof construction in order to alleviate future problems with the native Deer Mice becoming pests in these structures.

10. Encourage or develop programs to reintroduce the Bald Eagle and the Peregrine Falcon as a top-level avian predator to San Miguel and Anacapa Islands.

C. SANTA BARBARA ISLAND

1. Reduce erosion along the footpath from the campground to the saddle between North and Signal Peaks by installing diagonally emplaced "quiet policemen" (railroad ties, etc.) at reasonable intervals along the entire affected area to divert winter runoff.

2. Inform hikers of the instability of certain sea cliffs.

3. Avoid any sewage facilities that employ leach lines for dispersal of liquid waste through the soil. The thin soil cover and the character of the soil will force sewage water to eventually leach out along canyons and cliff faces.

4. Eliminate the introduced iceplant Mesembryanthemum crystallinum and M. nodiforum. Eliminate Tocalote
(Gentaea melitensis) especially from the western slope of Signal Peak, Horseweed (Conyza canadensis) and Flax-leaved Fleabane (Conyza bonariensis) from Landing Cove and Cliff Canyon areas, and Italian Ryegrass (Lolium perenne) from the southeastern terrace.

5. To avoid damage to Coreopsis and snail populations, do not locate trails in or about Cave and Middle Canyons along the north-facing slopes. Trails may be established along the south-facing slopes of these canyons, provided they avoid the sensitive plant (e.g., Dudleya traskiae). Also, do not place trails across or along the water course to the bottom of Cave and Middle Canyons. Access to these canyons for any reason should be carefully controlled.

6. Close the trail across the top of North Peak; people in the area of the northwest flank and peak presently constitute a potential threat to populations of Tryon's Snail (Micrarionta tryoni), a "threatened" species.

7. Insure seasonal flow of water across the junction and down the small drainage gully located between Cave Canyon and Middle Canyon. Water flow here provides seepage to the north facing slope of the upper reaches of Cave Canyon, which contains an important Coreopsis stand and is one of the principal habitats for the Slug Snail (Binneya notabilis), the Concentrated Snail (Micrarionta facta), and Durant's Snail (Haplotrema duranti), all of which are "endangered" or "threatened" species. Also, water bars should be located across the trail at the head of Cave Canyon to channel runoff into the canyon instead of down the trail.

8. Add a statement to visitor information and enforce the policy of not turning over rocks; large rocks cover snails and Island Night Lizards. The Night Lizard will not return to a disturbed site. Prohibit collecting (including scientific collecting) of the Island Night Lizard on Sutil and Santa Barbara Islands.

9. Eliminate the introduced European Rabbit. The rabbit is an acknowledged threat to native vegetation and has indirectly caused the extinction of two passerine species, (the House Finch and Song Sparrow) and has also contributed to the reduction in distribution of the Concentrated Snail and Tryon's Snail.

**D. ANACAPA ISLAND**

1. Set a few "quiet policemen" (railroad ties, etc.) along the main path from the houses to the present picnic area to help divert winter runoff.
2. Discontinue the use of leach lines and explore the use of self-contained organic toilets, or use only outhouses and pits for human waste. Liquid wastes—not solid wastes—are a problem in that they cannot be deeply dispersed in the thin topsoil and will soon leach out along cliffs.

3. Relocate the camp on East Anacapa to an area closer to the landing and in vegetation composed of the introduced species of iceplant (Mesembryanthemum). Geologically there is the potential for serious erosion in the present high-use location. The present location is near a botanically important habitat, and Ayer's Snail is known to occur in the area.

4. Close Middle Anacapa to the public. Closure is needed from late summer until mid-spring to keep from damaging plant cover during the driest seasons and to allow seedling establishment. From mid-spring to mid-summer closure is needed to protect nesting colonies of Western Gulls. In any case, human activity may benefit introduced rats to the detriment of native mice, nesting sea and land birds, and land snails.

5. West Anacapa should be closed to the public, with the exception of the area adjacent to Frenchy's Cove. This will protect sensitive vegetation and the nesting rookeries of the California Brown Pelican, an "endangered" and "fully protected" species. At Frenchy's Cove use rat- and gull-proof refuse containers.

6. Undertake a study to determine if the Common Garden Slug (Milax gagetes) has been introduced on West Anacapa (suspected slime trails have been discovered). If so, evaluate the possibility and methods of eliminating the species on this island.

7. Eradicate the Black Rat on all of the Anacapases, beginning with East Anacapa. To aid in this task, remove junk piles, stacks of wood, and "historical debris" from East Anacapa and from the Frenchy's Cove area of West Anacapa.

8. Eliminate feral cats, if discovered on Middle and West Anacapa. Feral cats are known to pose a significant threat to the native fauna, especially nesting land and sea birds.

9. Eliminate Horseweed (Conyza canadensis) and Flax-leaved Fleabane (Conyza bonariensis) especially from the lighthouse area.

   PLUCK FLEA BANE HEADS - MOST EFFECTIVE MEANS.
E. SAN MIGUEL ISLAND

1. The existing abandoned navy road running approximately from one end of the Island to the other, should continue to be used as the main path for foot traffic. However, at the first sign of erosion in specific sections, foot traffic should be shifted to one side of the road. Shifting the trail in the vicinity of the old road may be established as a regular management strategy to avoid erosion.

2. Trails should be along beaches whenever possible, such as at Simonton Cove, Cuyler Harbor, and along the south coast. Foot traffic on beaches would have very little effect on the landscape; any effect would be very temporary. Trails connecting beaches should, however, pass through only non-sensitive areas.

3. Restrict public access to the Pleistocene mammoth beds at Running Springs, until such time as a controlled excavation of the fossils in this area may contribute to an interpretive program.

4. Undertake controlled excavation of the Pleistocene mammoth beds at Running Springs under the guidance of professional archaeologists, geologists, and paleontologists. Develop this activity as part of the interpretive program for the island. Archaeological and paleontological excavations, studies on the evolution of the Pygmy Mammoth, and the possible interaction of mammoths with early man would together offer a very appealing interpretive program for the public, and would contribute as well to scientific studies of the unique elephant species.

5. Restrict access to the caliche forests, especially those situated approximately between San Miguel Hill and Green Mountain. Trails may go up to the vicinity of the caliche fields, or, better, to a nearby vantage point overlooking the fields, but should not go into the caliche itself. Undertake a program to determine the annual rate of loss of calcareous rhizocrentrations. An annual count or photographic census should be undertaken to determine the annual status of the irreplaceable concretions to determine whether or not a yearly loss is occurring.

6. Prohibit public camping on the island in order to limit the danger of fire, to prevent undue trail erosion, and to avoid upset to the ecological relationships of the Island Fox. Activities involving the public should be introduced slowly. Landing on the island should
continue to be a Ranger, trained guide, or authorized naturalist/guide. Parties should be confined to trails and kept away from biologically, archaeologically, or geologically sensitive areas. After interpretive programs are developed, selected sensitive areas may be visited or viewed from nearby.

7. Retain the essential natural character of the island by minimizing construction. For example, no pier should be built at Cuyler Harbor or at any other location. Likewise, there should be no replicas or facsimiles of historically important structures, such as Cabrillo's boat, the Lester Ranch House, the Nidever Adobe, or Indian dwellings. In general, retain this island as a controlled environment with minimal human impact. Management decisions on other islands may at one point require study of a relatively undisturbed island.

8. Facilities considered necessary for the management of the island, such as a dwelling for rangers or housing for scientists, should be temporary in style and location. Such facilities should be located in already disturbed, rather than pristine, sites.

9. Relocate the ranger's outhouse away from where drainage may flow into the nearby stream. Water in Canada do Mar (Nidever Canyon) is presently contaminated with the fecal bacteria, E. coli.

10. Rebuild the old Nidever dam just below the present ranger station to reduce erosion of the alluvial flats on which temporary structures are now located.

11. Do not establish permanent or temporary structures anywhere around the immediate periphery of Cuyler Harbor, either above the cliffs or at their base; the substrate is unstable and subject to unpredictable and frequent landslides.

12. Drinking water for the Cuyler Harbor area may be tapped from spring no. 24 (see hydrology map), situated in the slump area between Nidever Canyon (Canada do Mar) and the palm trees. Other sites may also be suitable. Water for the west end may be obtained from spring no. 28 at Bath Beach (Pete's Camp). The best site to try to establish a well is the west side of the Dry Lake area.

13. Eliminate Spiny Clotbur (Xanthium spinosum) from Drylake and Willow Canyon areas, Horseweed (Conyza canadensis) from Drylake area, and Fan Palm (Washingtonia) from western Cuyler Harbor.
14. Fence off a portion of the original *Lavatera* population to provide for seedling re-establishment and to protect these plants from seals and sea lions.

15. Actively conserve shrubby vegetation in canyons and near fresh water, as this is the preferred nesting and foraging habitat of the San Miguel Island Song Sparrow.

16. Begin immediately a plan to eliminate the Black Rat, which is now limited in distribution, but is a potential threat to native mice (*Peromyscus*) and nesting birds, especially the Song Sparrow. Rats may also transmit diseases to the San Miguel Island Fox and it will be easier to eradicate Black Rats now, before they overrun the island.
Natural Resources Study
of the
Channel Islands National Monument, California

PLANT MAPS AND BOTANY APPENDICES

(For restricted distribution)
MAP 5.4
Santa Barbara Island
DISTRIBUTION OF
*Astragalus traskiae*

Few to scattered at each station

Revised June, 1979
MAP 5.5
Santa Barbara Island
DISTRIBUTION OF
*Dudleya traskiae*
(Santa Barbara Island Live-Forever)
1978

Locally common west of Signal
Peak, rare at other stations
MAP 5.6
Santa Barbara Island
DISTRIBUTION OF
Eriogonum giganteum
compactum

Locally common north of North Peak, few to scattered at other stations

Revised June, 1979
MAP 5.7
Santa Barbara Island
DISTRIBUTION OF
Eriophyllum nevinii
(Silver-Lace)

Scattered to locally common at each station

Revised June, 1979
MAP 5.8
Santa Barbara Island
DISTRIBUTION OF
Eschscholzia ramosa
(Island Poppy)

Revised June, 1979
MAP 5.9
Santa Barbara Island
DISTRIBUTION OF
Gilia nevinii

Few to scattered at each station

Revised June, 1979
MAP 5.10
Santa Barbara Island
DISTRIBUTION OF
Hemizonia clementina

Few to scattered at each station.
MAP 5.11
Santa Barbara Island
DISTRIBUTION OF
Lotus argophyllus ornithopus
(Silver Deerweed)

Shag Rock
Arch Point
Cave Canyon
Middle Canyon
Graveyard Canyon

Few at each station

 Revised June, 1979
MAP 5.12
Santa Barbara Island
DISTRIBUTION OF
Malacothrix foliosa

Scattered to common at each station

Revised June, 1979
MAP 5.13
Santa Barbara Island
DISTRIBUTION OF
*Platystemon californicus ciliatus* (Cream Cups)

Locally common at head of Cliff Canyon, few at other stations

Revised June, 1979
MAP 5.14
Anacapa Island
DISTRIBUTION OF
Astragalus miguelensis
(San Miguel Island Locoweed)

Few to scattered at each station
MAP 5.15
Anacapa Island
DISTRIBUTION OF
Castilleja hololeuca (Paint Brush)

Occasional to common at each station

(Middle)

(West)

(East)

Revised June, 1979
MAP 5.16
Anacapa Island
DISTRIBUTION OF
Ceanothus megacarpus insularis
(Island Bigpod Ceanothus)

Rare to few at each station

Revised June, 1979
MAP 5.17
Anacapa Island
DISTRIBUTION OF
*Diplocactus parviflorus*
(Island Monkey Flower)

Occasional to scattered at each station.

Revised June, 1979
MAP 5.18
Anacapa Island
DISTRIBUTION OF
Eriogonum arborescens
(Santa Cruz Island Buckwheat)

Occasional to common at each station

Revised June, 1979
MAP 5.19
Anacapa Island
DISTRIBUTION OF
Eriogonum grande
subspecies grande

Occasional to common at each station
Anacapa Island
DISTRIBUTION OF
Erysimum insulare
(Island Wallflower)

Rare to few at each station

Revised June, 1979
MAP 5.21
Anacapa Island
DISTRIBUTION OF
Gilia nevinii

Few to occasional at each station

Revised June, 1979
MAP 5.22
Anacapa Island
DISTRIBUTION OF
Haplopappus detonsus

Scattered to common at each station
on West Island, rare at stations on
Middle Island

(Middle)

(East)
MAP 5.23
Anacapa Island
DISTRIBUTION OF
Hemizonia clementina

Scattered at each station

Revised June, 1979
MAP 5.24
Anacapa Island
DISTRIBUTION OF
Heuchera maxima
(Island Alum-Root)

Scattered to common at each station.

Revised June, 1979
MAP 5.25
Anacapa Island
DISTRIBUTION OF
Lavatera assurgentiflora
(Island Mallow)

Rare at each station

Location uncertain
Probably collected here in 1930

Revised June, 1979
MAP 5.26
Anacapa Island
DISTRIBUTION OF
*Mahonia pinnata* subspecies
*insularis* (Island Barberry)

Location uncertain
Not seen since 1940

(Middle)

0 1/2 mile

0 1/2 kilometer

Revised June, 1979
DISTRIBUTION OF *Malacothrix foliosa*

Rare to few at each station

Revised June, 1979
MAP 5.28
Anacapa Island
DISTRIBUTION OF
*Malacothrix squalida*

Rare to few at each station

Revised June, 1979
MAP 5.29
Anacapa Island
DISTRIBUTION OF
*Quercus tomentella* (Island Oak)

Locally common at each station

Revised June, 1979
MAP 5.30
San Miguel Island
DISTRIBUTION OF
Astragalus miguelensis
(San Miguel Island Locoweed)

Revised June, 1979
MAP 5.31
San Miguel Island
DISTRIBUTION OF
Castilleja hololeuca (Paint Brush)
MAP 5.33
San Miguel Island
DISTRIBUTION OF
Eriogonum grande
subspecies rubescens

Occasional to scattered at each station

Revised June, 1979
MAP 5.34
San Miguel Island
DISTRIBUTION OF
Erysimum insulare
(island Wallflower)

Revised June, 1979

Revised June, 1979
MAP 5.35
San Miguel Island
DISTRIBUTION OF
Galium buxifolium

Point Bennett

Castle Rock

Occasional to scattered at each station

Prince Island

Tyler Harbor

Haw Rock

Hoffmann Point

Willow Canyon

Cordwell Point

Revised June, 1979
MAP 5.40
San Miguel Island
DISTRIBUTION OF
Malacothrix indecora

Rare at each station

Revised June, 1979
MAP 5.41
San Miguel Island
DISTRIBUTION OF
Orobanche parishii
subspecies brachyloba
MAP 5.36
San Miguel Island
DISTRIBUTION OF
Galium californicum
subspecies miquelense

MAP 5.36
San Miguel Island
DISTRIBUTION OF
Galium californicum
subspecies miquelense

Scattered to locally common at each station

Revised June, 1979
MAP 5.37
San Miguel Island
DISTRIBUTION OF
*Helianthemum greenei*

Location uncertain Reported in 1939

Revised June, 1979
MAP 5.39
San Miguel Island
DISTRIBUTION OF
Malacothrix incana

Revised June, 1979
MAP 5.42
San Miguel Island
DISTRIBUTION OF
Phacelia divaricata
variety insularis

Few to occasional at each station

Revised June, 1979
Appendix 5.1  Santa Barbara Island Plant List

Achillea borealis  Yarrow
Amblyopappus pusillus  Fiddle-neck
Amsinckia intermedia  Island Coastal Sagebrush
Amsinckia spectabilis  California Saltbush
Aphanisma  Australian Saltbush
Artemisia californica var. insularis  Slender Wild Oats
Astragalus  Wild Oats
Atriplex californica  Coyote Brush
Atriplex pacifica  Black Mustard
Atriplex semibaccata  Ripgut Grass
Avena barbata  Soft Chess
Avena fatua  Red Brome
Baccharis pilularis subsp. consanguinea  Red-maids
Brassica nigra  Island Morning Glory
Bromus arizonicus  Beach Primrose
Bromus diandrus  Marijuana
Bromus mollis  Tocalote
Bromus rubens  Soap Plant
Bromus trini  Nettle-leaf Goosefoot
Calandrinia ciliata var. menziesii  Miner's Lettuce
Calandrinia maritima  Flax-leaved Fleabane
Calystegia macrostegia subsp. macrostegia  Horseweed
Camissonia cheiranthifolia subsp. cheiranthifolia  Giant Coreopsis
Cannabis sativa  Beach Primrose
Centaurea melitensis  Marijuana
Chenopodium californicum  Tocalote
Chenopodium murale  Soap Plant
Claytonia perfoliata  Nettle-leaf Goosefoot
Coneza bonariensis  Miner's Lettuce
Coneza canadensis  Flax-leaved Fleabane
Coreopsis gigantea  Horseweed
Crassula erecta  Giant Coreopsis
Cryptantha clevelandii var. clevelandii  Beach Primrose
Cryptantha maritima  Marijuana
Daucus pusillus  Tocalote
Dichelostemma pulchellum  Soap Plant
Dudleya traskiae  Nettle-leaf Goosefoot
Eriogonum giganteum var. compactum  Santa Barbara Island Buckwheat
Eriophyllum nevinii  Silver-lace
Erodium cicutarium  Redstem Filaree

(continued)
Santa Barbara Island (continued)

Erodium moschatum
Eschscholzia ramosa
Galium aparine
Galvezia speciosa
   (according to Cooper)
Gilia nevini
Hemizonia clementina
Hemizonia fasciculata subsp.
   fasciculata
Hesperocnide tenella
Hordeum glaucum
Hordeum pusillum
Hutchinsia procumbens
Lamarckia aurea
Lasthenia chrysostoma
Lepidium nitidum var. nitidum
Lolium perenne
Lotus argophyllus subsp. ornithopus
Lycium californicum
Lycopersicon esculentum
Malacothrix foliosa
Malva parviflora
Marah macrocarpus
Medicago polymorpha var. polymorpha
Melica imperfecta
Mesembryanthemum crystallinum
Mesembryanthemum nodiflorum
Microseris linearifolia
Mirabilis californica
Monolepis nutalliana
Muhlenbergia microsperma
Oligomeris linifolia
Opuntia littoralis
Opuntia oricola
Opuntia proliferas
Parapholis incurva
Parietaria hespera
Perityle emoryi
Phacelia aff. floribunda
Phalaris minor

Pholistoma auritum var. auritum
Pholistoma racemosum
Phyllospadix scouleri
Phyllospadix torreyi

Whitestem Filaree
Island Poppy
Bedstraw
Island Snapdragon

Hesperocnide tenella
Hordeum glaucum
Hordeum pusillum
Hutchinsia procumbens
Lamarckia aurea
Lasthenia chrysostoma
Lepidium nitidum var. nitidum
Lolium perenne
Lotus argophyllus subsp. ornithopus
Lycium californicum
Lycopersicon esculentum
Malacothrix foliosa
Malva parviflora
Marah macrocarpus
Medicago polymorpha var. polymorpha
Melica imperfecta
Mesembryanthemum crystallinum
Mesembryanthemum nodiflorum
Microseris linearifolia
Mirabilis californica
Monolepis nutalliana
Muhlenbergia microsperma
Oligomeris linifolia
Opuntia littoralis
Opuntia oricola
Opuntia proliferas
Parapholis incurva
Parietaria hespera
Perityle emoryi
Phacelia aff. floribunda
Phalaris minor

Pholistoma auritum var. auritum
Pholistoma racemosum
Phyllospadix scouleri
Phyllospadix torreyi

(continued)
Santa Barbara Island (continued)

Plantago ovata  Cream Cups
Platystemon californicus var. ciliatus  California Polypody
Polypodium californicum  Rabbitsfoot Grass
Polypogon monspeliensis  Fairy Mist
Pterostegia drymarioides  California Chicory
Rafinesquia californica  Wildmill Pink
Silene gallica  Milk Thistle
Silybum marianum  Common Sow-thistle
Sonchus oleraceus  
Sonchus tenerimus  
Spergularia macrotheca var. macrotheca  Sand Spurry
Stipa pulchra  Purple Needle Grass
Stylomecon heterophylla  Wind Poppy
Suaeda californica  Sea-blite
Thelypodium lasiophyllum var. lasiophyllum  
Trifolium palmeri  Tomcat Clover
Trifolium tridentatum  Six Weeks Fescue
Vulpia octoflora  Spiny Clotbur
Xanthium spinosum  

### Appendix 5.2 Anacapa Island Plant List

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abronia maritima (according to Howell)</td>
<td>Sticky Sand-verbena</td>
</tr>
<tr>
<td>Achillea borealis</td>
<td>Yarrow</td>
</tr>
<tr>
<td>Adiantum</td>
<td>California Maidenhair</td>
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<tr>
<td>Adiantum jordanii</td>
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<tr>
<td>Amaranthus</td>
<td></td>
</tr>
<tr>
<td>Amblyopappus pusillus</td>
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</tr>
<tr>
<td>Ambrosia chamissonis var. bipinnatisecta</td>
<td>Beach-bur</td>
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<tr>
<td>Amsinckia intermedia</td>
<td>Fiddle-neck</td>
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<tr>
<td>Amsinckia spectabilis</td>
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<tr>
<td>Anagallis arvensis</td>
<td>Pimpernel</td>
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<tr>
<td>Antirrhinum nuttallianum</td>
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<tr>
<td>Apiastrum angustifolium</td>
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<tr>
<td>Artemisia californica var. californica</td>
<td>Coastal Sagebrush</td>
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<tr>
<td>Astragalus didymocarpus</td>
<td></td>
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<tr>
<td>Astragalus miguelensis</td>
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<tr>
<td>Astragalus trichogonus subsp. leucopis</td>
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<tr>
<td>Atriplex californica</td>
<td>California Saltbush</td>
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<td>Atriplex coulteri</td>
<td>Brewer's Saltbush</td>
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<td>Atriplex lentiformis subsp. breweri</td>
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<tr>
<td>Atriplex pacifica</td>
<td>Australian Saltbush</td>
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<tr>
<td>Atriplex semibaccata</td>
<td>Slender Wild Oats</td>
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<tr>
<td>Avena barbata</td>
<td>Wild Oats</td>
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<tr>
<td>Avena fatua</td>
<td></td>
</tr>
<tr>
<td>Baccharis douglasii (according to Mason)</td>
<td>Mule-fat</td>
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<tr>
<td>Baccharis glutinosa</td>
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<tr>
<td>Baccharis pilularis subsp. consanguinea</td>
<td>Coyote Brush</td>
</tr>
<tr>
<td>Berula erecta (according to Dunkle)</td>
<td>Brickell Bush</td>
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<tr>
<td>Brickellia californica</td>
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</tr>
<tr>
<td>Bromus carinatus</td>
<td>Ripgut Grass</td>
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<tr>
<td>Bromus diandrus</td>
<td></td>
</tr>
<tr>
<td>Bromus madritensis (according to Mason)</td>
<td>Maritime Brome</td>
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<tr>
<td>Bromus maritimus</td>
<td>Soft Chess</td>
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<tr>
<td>Bromus mollis</td>
<td>Red Brome</td>
</tr>
<tr>
<td>Bromus pseudolaevipes?</td>
<td></td>
</tr>
<tr>
<td>Bromus rubens</td>
<td>Sea-rocket</td>
</tr>
<tr>
<td>Bromus trinii</td>
<td>Red-maids</td>
</tr>
<tr>
<td>Cakile maritima</td>
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</tr>
<tr>
<td>Calandrinia ciliata var. menziesii</td>
<td>Island Morning Glory</td>
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<tr>
<td>Calandrinia maritima</td>
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<tr>
<td>Clystegia macrostegia subsp. macrostegia</td>
<td>Milk-maids</td>
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<tr>
<td>Cardamine californica</td>
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</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpobrotus aequilaterus</td>
<td>Sea Fig</td>
</tr>
<tr>
<td>Castilleja affinis</td>
<td>Indian Paint Brush</td>
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<tr>
<td>Castilleja hololeuca</td>
<td>Paint Brush</td>
</tr>
<tr>
<td>Ceanothus megacarpus subsp. insularis</td>
<td>Island Bigpod Ceanothus</td>
</tr>
<tr>
<td>Chenopodium</td>
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</tr>
<tr>
<td>Chenopodium californicum</td>
<td>Soap Plant</td>
</tr>
<tr>
<td>Chenopodium murale</td>
<td>Nettle-leaf Goosefoot</td>
</tr>
<tr>
<td>Clarkia epioloioides</td>
<td></td>
</tr>
<tr>
<td>Claytonia perfoliata</td>
<td>Miner's Lettuce</td>
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<tr>
<td>Cnusza bonariensis</td>
<td>Flax-leaved Fleabane</td>
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<tr>
<td>Cnusza canadensis</td>
<td>Horseweed</td>
</tr>
<tr>
<td>Coreopsis gigantea</td>
<td>Giant Coreopsis</td>
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<tr>
<td>Corethogyne filaginifolia</td>
<td>Cudweed Aster</td>
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<tr>
<td>Cotula</td>
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<tr>
<td>Crassula erecta</td>
<td></td>
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<tr>
<td>Cressa truxillensis var. vallicola</td>
<td>Alkali Weed</td>
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<tr>
<td>Cryptantha clevelandii</td>
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<tr>
<td>Cryptantha muricata var. jonesii</td>
<td></td>
</tr>
<tr>
<td>(according to Eastwood)</td>
<td></td>
</tr>
<tr>
<td>Cupressus</td>
<td>Marsh Dodder</td>
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<tr>
<td>Cuscuta salina var. salina</td>
<td>Bermuda Grass</td>
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<tr>
<td>Cynodon dactylon</td>
<td>Rattlesnake Weed</td>
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<tr>
<td>Daucus pusillus</td>
<td>Parry Larkspur</td>
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<tr>
<td>Delphinium parryi</td>
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<tr>
<td>Descurania pinnata subsp. menziesii</td>
<td>Tansy Mustard</td>
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<tr>
<td>Dichelostemma pulchellum</td>
<td>Brodiaea</td>
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<tr>
<td>Diplacus parviflorus</td>
<td>Island Monkey Flower</td>
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<tr>
<td>Distichlis spicata var. stolonifera</td>
<td>Salt Grass</td>
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<tr>
<td>Dodecatheon clevelandii subsp. insulare</td>
<td>Shooting-star</td>
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<tr>
<td>Dryopteris arguta</td>
<td>Coastal Wood Fern</td>
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<tr>
<td>Dudleya caespitosa</td>
<td>Giant Rye</td>
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<td>Elymus condensatus</td>
<td>Bush Sunflower</td>
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<td>Encelia californica</td>
<td>Seaside Daisy</td>
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<td>Erigeron foliosus var. stenophyllus</td>
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<tr>
<td>Erigeron glaucus</td>
<td>Santa Cruz Island Buckwheat</td>
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<tr>
<td>Erigeron sanctarum (according to Dunkle)</td>
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<tr>
<td>Eriogonum abroescens</td>
<td>Golden Yarrow</td>
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<td>Eriogonum grande var. grande</td>
<td>Beach Golden Yarrow</td>
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<tr>
<td>Eriophyllum confertiflorum</td>
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<tr>
<td>Eriophyllum staechadifloum</td>
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</tbody>
</table>

(continued)
Anacapa Island (continued)

Erodium cicutarium  
Erodium moschatum  
Erysimum insulare  
Eschscholzia ramosa? (according to Dunkle)  
Eucalyptus globulus  
Eucrypta chrysanthemifolia  
Filago californica  
Frankenia grandifolia  
Galium angustifolium var. foliosum  
Galium aprine  
Gilia angelensis  
Gilia clivorum  
Gilia nevinii  
Gnaphalium beneolens  
Gnaphalium bicolor  
Gnaphalium californicum  
Gnaphalium chilense  
Gnaphalium microcephalum (according to Dunkle)  
Gnaphalium purpureum  
Grindelia latifolia  
Haplopappus detonsus  
Haplopappus squarrosus  
Haplopappus venetus var. sedoides  
Haplopappus venetus subsp. vernonioides  
Heliotropium curassavicum var. oculatum  
Hemizonia clementina  
Heteromeles arbutifolia  
Heuchera maxima  
Hordeum californicum  
Hordeum glaucum  
Hordeum pusillum  
Hutchinsia procumbens  
Hypochoeris  
Hypochoeris  
Juncus bufonius var. bufonius  
Keckiella cordifolia  
Lamarckia aurea  
Lasthenia chrysostoma  
Lathyrus laetiflorus subsp. barbara?  
Lavatera

Redstem Filaree  
Whitestem Filaree  
Island Wallflower  
Island Poppy  
Bluegum  
Alkali Heath  
Bedstraw  
Bicolored Everlasting  
Green Everlasting  
Cotton Batting  
White Everlasting  
Gumweed  
Sawtooth Goldenbush  
Coast Goldenbush  
Heliotrope  
Toyon  
Island Alum-root  
Meadow Barley  
Foxtail  
Toad Rush  
Climbing Penstemon  
Goldentop  
Goldenfields  
Wild Sweetpea

(continued)
Anacapa Island (continued)

Lavatera assurgentiflora
Lepidium nitidum var. nitidum
Lepidium oblongum var. insulare?
Lepidium strictum?
Linaria canadensis var. texana
Lotus salsuginosus
Lotus scoparius
Lotus strigosus
Lotus subpinnatus (according to Bond)
Lupinus albifrons
Lupinus bicolor
Lupinus bicolor
Lupinus bicolor subsp. umbellatus
Lupinus succulentus
Lupinus truncatus
Lycium californicum
Mahonia pinnata subsp. insularis
Malacothrix foliosa
Malacothrix implicata
Malacothrix squalida
Malacothrix tenuifolia (according to Dunkle)
Malephora crocea
Malva parviflora
Marah fabaceus (according to Hoffmann)
Marah macrocarpus
Medicago
Medicago polymorpha var. polymorpha
Melica imperfecta
Melilotus indica (according to Bond)
Mesembryanthemum crystallinum
Mesembryanthemum nodiflorum
Microseris linearifolia
Mirabilis californica
Muhlenbergia microsperma
Oligomeris linifolia
Opuntia ficus-indica
Opuntia littoralis
Opuntia oricola
Opuntia prolifer a
Orobanche
Parietaria hespera
Pellaea andromedaefolia
Island Mallow
Peppergrass
Toad Flax
Coastal Lotus
Deerweed
Bishop's Lotus
Silver Lupine
Succulent Lupine
California Boxthorn
Island Barberry
Bluff-aster
Cheeseweed
Wild Cucumber
Bur Clover
Coast Range Melic
Yellow Sweet-clover
Crystalline Iceplant
Wishbone Bush
Annual Muhly
Coastal Prickly Pear
Coastal Cholla
Coffee Fern

(continued)
Anacapa Island (continued)

Pellaea mucronata (according to Dunkle)  Bird's Foot Fern
Perityle emoryi                                    Rock Daisy
Phacelia cicutaria var. hispida                         Rock Daisy
Phacelia distans                                    Mediterranean Canary Grass
Phacelia viscida                              Mediterranean Canary Grass
Phalaris minor                                        Surf Grass
Phyllospadix scouleri                                Surf Grass
Phyllospadix torreyi                                Goldback Fern
Pityrogramma triangularis                         Mediterranean Canary Grass
Plagiobothrys californicus                        Mediterranean Canary Grass
Plagiobothrys californicus var. gracilis
Plantago erecta                                       Surf Grass
Plantago insularis                                   Surf Grass
Platystemon californicus                           Surf Grass
Poa scabrella                                        Surf Grass
Polycarpon                                             Surf Grass
Polypondium californicum                           Surf Grass
Polypogon                                               Surf Grass
Polypogon semiverticillatus (according to Dunkle)  Surf Grass
Prunus ilicifolia subsp. lyonii                    Surf Grass
Pterostegia drymaricoides                           Surf Grass
Quercus                                                    Surf Grass
Quercus tomentella                                            Surf Grass
Rafinesquia californica                             Surf Grass
Rhus integrifolia                                    Surf Grass
Ribes malvaceum                                     Surf Grass
Rubus ursinus?                                     Surf Grass
Rumex crispus                                         Surf Grass
Salicornia                                               Surf Grass
Salix                                                    Surf Grass
Salvia brandesai (according to Dunkle)       Mediterranean Canary Grass
Salvia mellifera                                        Surf Grass
Sanicula arguta                                          Surf Grass
Scrophularia villosa (according to Dunkle)     Mediterranean Canary Grass
Selaginella bigelovii                                  Surf Grass
Senecio vulgaris                                      Mediterranean Canary Grass
Silene gallica                                         Mediterranean Canary Grass
Silene laciniata subsp. major                        Mediterranean Canary Grass
Silene multinnerva (according to Eastwood)    Mediterranean Canary Grass

(continued)
<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sisymbrium</td>
<td>Prickly Sow-thistle</td>
</tr>
<tr>
<td>Solanum</td>
<td>Common Sow-thistle</td>
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<tr>
<td>Solanum</td>
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Appendix 5.3 San Miguel Island Plant List

Abronia latifolia
Abronia maritima
Abronia umbellata
Achillea borealis
Agoseris grandiflora
Agropyron repens (according to Greene)
Allium praecox
Amblyopappus pusillus
Ambrosia chamissonis var.
    bipinnatisecta
Ambrosia chamissonis var.
    chamissonis
Amsinckia intermedia
Amsinckia spectabilis
Anagallis arvensis (according to Eastwood)
Antirrhinum nuttallianum
Apiastrum angustifolium
Artemisia californica var.
    californica
Astragalus curtipes
Astragalus didymocarpus
Astragalus miquelensis
Atriplex californica
Atriplex coulteri
Atriplex leucophylla
Atriplex patula subsp. hastata
Atriplex semibaccata
Avena barbata
Avena fatua
Baccharis douglasii
Baccharis pilularis subsp.
    consanguinea
Berula erecta
Beta vulgaris
Brassica geniculata
Brassica rapa
Bromus diandrus
Bromus maritimus
Bromus mollis
Bromus rubens
Bromus trinii
Cakile edentula subsp. californica
    Yellow Sand-verbena
    Sticky Sand-verbena
    Beach Sand-verbena
    Yarrow
    Mountain Dandelion
    Quack Grass
    Early Onion
    Beach-bur
    Beach-bur
    Piddle-neck
    Pimpernel
    Coastal Sagebrush
    San Miguel Island Loco-weed
    California Saltbush
    Seascale
    Spearleaved Saltbush
    Australian Saltbush
    Slender Wild Oats
    Wild Oats
    Coyote Brush
    Garden Beet
    Short-podded Mustard
    Field Mustard
    Ripgut Grass
    Maritime Brome
    Soft Chess
    Red Brome
    (continued)
San Miguel Island (continued)

Cakile maritima
Calandrinia ciliata var. menziesii
Calystegia macrostegia subsp. macrostegia
Calystegia soldanella
Camissonia cheiranthifolia subsp. cheiranthifolia
Camissonia micrantha
Capsella bursa-pastoris
Cardamine californica
Cardionema ramosissimum
Carpobrotus aequilaterus
Castilleja affinis
Castilleja hololeuca
Ceanothus (according to Greene)
Centauria melitensis
Cerastium glomeratum
Chasmanthe aethiopica
Chenopodium californicum
Chenopodium murale
Cirsium occidentale
Claytonia perfoliata
Coryza canadensis
Coreopsis gigantea
Corethrogyne filaginifolia
Cortaderia atacamensis
Cotula coronopifolia
Crassula erecta
Cressa truxillensis var. vallicola
Cryptantha clevelandii
Cuscuta salina var. salina
Daucus pusillus
Delphinium parryi
Dichelostemma pulchellum
Dichondra occidentalis
Distichlis spicata var. stolonifera
Dityherea maritima
Dudleya greenei
Elymus condensatus
Elymus pacificus
Epilobium adenocaulon
Eriogonum foliosum var. foliosus
Eriogonum foliosum var. stenophyllus
Eriogonum glaucus
Eriogonum grande subsp. rubescens
Eriophyllum confertiflorum
Eriophyllum staechadifolium

Sea-rocket
Red-maids
Island Morning Glory
Beach Morning Glory
Beach Primrose
Shepherd's Purse
Milk-maids
Sand Mat
Sea Fig
Indian Paint Brush
Paint Brush
Tocalote
Mouse-ear Chickweed
Soap Plant
Nettle-leaf Goosefoot
Western Thistle
Miner's Lettuce
Horseweed
Giant Coreopsis
Cudweed-aster
Pampas Grass
Brass Buttons
Alkali Weed
Marsh Dodder
Rattlesnake Weed
Parry Larkspur
Brodiaea
Salt Grass
Spectacle Pod
Giant Rye
Maritime Rye
Willow Herb
Fleabane
Seaside Daisy
Golden Yarrow
Beach Golden Yarrow

(continued)
San Miguel Island (continued)

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<th>Plant Name</th>
<th>Common Name</th>
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<td>Frankenia grandiflora</td>
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(continued)
San Miguel Island (continued)

Lomatium caruifolium
Lotus salsuginosus
Lotus scoparius var. veatchii
Lupinus albifrons
Lupinus arboresus
Lupinus bicolor
Lupinus chamissonis (according to Greene)
Lupinus succulentus
Lycium californicum
Lycopersicon esculentum
Malacothrix implicata
Malacothrix incana
Malacothrix indecora
Malacothrix succulenta
Malva parviflora
Marrubium vulgare
Medicago polymorpha var. brevispina
Medicago polymorpha var. polymorpha
Medicago sativa (according to Greene)
Melica imperfecta
Melilotus indicus
Mesembryanthemum crystallinum
Mesembryanthemum nodiflorum
Microseris douglasii subsp. tenella
Microseris elegans
Monolepis nuttalliana
Nemophila pedunculata
Oligomeris linifolia
Opuntia littoralis
Opuntia oricola
Orobanche fasciculata
Orobanche parishii subsp. brachyloba
Orthocarpus densiflorus
Orthocarpus purpurascens
Parapholis incurva
Pelargonium
Pennisetum clandestinum
Phacelias distans
Phacelias divaricata var. insularis
Phacelias viscida
Phalaris minor

Coastal Lotus
Deerweed
Silver Lupine
Coastal Bush Lupine
Dune Lupine
Succulent Lupine
California Boxthorn
Tomato
Cheeseweed
Wild Cucumber
Horehound
Bur Clover
Bur Clover
Alfalfa
Coast Range Melic
Yellow Sweet-clover
Crystalline Iceplant
Coastal Prickly Pear
Owl's Clover
Owl's Clover
Sickle Grass
Geranium
Kikiyu Grass
Mediterranean Canary Grass

(continued)
San Miguel Island (continued)

Phyllospadix torreyi
Pinus radiata
Pinus torreyana
Plagiobothrys californicus (according to Hoffmann)
Plantago
Plantago bigelovii subsp. californica
Plantago hirtella (according to Greene)
Platystemon californicus
Poa annua
Poa douglasii
Polypogon interruptus
Polypogon monspeliensis
Potentilla egedii var. grandis
Pterostegia drymarioides
Ranunculus californicus
Rhamnus pirifolia (according to Greene)
Rhus integrifolia
Rorippa nasturtium-aquaticum
Rubus ursinus
Rumex crispus
Rumex fueginus
Rumex salicifolius
Sagina occidentalis
Salicornia subterminalis
Salicornia virginica
Salix lasiolepis
Sanicula arguta
Scirpus cernuus var. californicus
Senecio vulgaris
Sidalcea malviflora
Silene antirrhina
Silene gallica
Silene laciniata subsp. major
Sisyrinchium bellum
Salanum douglasii
Sonchus asper
Sonchus oleraceus
Spergularia macrotheca var. macrotheca
Stachys
Stellaria media
Stephanomeria virgata (according to Greene)

(continued)
### San Miguel Island (continued)

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Parnham, T. J. 1849. Life, adventures, and travels in California, to which are added the conquest of California, travels in Oregon, and history of the old regions. Nafis and Cornish, New York. 468 p.


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