

# “Punta de los Reyes . . . God help the hapless mariner who drifts upon it!”

- San Francisco Chronicle 1887

## Point Reyes: A Treacherous Obstacle to Mariners

Point Reyes is the windiest place on the Pacific Coast and the second foggiest place on the North American continent. Weeks of fog, especially during the summer months, frequently reduce visibility to hundreds of feet. The Point Reyes Headlands, which jut 10 miles out to sea, pose a threat to each ship entering or leaving San Francisco Bay. The historic Point Reyes Lighthouse warned mariners of danger for more than a hundred years.

The historic Point Reyes Lighthouse, built in 1870, was retired from service in 1975 when the U.S. Coast Guard installed an automated light. They then transferred ownership of the lighthouse to the National Park Service, which has taken on the job of preserving this fine specimen of our heritage.

All lighthouses in the United States are now automated because it is cheaper to let electronics do the work.\* Many decommissioned lighthouses were transformed into restaurants, inns or museums. The lighthouse at Point Reyes National Seashore is now a museum piece, where the era of the lightkeepers' lives, the craftsmanship

\* except for the Boston Light, which remains staffed “in perpetuity” in accordance with legislation introduced by Senator Edward Kennedy of Massachusetts.

## The Point Reyes Light First Shone in 1870



The Point Reyes Lighthouse lens and mechanism were constructed in France in 1867. The clockwork mechanism, glass prisms and housing for the lighthouse were shipped on a steamer around the tip of South America. The parts from France and the cast iron tower,

which was built in San Francisco, were then hauled on ox-drawn carts from the landing on Drakes Bay to the cliff 600 feet above sea level.

Meanwhile, 300 feet below the top of the cliff, an area had been blasted with dynamite to clear a level spot for the lighthouse. To be effective, the lighthouse had to be situated below the characteristic high fog. It took six weeks to lower the materials from the top of the cliff to the lighthouse platform and construct the lighthouse.

Finally, after many years of tedious political pressure, transport of materials and difficult construction, the Point Reyes Light first

## The Lighthouse, Fog Signal and Lifesaving Station Saved Lives

Lighthouses provide mariners some safety by warning them of rocky shores and reefs. They also help mariners navigate by indicating their location as ships travel along the coast. Mariners recognize lighthouses by their unique flash pattern. On days when it is too foggy to see the lighthouse, a fog signal is essential. Fog signals sound an identifying pattern to signal location to the passing ships. However, the combination of lighthouses and fog signals does not eliminate the tragedy of shipwrecks.

Because of this ongoing problem, a lifesaving station was established on the Great Beach north of the lighthouse in 1890. Men walked the beaches in four-hour shifts, watching for shipwrecks and the people who would need rescue from frigid waters and powerful currents. This lifesaving station was later moved to Drakes Bay near Chimney Rock and was active until 1968. Today, it is a National Historic Landmark



Shipwrecked Junta, 1938, at Point Reyes Headlands.

National Park Service collection

## The Fresnel Lens: The French Jewels



The lens in the Point Reyes Lighthouse is a “first order” Fresnel (fray-nel) lens, the largest type of Fresnel lens. Augustine Jean Fresnel of France revolutionized optics theories with his new lens design in 1823.

Before Fresnel developed this lens, lighthouses used mirrors to reflect light out to sea. The most effective lighthouses could only be seen eight to twelve miles away. After his invention, the brightest lighthouses could be seen all the way to the horizon, about twenty-four miles.

The Fresnel lens intensifies the light by bending (or *refracting*) and magnifying the source light through crystal prisms into concentrated beams. The Point Reyes lens is divided into twenty-four vertical panels, which direct the light into twenty-four individual beams. A counterweight and gears similar to those in a grandfather clock rotate the the 6000-pound lens at a constant speed, one revolution every two minutes. This rotation makes the beams sweep over the ocean surface like the spokes of a wagon wheel,

“No keepers ever volunteer to transfer to Point Reyes, and almost without exception the keepers on the station are the ones who have entered the service there.”

- Superintendent of Lighthouses, 1926

## The Lonely Life of a Lighthouse Keeper

Keeping the lighthouse in working condition was a twenty-four hour job. The light was lit only between sunset and sunrise, but there was work to do all day long. The head keeper and three assistants shared the load in four six-hour shifts.

Every evening, a half-hour before sunset, a keeper walked down the wooden stairs to light the oil lamp, the lighthouse’s source of illumination. Once the lamp was lit, the keeper wound the clockwork every two hours and twenty minutes to turn the lens so that the light would flash. Then, throughout the night, he kept the lamp wicks trimmed so that the light would burn efficiently, thus the nickname “wickie.”

Daytime duties included cleaning the lens, polishing the brass, stoking the steam-powered fog signal and making necessary repairs. At the end of each shift, the keeper trudged back up the wooden staircase. Sometimes the winds were so strong that he

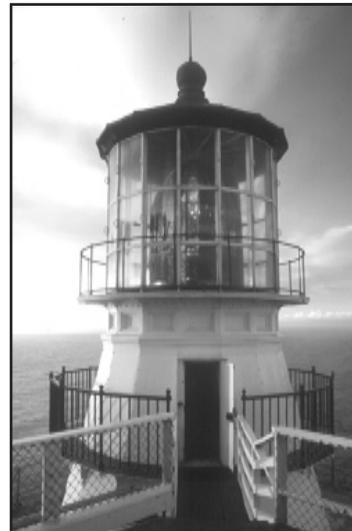
had to crawl on his hands and knees to keep from being knocked down by the wind.

The hard work, wind, fog and isolation at

## The Lighthouse is an Enduring Historical Legacy

The historic Point Reyes Lighthouse served mariners for 105 years before it was replaced. It endured many hardships, including the 1906 earthquake, during which the Point Reyes Peninsula and the lighthouse moved north 18 feet! The only damage to the lighthouse was that the lens slipped off its tracks. Thirteen minutes after the earthquake, the lighthouse was once again in working order.

The National Park Service is now responsible for the maintenance the lighthouse. Park rangers now clean, polish and grease it, just as lighthouse keepers did in days gone by. With this care, the light can be preserved for future generations - to teach visitors of maritime history and of the people



*Point Reyes Lighthouse today.*

## Visiting the Point Reyes Lighthouse Today

The Point Reyes Lighthouse is located on the western-most point of the Point Reyes Headlands.

The Lighthouse Visitor Center is open from 10:00 a.m. to 4:30 p.m., Thursday through Monday. Here, you can see historic photographs of shipwrecks and lighthouse-keepers, and handle items on the touch table, including whale baleen. A display of local birds will introduce you to the birds you might see just off the cliffs. A small bookstore offers books, maps and other educational products.

To get to the lighthouse itself, you must walk a half mile from the parking lot to the Visitor Center, and then down 308 steps. The stairs are open 10:00 a.m. to 4:30 p.m., Thursday through Monday. When wind speeds exceed 40 m.p.h., the steps to the lighthouse are closed for visitors’ safety.

Seasonally, there are tours of the lantern room and evening lighting programs. On weekends and holidays during whale-watching season, the road to the Lighthouse is closed to private vehicles. Visitors must ride a shuttle bus.

Please call the Lighthouse Visitor

# The Historic Point Reyes Lighthouse

