

**THE “REDWOOD COAST:” THE MARITIME CULTURAL LANDSCAPE OF THE  
POTENTIAL EXPANSION OF CORDELL BANK AND GULF OF THE FARALLONES  
NATIONAL MARINE SANCTUARIES**

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**Fort Ross' Doghole Port, late 19<sup>th</sup> Century**

**INTRODUCTION/SUMMARY**

**California’s shoreline from Bodega Head to Mendocino, part of the “Redwood Coast,” is a dramatic marine environment with thousands of years of human interaction which alternately impacted this area of California and its marine and shore-side resources as much as this environment shaped the activities and culture of the people who came here to work and settle.**

These interactions and overlapping activities have left physical as well as cultural traces ranging from place names, ocean highways no longer traveled, coastal settlements, industrial structures, and shipwrecks to form a maritime cultural landscape which is unique and nationally important. This coast is a perfect illustration of how the offshore ocean connects with the shore, and beyond, in terms of humanity’s engagement with the marine environment.

This was a region which helped build not only California, but the nation’s economy and communities, but which also became a place settled by people who came from around the world to establish on these shores themselves and their families.

This maritime cultural landscape’s uniqueness and significance makes it a place ideal for inclusion into a National Marine Sanctuary. A sanctuary not only protects these resources and its cultural connections. It focuses them to purpose to project messages about their importance, and provides a framework for ongoing research and outreach which moves beyond interpretation to

outreach in its broadest terms as marketing this sense of place as something that people wish to visit and sensitively interact with as well as protect.

This initial review of the maritime cultural landscape of the “Redwood Coast” is not intended to be comprehensive. Rather, it is a beginning to demonstrate a sense of these resources and the story of human interaction with the marine environment here. If added to the National Marine Sanctuary, the use of the maritime cultural landscape as a “tool” for characterizing this coast would be the beginning of a process of engagement and partnership with the community to define, better understand and share its stories. This approach is a process that focuses on the resources and their human stories to market this area for sensitive visitation to support if not build the local economy, and to inspire wider awareness and support for keeping this area protected and unique.

## ELEMENTS OF THE MARITIME CULTURAL LANDSCAPE

What are the elements of the maritime cultural landscape of the “Redwood Coast”?

- **It is the location of prominent and long standing landmarks for international and national maritime traffic**, connecting to offshore Cordell Bank and Point Reyes as a key intersection in shipping traffic from hundreds of years ago to today, with place names forgotten as well as still known place names left by Spanish, Russian, British and American mariners;
- **It is a drowned coastal environment of 18,000 years ago** on which ancient humans likely migrated to settle the Americas and where the ancestors of the modern Coast Miwok and *Kashaya* Pomo once lived and harvested the resources of an abundant marine landscape that was inundated by sea level rise with the end of the last great Ice Age, which reflects persistence and adaptation to a changing climate;
- **It is an area strongly shaped and influenced by the offshore marine environment of Cordell Bank and the edge of the continental shelf**, where the upwelling of the California current created a fishery as well as inshore kelp forests on marine terraces that provided habitat for marine mammals. The same environment of cold sea merges with warm air from the coastal hills and valleys to pull in thick blankets of fog that created an ideal climate for the growth of the redwood forests and which today provide the climatic conditions for a wine industry with unique vintages that sell based on the marketing of their origin on this coast;
- **It is an area whose rich pelagic and shore-side marine resources provided sustenance for the Coast Miwok and *Kashaya* Pomo peoples who have lived here for thousands of years.** The heritage of the first peoples is today represented not only in the sites of former settlements but also by the traditions and heritage of those people, who have persisted as important members of the coastal community. Their place names, their

memories and their traditions remain on these shores and waters whether written on a map or not;

- **It is an area whose climate and marine mammal habitat brought the first non-native settlers to this coast.** Russian and Aleut farmers and fur traders established agricultural outposts and a fortified settlement from which hunters on *baidarkas* hunted the marine mammals to near-extinction, working in the numerous small coves and kelp forests of this area before venturing farther south to the Farallones and into San Francisco Bay. Their place names, the standing and reconstructed buildings of Fort Ross, and the archaeological remains of their other settlements and camps at Bodega Head and along the coast remain as a reminder of them and their activities;
- **It is an area whose fishery inspired the growth of a commercial and recreational industry** whose people came from as far as San Francisco to harvest off the Farallones, Cordell Bank, and thence along the Redwood Coast, with many of those who fished coming from different lands and cultures to settle here and build an industry and communities. That fishing community was multicultural and diverse.
- **It is an area whose thick redwood forests inspired a lumber trade that lasted from the mid-19<sup>th</sup> into the 20<sup>th</sup> century.** They adapted to the rugged maritime environment by creating unique “doghole” ports and building large fleets of small, maneuverable schooners that hugged the coast to log the redwoods and carry the timber to markets as close as San Francisco and as distant as the Eastern Seaboard, Australia and Asia. The only highway to create that economy was by the sea, with vessels working the coast before heading to Cordell Bank and thence turning south to commence their run to the Golden Gate. That trade left not only place names and the archaeological remains of the dogholes and those vessels unlucky enough to be lost on these shores, but also lasting communities like Bodega Bay, Gualala, Point Arena, Mendocino and Caspar to name a few;
- **It is an environment whose nature resulted in as many as 200 shipwrecks.** The dangers inspired the mapping of the coast as well as the construction of two lighthouses, one at Point Arena and the other at Point Cabrillo, the placement of buoys and other markers, and which inspired the placement of a life-saving station at Point Arena to assist those in peril on the sea;
- **It is an area whose history, culture and rugged beauty, as well as the need to provide regular links, inspired pushes for access by land as well as by sea.** Limited wagon roads gave way to a coastal railroad, and in the early 20<sup>th</sup> century, to State Route 1, the “Coast Highway,” which links the coastal environment and its communities. These led to increased tourism and development that marketed the benefits and beauty of the maritime landscape.
- **It is a significant section of the California coast,** where battles for its preservation and access to it spawned the California Coastal Commission, fourteen marine protected areas,

including state parks and preserves, and a strong push for either national monument or sanctuary designation.

**This history and the uniqueness of the maritime landscape are not lost on these communities and their residents** or the elected officials on this section of coast. Nor is a sense of the need to protect it. Fierce battles were fought in the early 1960s to prevent the construction of a nuclear power plant at Bodega Head, and to provide public access through the ten-mile section of coast enclosed in the Sea Ranch development. Along with inland State Parks that preserve remaining stands of the coast redwoods, the coast’s marine parks and reserves are part of the modern maritime cultural landscape, with their perceived resource values and human uses all part of the ongoing saga of human involvement with this unique coastal/marine environment.



**Coleman Beach, Sonoma Coast State Beach (Davidcmc58/Google Earth)**

The next sections examine the specifics of the maritime cultural landscape of the “Redwood Coast.”

## A Drowned Late Pleistocene/Early Holocene Environment



Tidepools at Salt Point State Park, Sonoma County. The marine resources of the changing coastline were a source of sustenance for the first peoples and speak to a now-forgotten (and now drowned) prehistoric coast that helps define this aspect of the maritime cultural landscape (Tom Moyer Photography/Flickr)

- At the time of the last glacial maximum, some 18,000 years ago, **the coastline extended some 30 miles offshore**. Archaeologists increasingly believe that this now drowned shoreline was the major route for the first peoples who migrated to the Americas. In skin boats, they would have subsisted on the rich maritime resources along the coast – kelp, shellfish, marine mammals, and fish existed in abundance.
- At the same time, research by California State Parks archaeologist Breck Parkman suggests that a land route followed by migrating game was a source of food for early humans also migrating and following the coast. Parkman has studied a “rubbing stone” site near Sonoma State beach where prehistoric animals like mammoths congregated and where stone tool chips suggest a focal point for early hunting. This site, like a rock shelter near Duncan’s Landing and an early stone point potentially dating to 11,000 years ago are other indications of this area as a maritime landscape, most of it now drowned and extending far out to sea, including a once dry headland now known as Cordell Bank, which may have been a highway by which the first humans entered and ultimately populated North and South America.
- **As glacial ice melted, the ancient shoreline flooded between 18,000 to 10,000 years ago to within a few miles of the modern coast**. During that period, even as people continued to migrate along these shores, others are thought to have settled along the river

valleys and river mouths of the major and minor terrestrial drainages – like the Russian River – where they met the sea and followed those valleys to finally settled where the sea’s rise stopped close to what is now the modern coastal shoreline some five thousand years ago.

- **The steepness of the northern coast provided a more stable environment for final human settlement** here by the ancestors of the Coastal Miwok and the *Kashaya* Pomo than farther south; ongoing sea level rise on the flatter coastal environment off the Farallones finally flooded the shallow coastal plains and penetrated the canyon through which the Sacramento River flowed to the sea to flood the large interior valley that is today San Francisco Bay between 8,000 to 4,000 years ago. Throughout this process, the marine environment persisted as new shorelines were formed, and their shellfish and other marine life provided sustenance for successive generations of native peoples.
- **Coast Miwok traditions speak to what is likely their historical memory of these events.** In 1910, C. Hart Merriam wrote down these traditions and related the story of *How Kah'-kah-loo The Ravens Became People*. “When water covered the world only the top of the highest mountain rose above it. The people had climbed up on this mountain, but could find no food and were starving. They wanted to go off and get something to eat. When the water went down all the ground was soft mud. After a while the people rolled rocks down to see if the mud were hard enough to hold them. When the rocks stayed on top, the people went down to search for food. But the mud was not hard enough to hold them and they sank out of sight, leaving deep holes where they had gone down. Then *Kah'-kah-loo* the Ravens came and stood at the holes, one at each hole where a man had gone down. After a while, when the ground hardened, the Ravens turned into people. That is the reason the *Mewuk* are so dark.”
- More engagement is needed with the descendants of the first people for them to directly relay their history and traditions in ways other than through intermediaries like Dr. Merriam.
- The “coastal migration” theory of human settlement of the Americas is controversial because of the scarcity of direct archaeological evidence. That evidence may likely exist on the seabed of the coast on those portions of the continental shelf such as those in the proposed expansion area.

## The Coastal Miwok and Kashaya Pomo



Kashaya Pomo elder Essie Parrish gathering palm kelp seaweed. Photograph by Samuel Barrett and crew, Manchester, Mendocino County, 1961 (Phoeba A. Hears Museum, University of California 25-5798).

- **Two distinct groups of first peoples inhabited the coastal and inland area of the “Redwood Coast.”** Ethnographically these people are today known as the *Kashaya* Pomo and the Coast Miwok. Their traditions speak to how they were created and how they have occupied these lands since the dawn of human time. Archaeological evidence demonstrates a human presence as far back as 11,000 years ago, and perhaps earlier. A wide range of archaeological sites, some on what have been identified as traditional villages and settlements, have been recorded by archaeologists in the coast/redwood forest belt that lines the shoreline and penetrates inland.
- **Traditional knowledge and archaeological evidence indicates that the coastal peoples subsisted largely on the products of the marine environment** – harvesting salt, kelp, marine mammals, shellfish and fish. The basis of accumulated wealth in addition to food resources was the processed shell of mollusks such as the Bodega Bay clam (*Saxidomus giganteus*). The traditions of the first people, as recorded by C. Hart Merriam in 1910, note that “Coyote-man brought *Koo'-tah* the big clam, from which *pis'-pe* the shell money is made, and planted it here at Bodega Bay. This is the place and the only place where the big clam was in the beginning. Wherever else you find it now, the seed came from here. The Tomales Bay people got their seed here.”
- According to the Fort Ross Conservancy, the *Kashaya* experienced less acculturation than other California native peoples, largely avoiding forced removal by Spanish and Mexican authorities to missions. Unlike the Coast Miwok of the Bodega Bay region, who suffered more from this cultural contact in the 16<sup>th</sup> century with visiting Spanish explorers, the *Kashaya* did not encounter foreigners until the arrival of the Russians in

the early 19<sup>th</sup> century. **A largely collaborative relationship with the Russians persisted for some three decades and involved cultural and social exchanges.** The arrival of Mexican and American settlers following the Russian withdrawal brought increased settlement, the concept of “private” land and an end to the traditional nomadic ways of moving to harvest available food resources throughout a year. In time, as many *Kashaya* settled on the ranch of Charles Haupt, who had married a *Kashaya* woman, this became their increasingly restricted “home,” which in time resulted in the U.S. Government’s purchase of a forty acre reservation near Stewart’s Point.

- As the Fort Ross Conservancy notes, “This reservation exists today a tract high on an exposed ridge possessing poor soils and little water. It was hardly an adequate compensation for the loss of their homeland. Today many *Kashaya* still reside on the reservation and in areas surrounding Fort Ross. Although the majority live and work in the principal cities of Sonoma County, many have gone on to continue their careers in the greater Bay Area. Presently a growing number of *Kashaya* occupy positions of political and educational leadership among the Indian and non-Indian communities of this region. Many of their numbers are to be found in the educational, academic, health care, social services, and administrative professions. Although the *Kashaya* are contemporary California Indians in a modern and fast moving world, they still retain their strong feelings of attachment to their ancestral land and the way of life that was so long enjoyed by their ancestors.”
- The coastal region and its maritime cultural landscape retain, in addition to their traditions and historical knowledge, indigenous place names noted by The U.S. Coast Survey’s George Davidson and marked on manuscript survey charts (T sheets) in NOAA’s archives – names phonetically rendered like *Otono* Cove, *Meteni* Cove (and *Meteni*, a major village), *Chitono* Cove, *Tsukai* Cove, *Wallala*, and *Sulmawi* Cove – names which do not “show” on a modern chart but which still do in the traditions of the *Kashaya* and which should also be recorded and honored on “modern” charts.
- The Coast Miwok people of Bodega Bay, as well as nearby Olema, Tomales and Marshall lost their traditional lands through the process of settlement by non-natives beginning in the mid-19<sup>th</sup> century. Originally granted a small, 15.45 acre reservation, the Graton Rancheria, in isolated hilly inland area, the people ultimately lost that in 1958 and scattered. Reorganizing in 1992 as the Federated Coast Miwok and now formally recognized as the Federated Indians of Graton Rancheria, they number some 1,000 persons, descendants of fourteen ancestors. While no longer occupying their traditional lands, they retain a strong cultural and traditional connection. Their website notes that “The primary objective of the Tribe is to restore a land base within its territory.”



## The Pacific Ocean Highway



Cape Mendocino and Sugar Loaf Rock (Gary Todoroff)

- **The Pacific Ocean’s vast expanse was gradually traversed and charted by European explorers who used prominent coastal landmarks as navigational aids.** Following Spain’s “discovery” of the Pacific Ocean in 1513, early Spanish explorers took to that ocean beginning in 1527. Among those voyages that followed were explorations by mariners such as Juan Rodríguez Cabrillo, Sebastian Rodríguez Cermeño, and Sebastian Vizcaíno in 1542-1543, 1595 and 1602 that studied and visited the California coast, while others crossed the Pacific to commence a transoceanic trade with the Philippines after 1565. In the two centuries that followed, the “Manila galleons” and other Spanish ships made regular landfall on the northern California coast in or around Cape Mendocino before turning south to bear for Acapulco.
- **The maritime landscape of the coast reflects these voyages and this human history** through a variety of place names bestowed by succeeding generations of Spanish, English, French, Russian and American navigators. Their names for these features, be they offshore features such as banks, islands or reefs, or prominent capes or headlands, as well as bays and estuaries, “overwrote” the names these areas were known as to the first peoples who lived there. As well, names changed over time as successive explorers placed “new” names on the land and sea, sometimes as an overt feature of geopolitical rivalry in which names imparted a claim of ownership through symbolic possession. In this fashion, the maritime cultural landscape of the “Redwood Coast” offers multiple names for some of its marine landmarks.
- Cape Mendocino, for example, was named for Spanish Viceroy Antonio de Mendoza by Cabrillo’s expedition in 1542; it is the oldest surviving Spanish place name on the

California coast. Other Spanish names not on modern charts but which persist in the maritime cultural landscape includes the Cabo de Piños, conferred in 1542-1543 by the Cabrillo expedition for the headlands behind Fort Ross.

- Similarly, other place names that no longer survive include the Rio Grande de San Sebastian (Tomales Bay). Bodega Bay obtained its name from the 1775 voyage and the discovery of the bay by explorer Francisco de la Bodega y Quadra. Bodega Head (on the modern chart) and known to the first peoples as *Tiu Tuiya* was named the Punta del Cordon by Bodega, and was renamed Cape Rumiantsov by Russian explorers in 1809.
- Another Russian place name no longer charted is a promontory between Gull and Arch Rock north of Duncan's Landing which was known as Cape Slavianska; similarly, the Russian River was known to the Russians as the *Bolshaya Slavianka*.
- A variety of old maps – Spanish, Russian, French and British – reflect the charting of this coast by exploring mariners and the names they perpetuated and changed, among them the later charts of George Vancouver, whose Pacific voyage of 1792-1795 charted much of the Pacific coast, and French explorer Eugene Duflot du Mofras in 1841.
- **One reflection of these changes as found in names that shift through time is Point Arena.** Spanish explorer Ferrello named it *Punta de Cabos* in 1543, but by the 17<sup>th</sup> century Spanish sailors crossing the Pacific and sighting it called it the *Barra de Arena* (Sand Point) or *Punta Delgada*. George Vancouver misspelled it Barro de Arena in 1792 and that name persisted on American charts through 1851. The U.S. Coast Survey finally set the name as Point Arena in 1853.
- **The Pacific Ocean was opened up** to expanding American, and international maritime trade and commerce as a result of these voyages, charts and the “naming” of coastal landmarks. In the 19<sup>th</sup> century, this trade expanded dramatically as American fur traders, whalers, hide and tallow traders and the U.S. Navy increasingly entered and sailed the Pacific and this coast.
- **Despite charts and experience, some ships that navigated this ocean highway came to grief** as a result of storms, fog, and mistakes in navigation that led to shipwrecks. Some of these were farther offshore, sinking near Cordell Bank, the offshore turning point to head south and toward the Gate. Others miscalculated or were lost on fog or storms and struck Point Reyes or the coast.
- Among the earliest known wrecks on the Redwood Coast was the 1850 loss of the brig *Frolic*, heading for San Francisco with a Chinese trade cargo when it struck the shore near Caspar. Another, the ship *Oxford*, after drifting lost in the fog for two weeks, was lost when the captain mistakenly sailed for Tomales Bay's headlands thinking it was the Golden Gate in 1852. These two shipwrecks also speak, as do others, to this landscape as part of the Pacific Ocean “highway.”

## Russian Farmers and Fur Traders

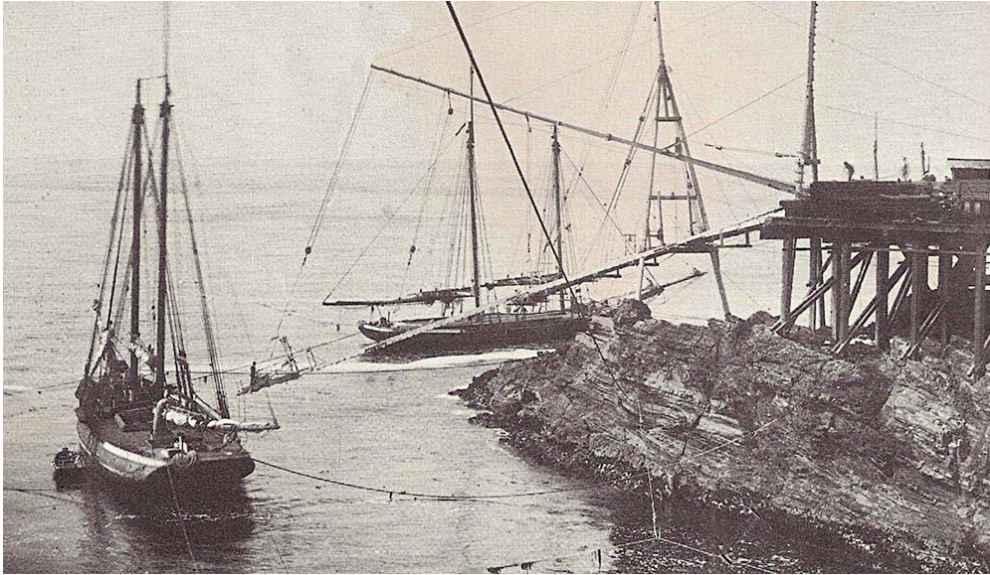


Fort Ross (Robert Schwemmer)

- The rich pelagic resources of this maritime landscape, particularly the kelp forests in the numerous coves and inlets that provided habitat for the California sea otter (*Enhydra lutris nereis*), and this area's ocean-influenced climate's benefits for agriculture brought the Russian American Company to the coast in the early 19<sup>th</sup> century to hunt otters for their fur, and ultimately to establish settlements for agriculture and as a base for their sealing operations.
- Regular Russian fur hunting expeditions were made to California between 1808 and 1811 in advance of settlement. Some of these expeditions involved American fur traders, working from and with American ships. This was the first American industrial incursion into California. When the Russians withdrew from the partnership, the Americans persisted, albeit with difficulty. This was a strong and early factor in persistent interest by the U.S. in California and its resources that would ultimately lead to conquest in 1846-1848.
- **The fur hunting activities in California were part of a larger “maritime fur trade” that occupied the “Northwest Coast of America,”** spanning from Alaska to Southern California, from the late 18<sup>th</sup> century through the early 19<sup>th</sup> century. British, Russian, and American fur traders worked with native populations, bartering for and harvesting fur seals for trade with China, exchanging the furs and other commodities for Chinese luxury goods.
- **The maritime fur trade altered the environment**, practically exterminating the fur seals – as of 1938, California's sea otter population, devastated a century earlier by the trade, had declined to some fifty individuals.

- **The maritime fur trade also changed the cultures of the native peoples involved in it,** from the Aleut and other peoples of Alaska such as the Tlingit, to the peoples of British Columbia, Washington, Oregon and California, to the native peoples of Hawaii. In California, the trade and the arrival of the Russians had a particular impact on the *Kashaya* Pomo, whose major village, *Meteni*, became the site of the Ross Colony, or Fort Ross, a major settlement for three decades. A separate settlement was made inland of “Port Rumiantsev,” or Bodega Bay, where two shoreside warehouses and a dock occupied the lands of the Coast Miwok. At Fort Ross, the *Kashaya* lived, worked and intermarried among the Aleuts and Russians in a multicultural community.
- **The marine environment of Fort Ross provided ideal conditions for the Russian settlement and its activities** – ample timber in the local redwoods, a temperate growing climate, pasturage, and fresh water. The cove was not an ideal deep water anchorage, but that was available at the other settlement on Bodega Bay.
- Using Ross as a base, *baidarkas* with Aleut hunters worked the many small coves and inlets and by the early 1820s had more or less wiped out the sea otter population of the Redwood Coast.
- The Russian settlements on the Redwood Coast were made primarily to provide agricultural produce for Alaskan settlements, but also to be a base for regular sea otter hunting on this coast and beyond to the Farallones, Monterey Bay and San Francisco Bay. The Russians built a small shipyard in the cove of Fort Ross, the first shipyard in California. They also in time established large ranches in the surrounding area as agriculture became more prominent as the fur trade declined with the otter’s depletion after 1815.
- Fort Ross and the Bodega settlements persisted until the Russian American Company closed out their California operations and sold the property to John A. Sutter in 1841.
- While the buildings at Bodega became ruins (noted in 1853 by a U.S. Coast Survey party) and are now an archaeological site, as are the other Russian sites, Fort Ross survived as part of the ranch of the Call family and in time became a California State Park which now encompasses 3,000 acres. A National Historic Landmark and a California State Landmark, Fort Ross is at the center of ongoing archaeological research. Work on site since 1906 has led to the reconstruction of missing structures and walls, and the Park hosts an active interpretive and living history program and hoists some 15,000 visitors annually. Fort Ross is a source of local and state pride, and just celebrated its bicentennial with events and ceremonies in July 2012.
- **Bodega Bay also embraces its Russian heritage** and celebrated the bicentennial of “Port Rumiantsev” with a festival, tall ship visit and cultural events involving the Russian American community, locals, and the Coast Miwok of the Graton Rancheria.

## The Lumber Trade: Doghole Ports



Bourn's landing with schooners, ca. 1880 (Mendocino RR)

- **The marine climate of this coast is conducive to the growth of the California or Coast Redwood (*Sequoia sempervirens*)**, whose range extends from Monterey to the Oregon border in a narrow strip that runs from five to 47 miles inland. These trees, a highly valuable timber commodity, were harvested in increasing numbers after the mid-19<sup>th</sup> century in response to the American settlement and urbanization of the Pacific Coast, and inspired the growth of a coastal and ultimately international lumber trade.
- The initial logging of redwood groves around Monterey and San Francisco bays exhausted the supply thanks to the extraordinary growth of San Francisco during the California Gold Rush and the city's frequent rebuilding thanks to several catastrophic fires.
- The 1850 wreck of the brig *Frolic* in 1850 with a valuable cargo of Chinese trade goods brought would-be salvagers to the area. On their journey to the wreck site, they were astounded by vast coastal forests of unlogged redwood trees. The local *Mitom* Pomo had salvaged the wreck, but the news of extensive redwood on the coast inspired San Francisco entrepreneurs to build the first of a series of logging camps and sawmills on the coast.
- **By 1870, the coast was lined with dozens of camps and settlements** that shipped goods to San Francisco in small, two-masted schooners that easily navigated the rocky shoreline to load at the end of wire-rope "chutes" in ports known as "dogholes" because they were so small that a "dog had enough room to go in and back out."
- This also spurred the development of small shipyards along the Mendocino shoreline such as the Thomas Peterson shipyard at Little River that was responsible for building

thirteen 2-masted lumber schooners from 1868 to 1879. These vessels were the backbone of West Coast shipping through much of the 19<sup>th</sup> century.



**The Peterson Shipyard (Robert Schwemmer Maritime Library)**

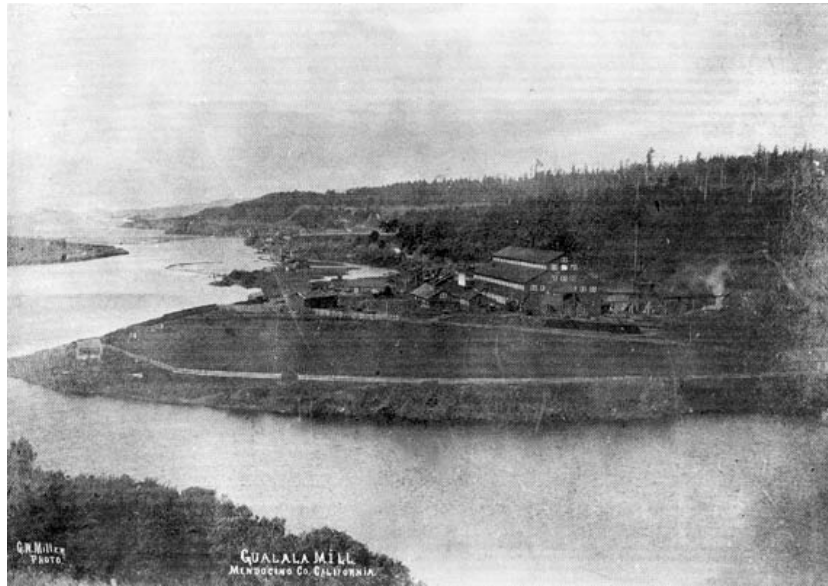
- **The output of the coast was prodigious.** The Garcia Mill near Point Arena, founded in 1869-1870, had an output of some eight million board feet per year.
- The San Francisco *Journal of Commerce* noted in January 1879 that “the lumber, grain, wool and other produce is shipped to us for sale and reshipment, and every little chute, roadstead or landing sends its products to and receives its supplies from San Francisco, dealing with no other place and having no other connections.”
- The arrival of the railroad on the Pacific in 1869 was slow to reach the redwood coast, and in 1879 had little effect on the schooners’ market. Increasing access by rail cut into the coasting trade, but it remained active through the early 20<sup>th</sup> century. Two-masted schooners gave rise to larger three-masted schooners and engine-powered “steam schooners” to support the trade.
- **The logging of the coast denuded the near-shore environment and the interior;** in this fashion some of the smaller “dogholes” closed as inland stands were logged and shipped by rail to larger ports like Mendocino and Fort Bragg. Today, the maritime cultural landscape includes the surviving stands of Coast Redwoods preserved in several California State Parks in Sonoma and Mendocino counties.
- In addition to the regular lumber trade, the coast was the setting for an active bark (used for tanning leather), railroad tie and cord wood industry.
- **Close to 200 shipwrecks line this section of the coast,** the majority of them being lumber schooners lost while engaged in the trade on a shore described in the *Coast Pilot* of 1889 as being lined with “jagged rocks above the water, sunken rocks, foul bottom and breakers....” These wrecks form an important part of the maritime cultural landscape of the redwood coast.

- **The coastal lumber trade left a large number of “doghole” names on the coastal landscape** – Biehler’s Landing, Fisk Mill Cove, Rough and Ready, Nip and Tuck, Saunders Landing, Iverson’s Landing, Bourn’s Landing and Cuffey’s Cove being but a few. Mapping the various landings shows on average only a few miles separating each from the other, all testimonials to the rapid, industrial and localized scale of a national and international trade.



**Fort Ross as a doghole port in 1876 (NOAA Library)**

## The Lumber Trade: Coastal Settlements



Gualala Mill, 1900 (Mendocino RR)

- **The lumber trade and the rise of ranches on logged-out bluffs created a vast coastal industrial landscape** that was also part of the maritime cultural landscape – a shoreline dotted by mill towns, dogholes and in time more substantial settlements.
- **A number of these settlements and industrial facilities are now “vanished” other than place names** and few surviving structures; among them are Albion, Iverson, Bourn’s Landing, Biehler’s Landing and Union Landing. Among those which have survived are Gualala, Mendocino, Caspar, Fort Bragg, and Point Arena, which is said to be the smallest incorporated city in California.
- **The survival of the settlements with the collapse of the coasting trade and the end of the lumber industry is due to the ultimate arrival of the railroad** to serve the coast’s lumber trade and ranches – which also brought tourists seeking to enjoy its climate and scenic vistas – and the ultimate arrival of the coast, or shoreline highway.
- **A number of sites and buildings on the redwood coast are listed on the National Register of Historic Places**, including a historic district in Point Arena, the O.W. Getchell House at Anchor Bay, and the Iverson House in Point Arena. Stewart’s Point, an essentially unaltered doghole port settlement, is a Sonoma County Historic District, as is Duncan’s Mills.
- Another factor is the unique character of these places as “art-centered villages” with bed-and-breakfasts, some in historic homes and facilities linked to the lumber trade. Ultimately, **a key attraction is the landscape in which these towns sit**, a setting that tourist guides and chambers of commerce stress is diverse, rugged, unique and timeless.



## Harvesting the Sea



Bodega Bay Fisherman's memorial (Paul F. Gill)

- **The rich pelagic and tidepool resources of the redwood coast have sustained people living on the redwood coast for thousands of years.** The traditions of the *Kashaya* Pomo and the Coast Miwok speak to the regular harvests of the sea, and archaeological evidence speaks not only to traditional use but also provides evidence of species range and change such as the decline of marine mammals due to historic period Russian and American fur trade hunts.
- Goode's 1887 Report on U.S. Fisheries notes the following: "the coast of Sonoma County has no bays especially suitable for fishing, and there are, so far as we know, no persons who make their entire living by this means. At Fort Ross and at Duncan's Mills are several men who fish during the summer, and who occasionally send boxes of fresh fish by trail to the San Francisco market. In the fall, salmon runs in Russian River and are taken in some numbers. The total annual catch of Sonoma County cannot exceed 10,000 pounds."
- The same study notes that "the coast of Mendocino County is rocky, without indentations or large streams. There are no fisheries of any importance anywhere within its borders, and probably no regular fishermen. The total annual catch cannot exceed 3,000 pounds. At one time a man living at the light house at Cape Mendocino owned a whale-boat, and in smooth weather went fishing for halibut on a reef that runs out from the cape. He sent them to Eureka to be retailed, and also shipped a few to San Francisco."
- Other important fishing ports on the Mendocino Coast included Noyo Harbor, near Fort Bragg,
- While the 1889 report on the Fisheries of the United States, a benchmark study, does not document a fishing "industry" on the redwood coast, **the Coast Miwok who remained in communities such as Bodega Bay persisted and increasingly turned to fishing,**

especially with the arrival of the railroad after 1870 which provided a link for fresh fish to go to San Francisco.

- After the turn of the century, the Smith family, who were Coast Miwok, began the commercial fishing business in Bodega Bay. William Smith's business began with one small boat and expanded into a fleet run by his sons in the 1950s.
- Smith Brothers – the five sons of William (Steve, Bill, Ernest, Edward and Eli) built the first commercial pier in Bodega Bay, supplied fish and crab to a local and regional market, and began the now 40-year old annual blessing of the fishing fleet and fishing boat parade. **The Smith Brothers are remembered with considerable local pride to this day.** Smith Brothers Lane in Bodega Bay is, like the commercial fishing harbor and the pier, part of the town's maritime cultural landscape.
- **The dredging of Bodega Bay in 1943 spurred the growth of the commercial fleet;** within a few decades Bodega bay was the busiest fishing port between San Francisco and Fort Bragg. The fleet numbered some 300 boats in the 1980s.
- **While the fishery has declined, Bodega Bay's harbor is still defined by fishing boats** and commercial and sport fishing remains part of the Bodega Bay economy; crab, rockfish, sole and sea urchins are harvested.
- The California Department of Fish and Game noted in the early 1950s in a report on coastal fishing that fishing took place up and down the coast on a small scale with greater activity at some ports such as Point Arena, where "fishing boats tie up at the wharf where there are hoists, scales and cleaning sheds. Ashore there is a large warehouse where fish are handled. A small fleet of trollers anchors in the cove during the season or ties up at the dock. The chief activity is salmon and albacore trolling but a few setline boats work out of this port. Occasionally trawlers unload sole, lingcod, and rockfish. A few crab fishermen deliver at the cove. All fish goes out by truck. For the past 20 years the catches at Point Arena have averaged 300,000 pounds per year with 940,000 pounds in the peak year, 1940."



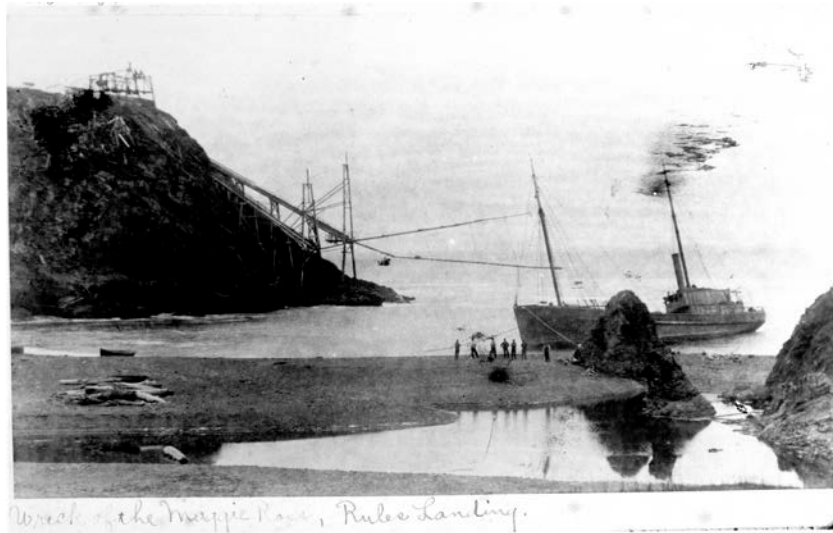
FIGURE 2. Salmon trolling boats delivering to a buyer-barge anchored near the entrance to Bodega Bay. *Photograph by H. B. Nidever, June 30, 1934.*

- The U.S. Fish Commission steamer *Albatross* worked off this coast in 1890 conducting trawls and deep sea research near Bodega and Point Arena, and **a significant body of historical ecological data exists** as a result, not all of it easily accessible.
- **Breath-held abalone diving is a popular and ongoing recreational activity on the coast**, and has been for decades especially at several California State Beaches such as Fort Ross.



Abalone divers on the coast (Malibu Divers)

## Shipwrecks



Wreck of the steam schooner *Maggie Ross*, Rules Landing, 1891.

- **The redwood coast is a dramatic, dangerous setting which has wrecked close to 200 vessels** within the 60 mile stretch of coast discussed here. At least half of these probably remain on the coast as sunken or buried archaeological resources.
- **One of the earliest known shipwrecks on the coast is the clipper brig *Frolic***, which wrecked in 1850 with a speculative China trade cargo bound for Gold Rush. The wreck was salvaged by the local Mitom Pomo, and the site of one of their villages at Three Chop Ridge has yielded traces of its glass and ceramic cargo. The wreck itself lies near Caspar and has been archaeologically studied and is listed in the National Register of Historic Places.
- **The second oldest known wreck in his section of the coast is the 1836 packet ship *Oxford***, which mistook Tomales Bay's entrance for the Golden Gate during the Gold Rush in July 1852. After the cargo was removed, the stranded ship was abandoned to the mud off Sand Point just inside the bay.
- **Most of the shipwrecks from the late 1850s through the 1880s were brigs and schooners involved in the lumber trade** which were lost at doghole ports or while hugging the coast. Clusters of these wrecks can be found off former dogholes such as Bourn's landing, Fort Ross Cove, and Biehler's Landing, as well as settlements such as Gualala and Point Arena.
- Among the wrecks clustered around Bodega Bay are the steam schooner *Albion River*, lost in April 1903, the barge *Caroga*, lost in March 1953, *Eight Brothers*, lost in 1937, the former ship (cut down to a barge) *Isaac Reed*, lost in July 1924, the schooner *Joseph*, lost in May 1880, the schooner *Shooting Star*, lost in July 1861, and the schooner *Volunteer*, lost in June 1906. Most of these vessels were in the lumber trade or the coastal produce trade. Other wrecks include fishing vessels such as the salmon trawler C-

7742, lost at Dillon Beach, and *Corona*, a former U.S. Navy sub chaser converted into a fishing vessel and lost at Bodega in April 1924.

- The known wrecks between Bodega Head and Fort Ross are the schooner *D.C. Haskins*, lost at Russian landing in October 1885, the schooner *Sovereign*, lost at the entrance to the Russian River in January 1873, and the schooner *Hannah Louise*, lost at Russian Gulch in April 1872 – all of them in the lumber trade.
- Among the known wrecks at Fort Ross are the brig *Donna Maria*, lost in May 1854 and the schooner *J. Eppinger*, lost in January 1901, both of them in the lumber trade. The vessels wrecked north of Fort Ross at Timber Cove are the schooner *Christina Stevens*, wrecked in April 1880, and the schooner *Liberty*, lost in February 1872, both of them in the lumber trade.
- Among the vessels known to be lost at Salt Point are the schooner *Bianca*, lost at Salt Point in December 1861, the brig *Ellen H. Wood*, wrecked in March 1859, *Erial*, wrecked in 1889, the schooner *Mary D. Pomeroy*, wrecked in December 1879, and the schooner *Nautilus*, wrecked in October 1877, all of them in the lumber trade. The two known wrecks at Fisk Mill Cove are the schooner *Carolita*, lost in January 1876, and the schooner *Gracie Belle Richardson*, wrecked in the 1880s, both in the lumber trade.
- Among the wrecks in and around Stewart's Point are the schooner *Abraham Lincoln*, wrecked at Fisherman's Bay in 1880, the schooner *Charles T. Winslow*, lost in February 1885, the schooner *D.W. Tyien*, lost in March 1878, the schooner *George Henrich*, lost in March 1871, the schooner *Gina Reed*, lost in November 1861, the schooner *Gracie Belle Richardson II*, lost in the 1880s, the schooner *Huichica*, lost in February 1872, the schooner *Mary Etta*, lost in February 1905, the ship *Matilda Heron*, lost in January 1875, the schooner *Minerva*, lost in March 1871, the schooner *Pet*, lost in April 1866, the schooner *Pinol*, lost in November 1873, the schooner *Portia*, lost in October 1894, the schooner *Susie*, lost in February 1876, the schooner *Wild Pigeon*, lost at Fisherman's Bay in November 1870, and the schooner *William*, lost in February 1871. All of these vessels were in the lumber trade. The schooner *Ruth* was lost at Biehler's Point in 1893.
- Among the vessels known to be lost north of Biehler's Point, including Gualala, Bourn's landing and Collins Landing are the schooner *Lulu*, lost at Westport, in September 1885, the brig *Curacao*, lost at the mouth of the Wallala River in December 1862, the schooner *Skylark*, lost at Gualala in November 1876, and the schooner *Three Sisters*, lost at Gualala in October 1880, the schooner *A.J. Mouje*, lost at Bowen's Landing in April 1869, the schooner *Artful Dodger*, lost at Bowen's Landing in February 1877, the schooner *Bill the Butcher*, lost at Bowen's Landing in June 1893, the schooner *Martha and Elizabeth*, lost at Bowen's Landing in November 1877, the schooner *Mary Hart*, lost at Bowen's Landing in September 1878, the brig *Walcott*, lost in May 1863 at Bowen's Landing, the schooner *Aerial*, lost in September 1888 at Fish Rock, the schooner *Archie and Fontie*, lost at Fish Rock in March 1902, and the steam schooner *Crescent City*, stranded on Fish Rock in January 1903. All of these vessels were engaged in the lumber trade.

- Wrecks in and around Iverson’s Landing, Saunders Landing and on Saunders Reef (also named Caspars Reef) include the schooner *S. Danielson*, lost at Iverson’s in April 1903, the steam schooner *Arctic*, lost on Saunders Reef in July 1922, the steam schooner *Caspar*, lost on the reef in October 1897, the steamer *Ferndale*, lost on the reef in 1883, and the tanker *Whittier*, lost on the reef in May 1922.
- Shipwrecks in and around Point Arena include the schooner *Ajax*, lost in December 1893, the schooner *Alviso*, lost in September 1883, the schooner *Amazone*, wrecked in February 1876, the schooner *Annie*, lost in 1874, the schooner *Annie Iverson*, lost in December 1873, the schooner *Barbara Fritchie*, wrecked in 1880, the schooner *B.F. Lee*, wrecked in 1871, the ship *Brooklyn*, lost in 1916, the schooner *Charles and Edward*, lost in January 1858, *Dunkerque*, lost in 1918, the steamer *Eastport*, lost in July 1875, the schooner *E. Buckley*, lost in July 1864, the schooner *Eliza Miller*, lost in October 1880, the schooner *Emilie Schroeder*, list in march 1871, the pilot boat *Fanny*, lost in 1852, the schooner *H. Bendel*, lost in February 1888, the schooner *Helen*, lost in November 1865, the sloop *Jack Hayes*, lost in January 1858, the schooner *James Townsend*, lost in August 1895, the schooner *Mary Zephyr*, lost in 1881, the schooner *Olivia Schultz*, lost in March 1883, the ship *Pacific Enterprise*, lost in September 1949, the schooner *Reliance*, wrecked in January 1885, the schooner *Robert E. Lee*, lost in November 1870, the steam schooner *Sea Foam*, lost in February 1931, , and the steamer *West Coast*, lost in December 1891.
- **Other shipwrecks are associated with the ocean highway** – vessels which were lost while running to or along the coast. They include the iron clipper *Lammermoor*, a 260-foot long vessel that wrecked off Bodega Reef in June 1882 with a cargo of coal from Australia, the steel-hulled coastal steamer *Pomona*, which wrecked at Fort Ross in March 1908, and the bark *Windermere*, lost in September 1883, wrecked near Fort Ross at Windermere Point, the ship *Joseph S. Spinney*, lost in October 1892 near Fort Ross, and the coastal steamer *Norlina*, lost at Salt Point in August 1926.



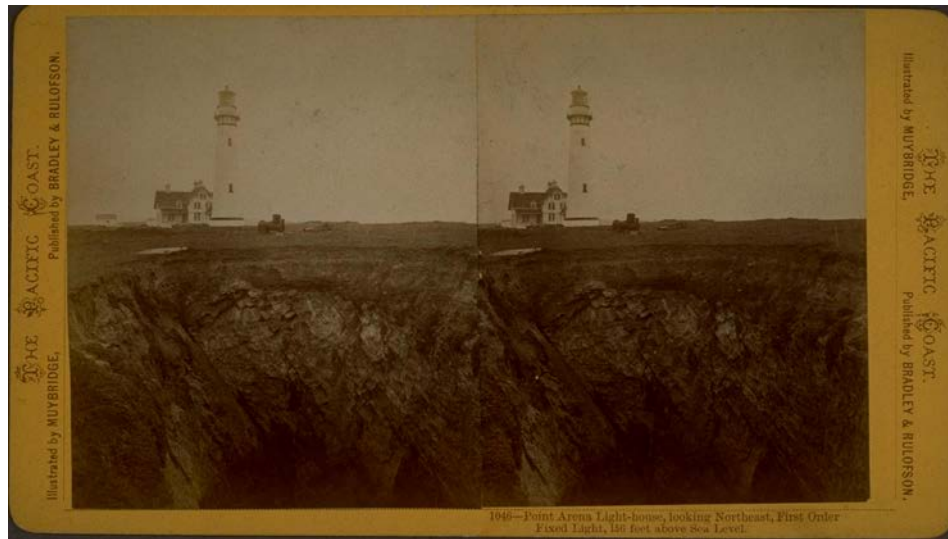
**Boiler of the steam schooner *Sea Foam*, 2007 (Robert Schwemmer/NOAA)**

- The large number of wrecks on this section of coast inspired the U.S. Government to invest in, along with other measures, lifesaving stations. The lifesaving service commenced in 1878 with initial stations around the Golden Gate, but gradually stations moved north; a station was established on Point Reyes Beach in 1889, augmented by a boathouse and then a new station in Drakes Bay in 1928. The Drakes Bay Station survives and is a National Historic Landmark. A station was built at Bolinas, farther down the coast and close to ship hazard Duxbury Reef in 1915, but the dangerous section of coast north of Point Reyes did not gain a station until 1901 when the Life-Saving Service established the Arena Cove Station (No. 314).
- Some of the wrecks on this section of the coast were responded to by Life Saving Stations at some distance, including Point Bonita off San Francisco, Bolinas, and Drakes Bay. These stations, part of the maritime cultural landscape of Gulf of the Farallones National Marine Sanctuary, are linked historically as well as by the larger coastal landscape to the Redwood Coast.
- The Arena Cove Life-Saving Station remained active through the next decades, transitioning to the U.S. Coast Guard when it was established. The crew of the station engaged in a number of heroic rescues in the highest traditions of the service.
- Now in private hands, the station is a popular bed and breakfast, the Coast Guard House Historic Inn & Cottages.



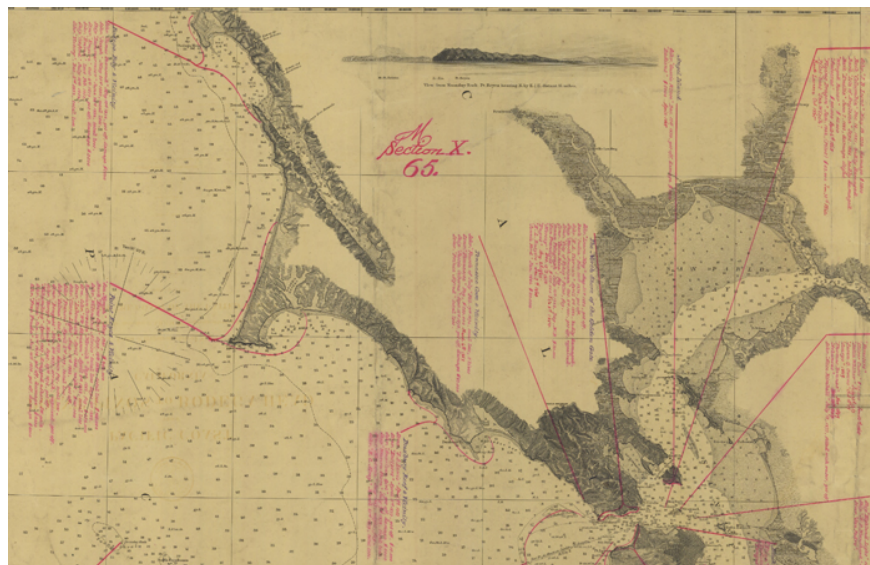
**Coast Guard House Historic Inn & Cottages (Coast Guard House Historic Inn)**

## Charting and Lighting the Coast



The original Point Arena Light of 1870, later destroyed in the 1906 earthquake

- To better navigate the coast, the U.S. Government sent out the U. S. Coast Survey to accurately chart it. This group, established in 1807, was the nation's first scientific government agency and a predecessor to NOAA. From the 1850s through the 1870s, their surveys resulted in detailed base maps, known as T-sheets, which in turn were processed into published charts for navigation. The T-sheets contain detailed knowledge not noted on the published charts; NOAA has archival copies of this data as well as various versions of charts published in response to changes on the coast through the years. One aspect, shipwreck locations, was also noted in annotated copies of the published charts; NOAA also retains these in its archives.



1885 Annotations of Shipwreck Clusters on the Coast (NOAA Library)



- The U.S. Government also responded to the dangerous nature of this part of the coast by planning to erect lighthouses with adjacent fog signals as aids to navigation.
- The government set aside a lighthouse reservation between Fort Ross and Salt Point on the Sonoma Coast, but a lighthouse was not built there.
- The first light on this section of the coast was Point Arena, which went into operation on May 1, 1870. The 100-foot high tower and associated keeper's quarters and outbuildings remained a major coastal landmark until severely damaged in the April 18, 1906 earthquake that destroyed not only San Francisco but many surrounding and far-flung communities, including Point Arena.
- In the aftermath of the earthquake, the original lighthouse was demolished and a new reinforced concrete tower and station were built, going into operation on January 15, 1908. The original lens of the first lighthouse survived the earthquake and was installed in the new lighthouse.
- The lighthouse keepers and their families were important members of the community, among them keeper Bill Owens and his wife Isabel, the last civilian keepers of the light.
- The lighthouse was automated in June 1977, and without keepers, the station's status as a tourist destination open for tours was in doubt. The Point Arena Lighthouse Keepers, a non-profit organization, stepped in with a 25-year lease to the structures and grounds in 1984 and in 2000 became the owners. They maintain an exceptional museum and provide lodging in the restored keeper's quarters as one means of generating revenue for the ongoing maintenance and preservation of the light.



**Point Arena Light, 2007 (Robert Schwemmer/NOAA)**

- The Point Arena Lighthouse is listed in the National Register of Historic Places and is a California State Landmark.
- North of Point Arena, at Point Cabrillo, a smaller, wooden lighthouse was erected in 1915 to serve the coastal ports in and around Mendocino in response to requests from the lumber trade. Completed and first lit on June 10, 1909, the Point Cabrillo Light was automated in 1973.
- The property was purchased in 1992 by the California State Park Conservancy to protect it and the surrounding 270-acre lighthouse reservation from development. After restoration of the light commenced, the Point Cabrillo Light was transferred to the State to become a California State Park in 2002.
- **Point Cabrillo is a popular tourist destination;** with State budget issues, the park was set to close in July 2012 but is currently staying open on a month-to-month basis.



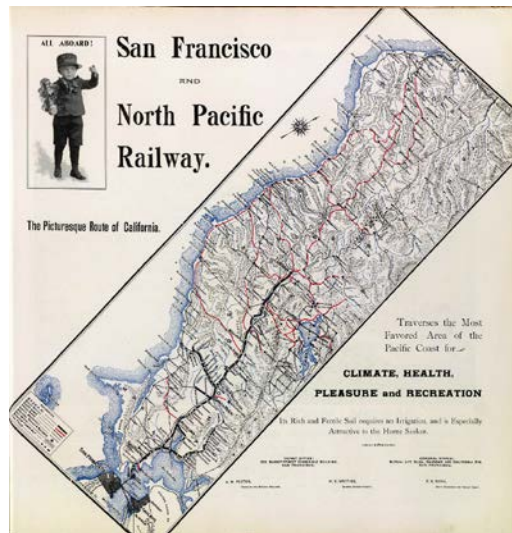
**Point Cabrillo Light (California State Parks)**

## Protection and Tourism



The Point Arena Float (Buoy) House (Flickr)

- **The uniqueness of this rugged coast inspired tourism and marketing of its climate and vistas** for potential residents in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The San Francisco and North Pacific Railway advertised that their trains traversed “the favored areas of the Pacific Coast for Climate, Health, Pleasure and Recreation” but it ran well inland from the coast.



The SF & NPR Advertisement (David Rumsey Collection)

- **While rail service linked Bodega, transportation to and along the coast remained the domain of ships through the early 20<sup>th</sup> century.** California State Route 1, the Coast Highway, did not fully open up until after the Second World War. The Coast Highway is now a popular driving destination with its scenic vistas, beaches and picturesque coastal towns.

- The protection of the coastal environment included a pitched battle to keep a proposed Pacific Gas & Electric Company nuclear power plant from being built at Bodega Head. The battle was successful; a reminder of it is the large shaft bored for the reactor, now known to locals as the “hole in the head.”
- Another development, Sea Ranch, came into being in response to the natural beauty of this maritime landscape beginning in 1963. Occupying a ten-mile section of the coast, Sea Ranch’s development and debate over public access through the development to the shore led to a new organization, Californians Organized to Acquire Access to State Tidelands (COAST), who authored a county ballot initiative in 1968 to create public trails. While that failed, a state law passed the same year required the trails. In 1972, COAST, along with other organizations, successfully campaigned for California Proposition 20, which created the California Coastal Commission, with its mission “To protect, conserve, restore, and enhance the environment of the California coastline.”
- **This section of coast has a large number of marine protected areas.** In Sonoma County there are eight; Del Mar Landing State Marine Reserve, Stewarts Point State Marine Reserve & Stewarts Point State Marine Conservation Area, Salt Point State Marine Conservation Area, Gerstle Cove State Marine Reserve, Russian River State Marine Reserve and Russian River State Marine Conservation Area, Bodega Head State Marine Reserve & Bodega Head State Marine Conservation Area, and Estero Americano State Marine Recreational Management Area. There is also Fort Ross State Historic Park.
- **Mendocino County has twelve state beaches;** Big River Beach, Caspar Headlands State Beach, Van Damme Beach, Greenwood State Beach, Seaside Beach, Westport-Union Landing State Beach, Manchester State Beach, Navarro Beach, Portuguese Beach, Schooner Gulch State Beach, Long Valley Creek, and 10 Mile Creek. There are also State Parks and Marine Preserves; MacKerricher State Park, Mendocino Headlands State Park, Point Cabrillo State Park, Point Arena State Marine Reserve and Point Arena State Marine Conservation Area, Russian Gulch State Park, Saunders Reef State Marine Conservation Area, and Sea Lion Cove State Marine Conservation Area.
- **The area’s coastal heritage, including its lumbering, maritime and railroad history, is actively promoted** in individual communities, in museums, and in wayside exhibits and markers put up by the State, as well as at State parks such as Point Cabrillo, Fort Ross and at sites like the Point Arena Lighthouse. Marketing this history and the maritime cultural landscape are key aspects of the tourism strategy for the Redwood Coast as well as its agriculture and wineries.
- **Diving on the coast and exploring its kelp forests and wrecks is another aspect of tourism marketing.** This also includes the wreck of *Pomona* at Fort Ross. Its remains are listed in the National Register of Historic Places, and it is a popular dive attraction at Fort Ross State Historic Park.

## Conclusions

**This document, as noted, is an introductory essay** on a diverse, unique and significant maritime cultural landscape that documents humanity's ongoing relationship with this coastal environment, and its effect on human activity as well as humanity's effects on the environment.

**Studying and more comprehensively identifying this maritime cultural landscape is the recommended next step** – but in that, what is recommended is not that this be accomplished by a small group of government historians, archaeologists and historical ecologists, but as a collaborative process with regional and local experts and residents. It must be a process that is open, transparent and inclusive, and give voice and listen to all perspectives and cultures. It is not an exercise to determine what is “significant” and hence what is either “less” significant or not significant at all. The purpose is to reflect all that has happened here and how this environment has played a role. Together, and without establishing a hierarchy, by looking at this section of the coast as a maritime cultural landscape, we see that the entire story is significant.

## Acknowledgements

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