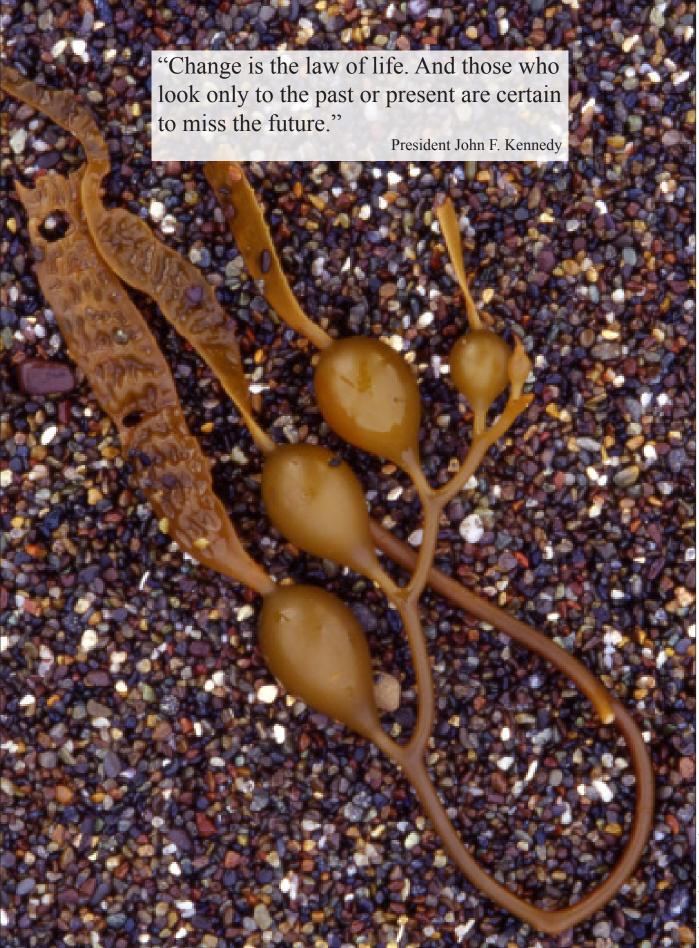


# Point Reyes National Seashore 2010 Year in Review

Point Reyes National Seashore



© Galen Leeds Photography

# A Message from the Superintendent

Dear Friends of Point Reyes,

This past year marked another successful year preserving the coastal wilderness and irreplaceable resources at Point Reyes National Seashore while providing an exceptional experience to visitors by park staff, partners and volunteers.

We received over \$2 million in funding from the American Recovery and Reinvestment Act (ARRA) for projects such as multiple photo-voltaic solar installations on buildings to help reduce our carbon footprint, to providing additional accomodations at the Point Reyes Hostel.

As you read on, many of the past year's highlights are illustrated in this document. The park served over 2.2 million visitors this year and continues to be one of the top thirty most visited parks in the nation. The park staff are some of the most dedicated public servants in the national park system.

We hope you will continue to join us in working to save this coastal sanctuary as a legacy for future generations.

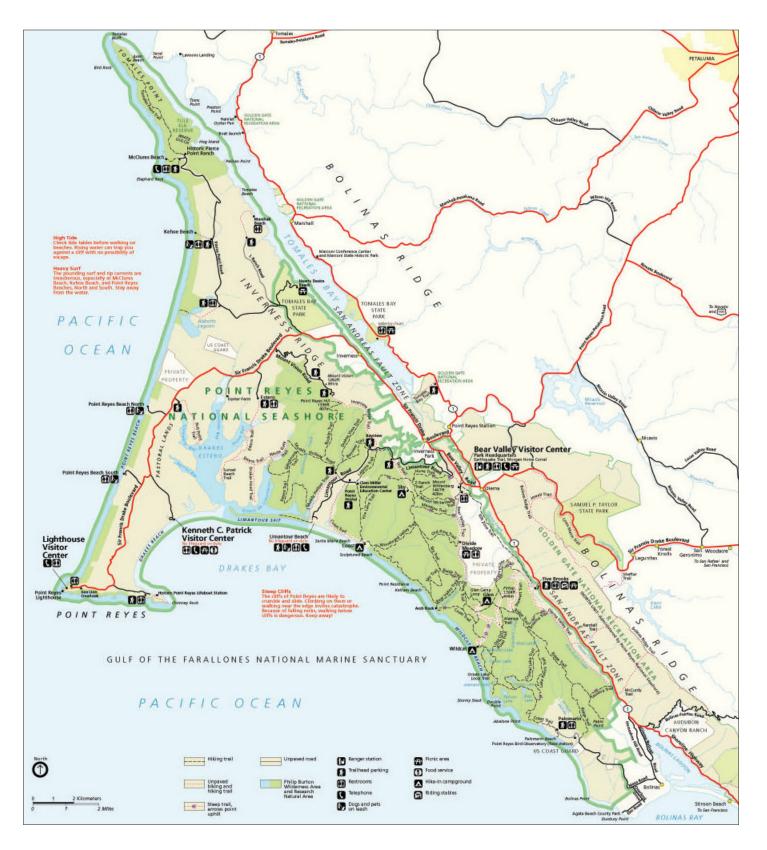
Sincerely,

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Cicely A. Muldoon Superintendent



# Park Map



ne of America's greatest coastlines, Point Reves National Seashore comprises over 71,000 acres, including 32,000 acres of Congressionallydesignated wilderness area. Estuaries, windswept beaches, coastal grasslands, salt marshes, and coniferous forests create a haven of 80 miles of unspoiled and undeveloped coastline. Located just an hour's drive from an urban area populated by eight million people, the park receives over two million visitors annually. Abundant recreational opportunities include 147 miles of hiking trails, backcountry campgrounds, and many beautiful beaches.

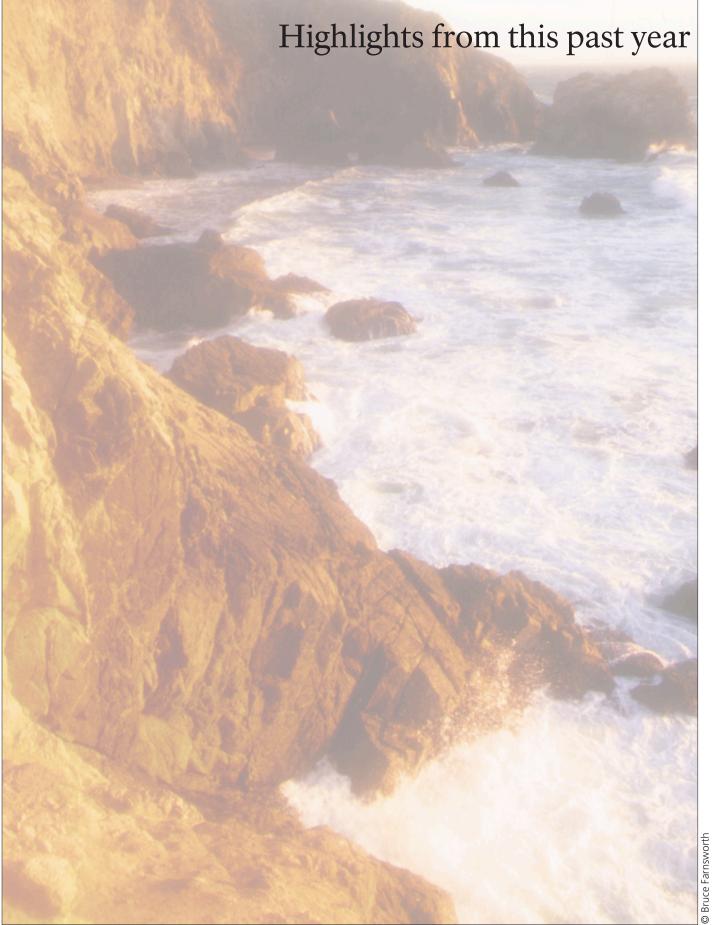
Geologically, Point Reyes National Seashore is a land in motion. The great San Andreas Fault separates the Point Reyes Peninsula from the rest of the North American continent. Granite bedrock found here matches the bedrock in the Southern Sierra Nevada range. This indicates the peninsula

has moved over 300 miles northwest over a period of 30 million years. As wildland habitat is lost elsewhere in California, the relevance of the Point Reyes Peninsula as a protected area with a notably rich biological diversity increases. Over 45% of North American avian species and nearly 18% of California's plant species are found here due to the variety of habitat and uniqueness of the geology. Twenty-seven threatened and endangered species exist within the Seashore.

Point Reyes contains examples of the world's major ecosystem types. For this reason it was internationally recognized in 1988 by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Man and the Biosphere program and included as part of the Central California Coast Biosphere Reserve.

The cultural history of Point Reves dates back some 5,000 years ago to the Coast Miwok Indians, the first human inhabitants of the peninsula. Over 120 known Coast Miwok village sites exist within the park. According to many experts, Sir Francis Drake landed here in 1579, the first European to do so. In response to the many shipwrecks on the treacherous coastal waters, key lighthouse and lifesaving stations were established by the United States Government in the late 1800s and early 1900s. In the early 1800s, Mexican land grantees established ranchos. These were followed by a wave of American agricultural operations which continue to this day in the Seashore's pastoral zone.





## Maintaing Facilites is a Key to Visitor's Enjoyment

he Facility Management Division celebrated another very successful year in 2010 by successfully completing American Recovery and Reinvestment Act (ARRA) projects totaling \$2.6 million. Included in those projects is an alternative energy installation of 50kW of electrical power generation from photovoltaic systems; improvements to the boat-in campground at Tomales Bay Beach; and a reroute of the Muddy Hollow trail out of a sensitive riparian zone.

The Energy Manager and intern staff led the efforts of University of California at Davis to develop an energysaving lighting plan for the Bear Valley Visitor Center; and worked with PG&E to create a lighting retrofit project that will further conserve electrical energy in the Park Headquarters area. Ongoing partnerships with Conservation Corps North Bay and other youth and volunteer groups provide opportunities for the community to help preserve our trails for future generations.

Looking to 2011, plans are in place to further improve the park's capital assets while preserving energy and protecting natural and cultural resources.



Lowering of restrooom at Tomales Bay Beach



Crew working on Muddy Hollow Trail

# Bay Area Fire Management

Bay Area Network Fire Management Highlights • 235 acres treated with use of fire as a management tool at Point Reyes NS and Pinnacles NM. The primary objective was to set back the growth of invasive plant species.

• 30 acres of piled woody debris from activity fuels treatment, were disposed of by burning at Golden Gate NRA.

• 175 acres of non-native eucalyptus, dead and diseased native tanoak, live oak and hardwoods stands were mechanically sheared by workers employed with the 2009-10 American Recovery and Reinvestment Act (ARRA) at Golden Gate and Point Reyes. Material cut by the workers was mechanically chipped or piled for burning at a later date. • 150 acres were either thinned and chipped or piled, or mowed at various Bay Area National Parks and Fire Management personnel supported prescribed fire and wildfire suppression operations at other California National Parks as well as Bureau of Land Management and US Forest Service areas throughout the fire season.



Fire Management Officer Roger Wong on the Estero burn



Townsend's big-eared bats.

# US Geological Survey Biologists at Work

USGS biologists Gary Fellers and Patrick Kleeman conducted research on rare frogs and bats. California red-legged frogs are present within the park and are listed as Federally-threatened. The frogs breed in ponds and marshes during the winter and then disperse to riparian areas for most of the year. About a dozen of the breeding sites within the park are monitored to evaluate breeding, and to track year-to-year changes in breeding success.

Bats are monitored at Point

Reves with automated digital recorders that record ultrasonic bat vocalizations. The recordings are used to determine what species are present in the park, and to track seasonal and annual fluctuations in bat activity. Point Reyes hosts one of the largest known maternity roosts of Townsend's big-eared bat, which is quite rare throughout most of it's range in California. One roost site within the park has been monitored monthly (with night vision equipment) for the last 20 years. Over that time, the population has gradually increased.

#### Using Resources to Teach, Inspire and Reconnect

During 2010, over 7,000 students used Point Reyes as an outdoor classroom through our curriculum-based interpretive programs. Additionally, over 48,000 people attended our ranger-led programs geared for all ages. When attendance at visitor centers and other outreach programs are included, over 640,000 visitor contacts were made by the interpretive staff.

Through the NPS Centennial Initiative, an additional six seasonal employees were hired which allowed for and additional 1,000 interpretive programs and 10,000 additional contacts.

Projects completed this past year included the redesign of the history section in the Bear Valley Visitor Center, design and publication of a Junior Ranger booklet with patch, and the newly designed Giacomini Wetland panels. Special events such as the 28<sup>th</sup> Annual Big Time Native American Festival and the 27<sup>th</sup> Annual Sand Sculpture Contest were held with record crowds. This past year brought two new permanent exhibits to the Bear Valley Visitor Center. The first was a life-size model of an elephant seal, prominently displayed at the ewntrance to

the visitor center. In spring, we had the first Science on a Sphere<sup>®</sup> exhibit installed in any national park. Science On a Sphere (SOS)<sup>®</sup> is a room sized, global display system that uses computers and video projectors

to display planetary data onto a six foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere<sup>®</sup> as an educational tool to help illustrate Earth System science to people of all ages.

Continued efforts to educate the public through stories in newspapers and other forms of media continued with over 30 press releases and followup stories on various topics. Additionally, two biweekly shows on a local FM radio station are hosted by staff.



New interpretive exhibit, Science on a Sphere®, was seen by over 2,000 visitors in the first few months



Interpretive Ranger along the Earthquake Trail

# Monitoring the Health of Our Precious Resources

In FY2010, the Water Resources Branch of the Natural Resources Division monitored endangered salmonids in Olema, Pine Gulch, Redwood, and Cheda Creeks as well as the newly restored Giacomini Wetland. In cooperation with USFWS, NPS fisheries staff relocated endangered tidewater gobies from a growing population in the Giacomini Wetland to extirpated sites in Tomales Bay State Park.

Vegetation Resources Branch completed compliance and planning work in advance of implementation of the restoration of 100 acres of native coastal dunes; completed soil surveys, genetic analyses, seed accessioning efforts, and monitoring for the endangered Sonoma spineflower in a USFWS cooperative Preventing

Extinction Project; and reported and monitored several other federally endangered plants including Sonoma alopecurus, Tidestrom's lupine populations. Invasive plant control continued with a focus this year on fertile capeweed and Scotch broom. The Range Management Branch completed ranch plans and **Best Management Practices for** several Olema Valley ranches and continued to collect and store native grass seed for future restoration of native grasslands.

The Wildlife Branch continued to closely monitor the remant non-native deer herd, which now numbers less than 70 and is non-reproductive; monitored and protected the threatened western snowy plover with exclosure placements and beach restrictions to protect nests and chicks; and for the second year, provided nesting bird surveys to Facilities Management, Fire, and other Natural Resource Management branches to protect breeding landbirds from incidental impacts of park operations.





Snowy plover docents continue successful education programs

Release of Tidewater goby within Tomales Bay State Park

# Partnerships Expanding Outreach Efforts

he Point Reyes National Seashore Association (PRNSA) conducts environmental education programming, operates the park's three bookstores and raises funds for park needs. In 2010, PRNSA residential youth environmental education programs offered 650 scholarships to children from underserved communities. These included newly arrived refugee children from Iraq, Sri Lanka and Burma as well as Native American Coast Miwok children. This represents a near tripling of PRNSA's scholarship program in just two years. In all nearly 1.800 children attended PRNSA's multi-day programs in 2010. For many of these children it was their first visit to a beach, first visit to a national park and first time backpacking and camping under the stars.

Another 1,600 attended PRNSA's Seminars program where expert naturalists, artists and wilderness guides help connect participants to the park and to broader environmental issues through our seminars afield program. Through a partnership with Environmental Traveling Companions, PRNSA was able to provide naturalist led kayaking trips to at-risk youth and persons with disabilities. PRNSA continued to build on the success of the Giacomini Wetland's restoration (PRNSA provided \$6.25 million in funds for this project) by working on curriculum that will teach youth about the amazing transformation that has taken place at the site. PRNSA also funded an addendum to a video that describes the changes that have taken place since the levees were removed and tidal flows resumed.

Through a bequest received in 2009, PRNSA will be providing \$250,000 for the rehabilitation of housing for researchers and youth interns at the Tomales Bay Marine Station.

And finally PRNSA held its first annual gala event at the park, raising over \$80,000 for PRNSA and park projects.



Young backpackers at Summer Camp



Canoeing activity for youth

# Visitor and Resource Protection

he year started with multiple major search and rescue (SAR) responses for missing individuals. Throughout the year, Rangers responded to a seashore-record number of SAR incidents both on land and water. Rangers worked closely with the Marin County Search and Rescue team, Bolinas Fire Department, United States Coast Guard, Sonoma County Sheriffs Office, and other agencies during this very busy SAR-response year.

Rangers logged many hours of vessel operation to patrol the seashore coastline, Tomales Bay, and familiarize themselves with the new California Marine Protected Areas adjacent to the seashore. These patrols were focused on preventing prevalent marine life poaching that is rampant on the California coast. Rangers made a particularly well publicized Abalone poaching case on Tomales Point. Rangers investigated and interdicted the cultivation of approximately 5,500 marijuana

plants in three sites within the seashore. Additionally, Rangers assisted the Marin County Sheriffs Office and Marin Municipal Water District (MMWD) to interdict another 7,800 plants just outside



of the seashore on MMWD land. Rangers worked closely with many local and federal law enforcement agencies to investigate and interdict these sites that were directly linked to Mexican Drug Trafficking Organizations. The Special Park Uses branch continued to work closely with the regional office to improve the concessions management program and maintain positive working relationships with ranchers. Appropriate special use permits were transitioned to Right of Way Permits. Unique 10-year ranch permits were negotiated and implemented for the first time.

Remants of garbage left behind in a

typical marijuana grow site



Boat operations in frigid waters along Tomales Bay

## Focus on Science and Communications

The Science division and the Pacific Coast Science and Learning Center continued their focus on facilitating the use of Bay Area National Parks for scientific inquiry, supporting science-informed decision making, communicating and providing access to new research, and promoting resource stewardship through partnerships. Some highlights included:

Collection of LiDAR, high resolution aerial images, and multispectral imagery for all of Point Reyes and Golden Gate, and the Tomales Bay Watershed. These data will be useful for assessing sea level change, erosion, water flow, vegetation assessment and many other research and monitoring questions.

Implementation of Marine Protected Area baseline assessments using underwater video cameras that will provide a measure of the effect of the new reserves on marine fish and invertebrates at Point Reyes. Developing seafloor habitat maps with Moss Landing Marine Laboratories.

Working with the nearly 100 Non-NPS researchers at Point Reyes each year to help ensure that research projects can help inform park conservation and management.

Providing over 15 high quality field and science communication internships for students to gain job and science skills in San Francisco Bay Area National Parks.

Developing and implementing a Wetlands Science Curriculum for local students.

Conducting 1 and 2-week science immersion programs for under-represented highschool students from the Bay Area. Development (with the Inventory & Monitoring Network) of a website portal for natural resource information for Bay Area National Parks: www.sfnps. org. The site will support all audiences, from students, to researchers, to the general public and park managers.

Hosting over 2,000 personnights at the Tomales Bay Marine Station for researchers working on important park research questions ranging from the population viability of endangered plants to the population dynamics of white sharks.

Coordinating the 5th annual Fungal Foray and Fungus Fair, which have brought the known number of fungi at Point Reyes to nearly 500 species.

Conducting a baseline endangered black abalone assessment for Point Reyes and Golden Gate.



Student interns providing intertidal monitoring research



The National Park Service cares for special places saved by the American people so that all may experience our heritage.

United States Department of the Interior National Park Service Point Reyes National Seashore Point Reyes Station, Ca 94956 415-464-5100 www.nps.gov/pore

