

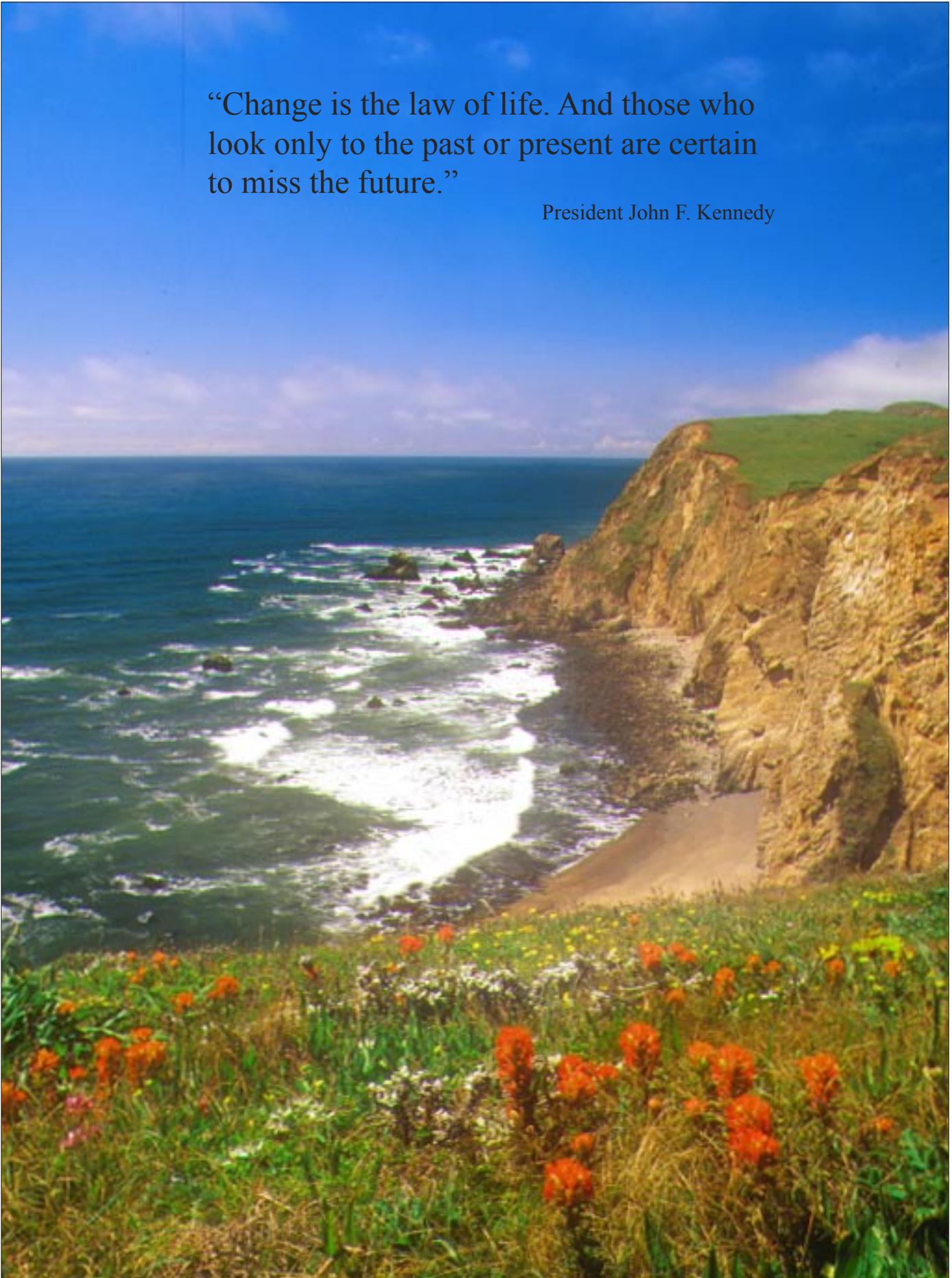


Point Reyes National Seashore 2007 Year in Review



“Change is the law of life. And those who look only to the past or present are certain to miss the future.”

President John F. Kennedy



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.

Projects ranging from beginning restoration of the Giacomini Wetlands on Tomales Bay, to rebuilding the Sacramento Landing pier within a smaller footprint to reduce impacts to critical eel grass beds, were accomplished last year.

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.

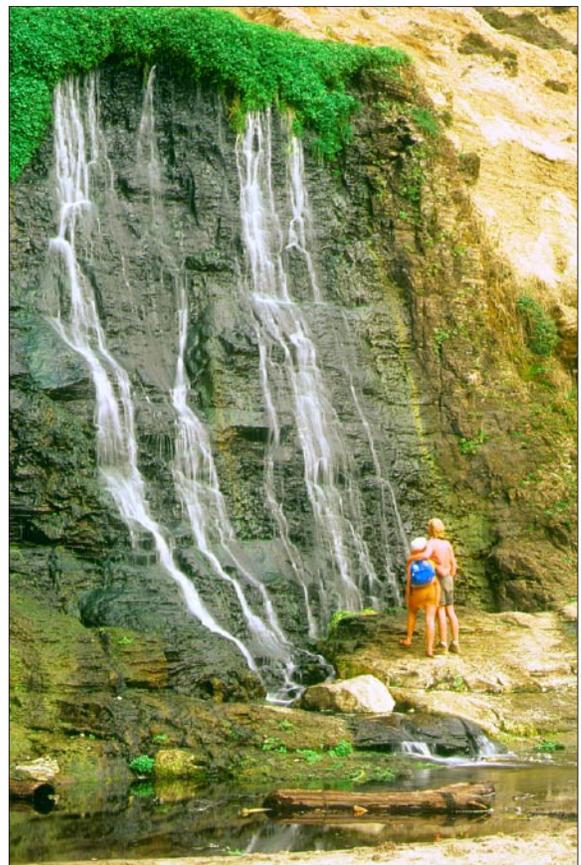
Sincerely,



Don L. Neubacher
Superintendent



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Park Map



One of America's greatest coastlines, Point Reyes National Seashore comprises over 71,000 acres, including 32,000 acres of Congressionally-designated 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 Reyes 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.



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Highlights from this past year



Giacomini Wetland Restoration Project

Point Reyes National Seashore moved forward with the first phase of the 560-acre Giacomini Wetland Restoration Project. Phase I focused on removal of agricultural infrastructure and conditions and enhancement of special status species habitat and included removal of at least one section of the former Giacomini Dairy Ranch levee. The Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the project was finalized in June 2007, and the Record of Decision was signed on August 16, 2007 by the Regional Director. After receiving the appropriate permits and authorizations, the Seashore and its funding and managing partner, Point

Reyes National Seashore Association (PRNSA), initiated construction of Phase I on September 23, 2007. Following completion of earthmoving activities on November 16, 2007, the Seashore conducted revegetation of the enhanced freshwater marsh and ponds created for the federally threatened California red-legged frog (*Rana aurora draytonii*) using a combination of Marin Conservation Corps crews and community and school group volunteers.



Groundbreaking ceremony on levee with (l to r) Sally Bolger, PRNSA; Chuck Morton, CALTRANS; Brian O'Neill, Golden Gate National Recreation Area; Beth Huning, San Francisco Bay Joint Venture; and Don Neubacher, Point Reyes National Seashore



Lowering of levee along the southern portion of the Giacomini Wetlands



Explore, Discover, Connect

The Point Reyes National Seashore Association (PRNSA) enjoyed a successful 2007, highlighted by the Giacomini Wetlands Restoration Project, the largest wetlands restoration project ever undertaken in Point Reyes and the largest project ever undertaken by PRNSA.

PRNSA raised over \$5.5 million dollars for this project, which will restore 550 acres of critical wetlands at the headwaters of Tomales Bay. These restored wetlands will improve water quality in Tomales Bay and provide habitat for numerous threatened and endangered species. Phase I of the project was completed in the fall of 2007, and the remainder of the project is scheduled to be completed in 2008.

In addition to its wetlands restoration activities, PRNSA had sales of \$350,000 in the three bookstores it operates in the three Park visitor centers, 350 participants in its Summer Camp program and over 1,200 participants in its environmental education school programs, and offered over 100 field seminars.



Watercolor artist Birgit O'Connor leads one of the many Field Seminars sponsored by PRNSA



Some of the children who participated in Summer Camp last year



Using Resources to Teach, Inspire and Reconnect

During 2007, over 6,000 students used Point Reyes as an outdoor classroom through our curriculum-based interpretive programs. Additionally, over 38,000 people attended our ranger-led programs geared for all ages. When attendance at visitor centers and other outreach programs are included, over 620,000 visitor contacts were made by the interpretive staff.

Projects completed this past year included the redesign of the Sir Francis Drake panels in the courtyard at Drakes Beach and final redesign of the Lighthouse Visitor Center panels. Special events such as the 27th Annual Big Time Native American Festival and the 26th Annual Sand Sculpture Contest were held with record crowds.

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

The Seashore's Interpretive staff won a national award from the National Association for Interpretation (NAI) in the Media Awards competition. The project was the publication *1906 Earthquake Centennial*. This is the 8th national award from NAI in the past 7 years for the Seashore!



Rangers providing informational and educational programs to park visitors



Fire Management and Communications

Fire Management had another successful year of wildland fire suppression, hazardous fuels management and interagency wildland fire support.

Two (2) statistical wildfires occurred at Point Reyes National Seashore and one on Golden Gate National Recreation Area lands administered by the Seashore. The largest, the Shoreline Fire, was 6 acres in size and began by arching electrical wires near the Dogtown Area. A large and rapid multi-agency response of local volunteer, county and Seashore fire personnel prevented the fire from creating additional problems in the Olema Valley.

The 5-person Hazardous Fuels Removal Crew spent the majority of the fire season in-park thinning dense eucalyptus stands in the Palomarin Trailhead area. Other projects included annual vegetation abatement around park residences and maintaining vegetation clearance adjacent to the Bayview Trail Evacuation Route. Along with personnel from Sequoia-Kings Canyon NP the crew was assigned to a 24,000 acre backcountry fire on the Lolo National Forest in Montana during the month of August for 2 weeks.

Our Type 3 wildland engine crew spent back to back assignments late July to mid-August assisting the US Forest Service in Northern California and on the Sawtooth National Forest in Idaho.

The Seashore Fire Management Officer and Fire Planner were largely responsible for completing the Pinnacles National Monument Fire Management Plan (FMP).

Additionally, 315 acres of hazardous fuels were treated by thinning, chipping, piling and mowing. The Seashore also continued the community brush dropp-off program and installed the Vision Fire exhibit panel in the Bayview parking area off of Limantour Road.



Before (above) and after (left) views of eucalyptus thinning near Palomarin Trailhead



Exhibit on Vision Fire at Bayview Trailhead

Facility Management: A Step Ahead



Culvert replacement with a bridge to improve passage for fish

In Fiscal Year 2007, Facility Management tackled a new series of projects to enhance and maintain park facilities and structures. The Roads branch repaired asphalt surfaces on Estero and Bear Valley Roads with repair/rehab funding. The Project Management and Engineering branch provided construction management for the

completion of the Lifeboat Marine Railway restoration, and also completed 55% of the Coastal Watershed restoration project by replacing culverts at Estero Road, Mt. Vision Road, and Home Ranch, removing impoundment at Glenbrook

Crossing, constructing frog ponds at Limantour Beach, and constructing 2.1 miles of trail which resulted in improving 20 miles of salmon and steelhead habitat.

Construction of the A Ranch wastewater system and replacement of the failed Home Ranch

wastewater system were also accomplished. Another major project overseen by the project manager was replacement of the pier at Sacramento Landing, which also improved eel grass beds around the site.

Roads crew slurry sealed 0.9 miles of the Cross Marin Trail. They also provided the labor and equipment used on the Truttman headcut and road project, in cooperation with the park Rangeland Ecologist.

The Trails Branch replaced culverts with bridges at the Glen Trail and Bear Valley Trail intersection and on the Rift Zone Trail to improve salmon and steelhead habitat.

A major project overseen by the Buildings & Utilities Branch was the replacement of vault toilets with a sustainable restroom facility at the Lighthouse Visitor Center.

Additional accomplishments included:

25,581 kWh of renewable energy produced by our photovoltaic solar systems;

30 tons of recycling removed from the park; and

a 95% visitor satisfaction rating for our visitor use facilities through visitor surveys.



New Sacramento Landing pier

Preserving the Seashore's Native Ecosystem

Management of the two species of non-native deer, axis and fallow, began in July 2007, in accordance with the Preferred Alternative in the Environmental Impact Statement. Approximately 600 non-native deer have been lethally removed from Point Reyes National Seashore-administered lands. Lethal removal of axis and fallow deer was accomplished by contracted experts in wildlife control. Safety of visitors and staff, as well as humane treatment of dispatched animals, was paramount. Over 80 % of culled deer were donated as food for the needy to Bay Area charities, local Native American tribes and condor recovery programs throughout California.

As part of a joint NPS-USDA research project to assess the field efficacy of an experimental contraceptive for fertility control in fallow deer. Eighty (80) adult fallow does were captured via dropnet (83%) and dartgun (17%). Animals were assessed for health, pregnancy and lactation status, fecal samples were collected for progesterone assay (pregnancy testing) and *Mycobacterium avium* paratuberculosis culture

(John's disease testing). All does were permanently and uniquely marked with ear tags and VHF radio telemetry collars fitted with mortality sensors. Animals were injected with either GonaCon™, an experimental immunocontraceptive developed by the USDA, or a sham injection. Experimental subjects will be monitored over the next 4-6 years via radio telemetry to assess efficacy and safety of the vaccine.



Radio-collared and ear-tagged fallow doe



Tule elk at the Tule Elk Reserve on Tomales Point

Long-term Elk Monitoring

2007 was the third and final year of a joint NPS-USGS-U.C. Berkeley project to study the elk populations at Limantour and Tomales Point.

Information on adult survival, reproduction and calf recruitment is pending. Three elk censuses were conducted at the Tomales Point Tule Elk Reserve during November and December of 2007.

The highest count was 585 elk, higher than in previous years. The increase in females, calves and spikes and high survivability indicate that the Tomales Point population will likely continue to expand in 2008. The free-ranging herd at Limantour and Drakes Beach has expanded slowly with current numbers estimated at approximately 50 animals.

Point Reyes and Golden Gate Range Management Program

This year showed continued energy and commitment to the range program for Point Reyes and the Golden Gate northern district dairy and beef ranches.

Rangeland monitoring was reinitiated, sampling 20 vegetation trend transects and 20 Residual Dry Matter transects. Two sediment control Best Management Practices (BMPs) were completed in cooperation with the Park's Roads Crew. The Truttman Headcut Project constructed two rock weirs and backfilling the headcut. The Truttman Road Project regraded a road on a steep slope, installing waterbars with ditchouts and surfacing the road prism with rock. The Range Team implemented a full biological resource assessment of ten project locations, conducted permitting in coordination with Marin Resource Conservation District and set up an indefinite quantities contract for fence construction renewable up to four years. The Range program procured \$120,000 in funding to match Regional Board Grant for compliance, design and project implementation.

The Range program assisted NRCS and local Ranchers with compliance and technical guidance on EQIP projects to conserve resources on park rangeland.

The Range program has been assisting with the reintroduction of showy Indian clover at D Ranch. They have also been assisting UC Berkeley researchers on a study at Pierce Point and a Bodega Bay grassland study at Palomarin and assisting Pinnacles NM with their range program and General Management Plan.



Showy Indian clover



Heifer at the Mendoza dairy ranch within the Seashore



McClure dairy ranch and Abbotts Lagoon

Habitat Restoration and Rare Plant Conservation

During fiscal year 2007, the Point Reyes National Seashore Vegetation Team made significant contributions towards restoration and conservation goals at Point Reyes National Seashore and throughout the entire Pacific West Region.

Approximately two acres of European beachgrass follow-up were completed north and south of the mouth of Abbotts Lagoon as part of the dune restoration project. This project continues to work towards total restoration of 50 acres of critical dune habitat. As in FY05, male snowy plovers continue to use the restored area to rear the majority of fledged chicks. Tidestrom's lupine and beach layia, both Federally-endangered, continue natural recolonization in the restoration area.

All historic Cape-ivy removal sites were retreated numerous times by volunteers, NPS staff and MCC Americorps staff. Additional \$9,000 in fee demonstration funding was secured from the Water Resources Division for follow-up at Lagunitas and Glenbrook sites in FY08-09.

Over 2,400 Pampas grass plants (about 4 net infested acres across hundreds of wilderness acres) were removed by an experienced volunteer, park staff, and the California Exotic Plant Management Team (EPMT).

The CaEPMT staff also removed a blackwood acacia grove, contained a eucalyptus infestation, and treated scattered high-priority Scotch broom, French broom, mattress vine, and St. Johns' wort.

Over 600 volunteers contributed over 2,800 hours to habitat restoration and rare plant monitoring. In addition to the coastal dune, pampas, and Cape-ivy projects listed above, staff and volunteers removed nine high-priority species from about eight acres park-wide.

Sonoma alopecurus and Sonoma spineflower were monitored by SF Bay Area Network Inventory and Monitoring staff, Point Reyes staff and volunteers.

Additional funding was secured from USFWS to support work to improve site conditions for Sonoma alopecurus Population 5 at Abbotts Lagoon. Researchers from Washington University, Saint Louis, MO, continued research in coastal systems examining seed predation of Tidestrom's lupine, pollination differences between native and nonnative thistles, and overall vegetative response to coastal dune restoration. The fire management group contributed to rare plant conservation by completing management guidelines for the CNPS-listed endangered (1B) *Arctostaphylos virgata*. The range program assisted an NPS researcher with the reintroduction of the federally endangered showy indian clover (*Trifolium amoenum*) to Point Reyes. Spring monitoring showed several individuals had set seed and the USFWS recently awarded additional funds to continue the work.



Habitat Restoration volunteers

California Exotic Plant Management Team (CaEPMT)

In 2007, three CaEPMT teams treated over 70 different species at more than 110 different sites throughout the state. After six years they have successfully contained a major Himalayan blackberry infestation in Yosemite National Park's Mirror Lake basin. Working with the park, they have reduced the 30 gross infested acres in 2002 to 11 gross infested acres in 2007. At John Muir NHS, the yellow starthistle population dropped from 82 gross infested acres in 2002, to 1.4 gross infested acres in 2007. At Whiskeytown NRA, the team discovered a small infestation of diffuse knapweed (*Centaurea maculosa*), an A-rated highly invasive species not previously found in the park. The park's prompt follow-up reporting to the California Department of Food and Agriculture led to this population being controlled, and has sparked a keen interest in this population and a budding partnership between the agencies.

This year services were expanded by establishing contract projects with adjacent stakeholders to knock back adjacent infestations. The CaEPMT worked with Sierra National Forest (adjacent to Yosemite National Park) and the Presidio Trust and Mount Tamalpais State Park (adjacent to Golden Gate NRA). As in past years, they sponsored and trained two Student Conservation Association Exotic Plant Management Teams. The strategic use of intern teams on a more local level has reduced travel time associated with covering such a large territory resulting in more dedicated hours of field work to the parks.



Weed wrench removing plants in Whiskeytown National Recreation Area

Bay Area Fire Ecology and Fire Effects Program

The Fire Effects Monitoring crew completed 180 plots at six parks (Point Reyes NS, Golden Gate NRA, Santa Monica Mountains NP, Channel Islands NP, Pinnacles NM and Crater Lake NP) as well as three off-park fire assignments.

The Fire Ecologist completed the Resource Advisor Guide as well as the Fire Effects

Monitoring Plan. The Fire Ecology Program also managed a contract which resulted in guidelines for the management of Marin manzanita.

The Fire Ecology program secured several grants for Sudden Oak Death work including funds for the treatment of high value trees with AgriFos and funds to develop a public outreach program for the disease.

Preserving Our Past for the Future

The Museum, Archives and Research Services (MARS) program balances the permanent preservation of the Seashore's museum and archival collections with providing access to the resources for researchers and the public. This year the MARS program continued its emphasis on providing excellent service to researchers by facilitating 121 formal research requests, 63 from within the park, 58 from outside researchers. Program staff cataloged 128,016 items, and accessioned 6,432, exceeding program goals significantly. Museum preservation standards are measured as a percentage of standards met. The Seashore met 175 of 203 applicable standards (86.2%), exceeding program and national goals significantly. The program continues to be significantly involved in assisting with collections management throughout the region, especially East Bay/San Francisco Bay Network parks. Program staff completed eight projects at six other national parks, including John Day Fossil Beds NM, Kaluapapa NHP, the Honolulu regional office, Pinnacles NM and Redwood NP.

This year the Seashore Historic Preservation Crew completed 13 projects in the park and one in Mojave National Park. Among their projects, the crew began work on a major rehabilitation of several structures at the historic Home (Murphy) Ranch on Drakes Estero. In addition, the program completed 11 painting and roofing projects throughout the park, utilizing contractors. The crew completed a major wood window repair project on the Boathouse at the Lifesaving Station National Historic Landmark, making use of a new steam-based paint-removing machine for windows and doors located in the historic preservation shop. Wood window repair is meticulous and labor-intensive. It requires a high level of skill and specialized equipment which the Seashore crew possesses.

Work continued this year on the nomination of a prehistoric archaeology district to the National Register of Historic Places. Archaeologists at Sonoma State University are preparing the district nomination cooperatively with the park and it should be completed in 2008. Volunteers in the Archaeology Site Steward program provided critical assistance to the Seashore by monitoring several endangered sites throughout the park. Seashore staff met regularly with representatives of the Federated Indians of Graton Rancheria on a variety of issues related to sacred sites, including NAGPRA repatriations, the review of park projects, and a new cooperative agreement.



Museum Curator Kirsten Kvam preparing replica model of the *Golden Hind* for display



Preservation crew working on historic window repair at the Lifeboat Station

Inventory & Monitoring (I&M) Program

The San Francisco Bay Area Inventory and Monitoring Network (SFAN) coordinates biological inventories and long-term monitoring of natural resources within National Parks in the region. Over 90 active research permits, producing over 20 publications on various research topics were completed in 2007. Projects highlighted below include work from Golden Gate National Recreation Area, John Muir National Historic Site, Muir Woods National Monument, and Point Reyes National Seashore.

Northern Elephant Seals

The population estimate of 2,285 elephant seals at Point Reyes National Seashore in 2007 marks an all time high since their arrival at the park in the mid 1970s. These seals were counted at least once a week from December through March at the three breeding sites in Point Reyes: Drakes Beach, Point Reyes Headlands, and South Beach. In addition, more than 200 weaned pups were tagged and surveys conducted to resight animals.



AmeriCorps member Kristen Truchinski counting elephant seals

Harbor Seals

Harbor seals were monitored from February through August in 2007. Over 34 volunteers were trained in February and over 269 surveys were conducted at 10 locations at Golden Gate and Point Reyes. Data have been entered and are undergoing quality control. Data will be analyzed and an annual report will be forthcoming in 2008.

Salmon Monitoring

Coho and steelhead monitoring is conducted during three crucial periods in the life cycle of the salmon: juvenile (summer snorkel and electro-fishing surveys), adult (winter spawner surveys) and smolt (spring migrant trapping). Spawner survey

results indicated low numbers during the 2006-2007 coho salmon run. The Olema Creek watershed total redd production for this year class declined by 9% from the 2003-2004 year class levels. The largest decline was observed in Redwood Creek where total redd production declined by 44% for this year class. In contrast, preliminary coho smolt production estimates indicated higher than normal overwintering survival rates which ranged from 58% in Redwood Creek to 82% in Pine Gulch.

During spring trapping, a total of 20 adult steelhead were observed migrating downstream. Biologists also observed higher than normal numbers of steelhead smolts and fry.



Fisheries biologists Michael Reichmuth and Casey del Real collect data

Northern Spotted Owl Monitoring

This year's spotted owl monitoring showed two "firsts" for Marin County: a non-nesting year for spotted owls and a nesting pair of barred owls. Of the 48 spotted owl sites being monitored in Marin County, only one nest was found. Inventory & Monitoring staff monitored the 25 of 48 sites on NPS lands, and although spotted owl pairs were located at most sites, no nests were found. A non-nesting year for spotted owls has never been seen in 10 years of monitoring in Marin County, but has occurred in the Pacific Northwest. Spring also marked the first documented nesting of barred owls in Marin County. The barred owl young were located near Muir Woods at the end of June. Barred owls are considered nonnative in the Western states and have displaced spotted owls in the Pacific Northwest. Their recent invasion leaves us to speculate on the impact they will have on the local spotted owl populations and underscores the importance of monitoring.



Northern spotted owl feldgling and adult

©Susan Van Der Wal

Visitor and Resource Protection

This year saw the staff successfully limiting marijuana growing within the park. Several fields were discovered early in the year, before they were fully installed. Through aggressive patrolling and surveillance, the criminals were forced to leave the park to avoid being caught. These efforts will continue in 2008.

The Cosco Busan oil spill was a major incident for the park and the staff spent significant time working on booming strategies for Drakes Estero. Based on the lessons learned from this incident, more effective booming techniques are being looked at, as well as ways to make our response more effective in the future.



NPS Ranger deploying boom during Cosco Busan oil spill and marijuana plot





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by the American people so that all
may experience our heritage.

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