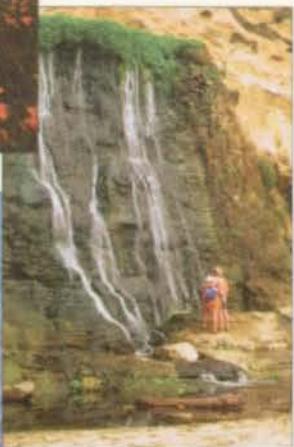
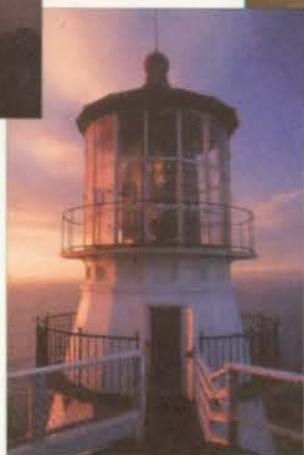


WIZ/D-86

POINT REYES NATIONAL SEASHORE



2000 Year in Review



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"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

—ALDO LEOPOLD

A MESSAGE FROM THE SUPERINTENDENT

Fiscal Year 2000 - The First Step to the 21st Century

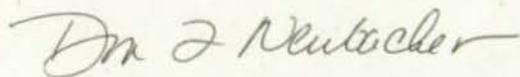
Of the 383 parks in our nation's park system, spectacular Point Reyes is the only national seashore on the west coast. Within its boundaries, over 80 miles of coastline remains preserved for future generations.

For Point Reyes, fiscal year 2000 was a significant year for many reasons. The park served over 2.5 million visitors at an operational cost of about \$1.58 per visitor. Visitor surveys indicated 96% of the visitors were satisfied with the experience. The Point Reyes staff, including over 1,000 volunteers and numerous park partners, did a tremendous job serving the public. Our maintenance and administrative personnel, park rangers, and interpretation staff are some of the best in the nation. My deepest thanks to them for an outstanding year.

In the resource protection area, this year both cultural and natural resource protection were enhanced. The park has 70 research programs underway and initiated long-term monitoring of critical species. In turn, the non-native plant management, prescribed fire, and habitat restoration teams have accomplished substantial work. Threatened and endangered species, such as the western snowy plover, Sonoma alopecurus, California red-legged frog, and northern spotted owl, continue to receive our critical attention. This year the park has made a major step forward in protecting the myriad cultural resources of the park. A new park archivist was hired to manage the park's collection. To ensure historic buildings get the restoration treatment they need, a historic preservation crew was formed that completed 16 preservation projects throughout the park.

This is the first year we have produced the *Point Reyes National Seashore Year in Review*. We hope it will demonstrate our commitment to you to ensure a quality visitor experience and the preservation of the resources of this outstanding park area.

Thank you for letting us serve you. We appreciate your support in caring for the nation's cultural and natural heritage.



Don L. Neubacher
Superintendent



Pounding surf along Point Reyes Beach



Background



NATURAL FEATURES

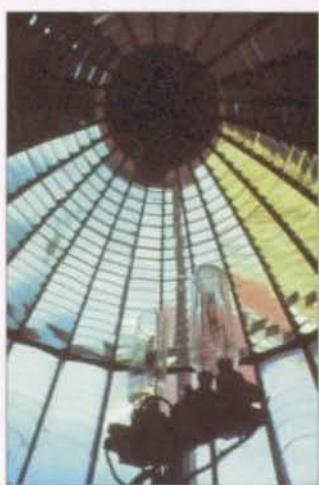
- 80 miles of coastline
- over 850 species of flowering plants
- 23 threatened and endangered species
- named "Central California Coast Biosphere Reserve" by the UNESCO Man and the Biosphere program in 1988
- over 460 species of birds seen on the Point Reyes Peninsula
- over 71,000 acres, including 32,000 acres of wilderness
- estuaries, beaches, coastal grasslands, salt marshes, and coniferous forests
- 65 species of mammals
- 28 species of reptiles and amphibians

INFRASTRUCTURE

- 4 backcountry campgrounds
- 17 water systems
- 147 miles of trails
- approximately 100 miles of roads
- over 100 public and administrative structures
- 27 sewage treatment systems
- 3 visitor centers
- 2 environmental education centers
- 30 restroom complexes

CULTURAL AND HISTORIC FEATURES

- 286 designated historic structures
- over 80 archeological sites
- 15,000 museum objects
- Point Reyes Lifeboat Station, a national historic landmark
- horse training facility for NPS patrol horses



Fragrant fritillary (*fritillaria liliaceae*), Clem Miller Environmental Education Center, McClure Ranch, and Fresnel lens



Background



Tule elk, fog over cliffs, California poppy, elephant seals, gray fox, Pacific tree frog, and Douglas fir cones

POINT REYES: A SPECIAL PLACE

One of America's greatest coastlines, Point Reyes National Seashore comprises over 71,000 acres, including 32,000 acres of wilderness area. Estuaries, windswept beaches, coastal grasslands, salt marshes, and coniferous forests combine to 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 2.5 million visitors annually. Abundant recreational opportunities include 147 miles of hiking trails, back country campgrounds, and numerous 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, indicating the peninsula has moved over 300 miles northwest over a period of 100 million years.

As wildland habitat is lost elsewhere in California, the relevance of the Point Reyes Peninsula increases as a protected area with a notably rich biological diversity. Over 45% of North American avian species and nearly 18% of California's plant species are found in the park due to the variety of habitat and uniqueness of the geology. Twenty-three 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 named the Central California Coast Biosphere Reserve.

The cultural history of Point Reyes reaches back some 5,000 years to the Coast Miwok Indians who were the first human inhabitants of the peninsula. Over 80 known 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.



POINT REYES HIGHLIGHTS FROM 2000

The following pages highlight some of the more exciting accomplishments at Point Reyes over the past year.



© Brian Farnsworth

Tule elk bulls with Pierce Ranch complex in background



Measuring Vital Signs

Point Reyes National Seashore is part of the San Francisco Bay Area Network of National Parks involved in the Natural Resource Challenge of the National Park Service. As a participant of this initiative, Point Reyes is conducting an inventory of biological resources over the next five years. Several steps of this inventory have already been completed. Last year, Point Reyes Bird Observatory inventoried landbirds, waterbirds, and shorebirds throughout the park. The park also compiled existing information on what species occur where and in what abundance. This database continues to grow as new species of plants and animals are added. Twenty new plant species, for example, were added to the park's plant list as a result of the vegetation mapping efforts.



This coming year, USGS, along with park biologists will continue to monitor and inventory terrestrial vertebrates using a sampling array of pitfall traps, cover boards, cameras and Sherman traps. With this array, multiple species can be inventoried and monitored at one location. In the coming year, the park will also initiate an inventory of invertebrate marine species, for which little is known.



© Alejandra Krause

Point Reyes as an Outdoor Classroom

Seashore Interpretive staff made great strides on several fronts this past year. With the help of local school teachers from Marin and Sonoma Counties, we created seven curriculum-based middle school science teacher guides for Seashore field trips. These guides were field tested in the spring of 2000 and will be distributed in the spring of 2001.



Secondly, we began the process of developing a Comprehensive Interpretive Plan for the park. This ten-year plan was developed during two, three-day workshops which were held with over 45 park partners and adjoining agency representatives as well as park staff and other NPS Chiefs of Interpretation and Education Specialists.

To integrate science and education as a part of the Pacific Coast Learning Center, planning has started for the development of a science-based *Expedition Station* and the implementation of an *All Taxa Biodiversity Inventory*.

Pelagic cormorant, California red-legged frog, sea stars, and teacher workshop on birds



Highlights

Snowy Plover: Saving a Threatened Species

The early predictions were optimistic for the federally-threatened Western Snowy Plover breeding season on Point Reyes' beaches this year. The first nest was more than two weeks earlier than the first nests seen in the last two years. And by the end of the season, Point Reyes Bird Observatory biologists had located and protected a total of 28 nests.

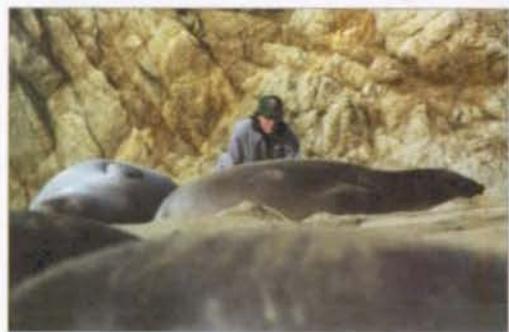
Although the number of nests was the highest counted since the late 1980s, unfortunately, the number of chicks that actually fledged from the nests was 60% of last year's total. This loss of chicks early in the season prompted biologists to initiate a study to examine the correlation between chick loss and weekends. Initial data indicates one and a half times the number of expected chick loss on weekends occurred in 1999 and 2000. For the snowy plover population to increase at Point Reyes National Seashore, we need to determine and address the causes of the low fledging rate, whether it is predation, human disturbance, or an as yet unknown factor.



© Gary Nichols

Northern Elephant Seals

The northern elephant seal colony at Point Reyes did not increase in number this year nor at other major colonies such as Año Nuevo or the Farallon Islands. The reason for the reduction in pupping is likely due to a continued lag effect from the very strong 1998 El Niño. Nevertheless, the winter weather was fairly mild and pup survival was higher than the previous two years. The maximum number of pups weaned was 276 and the maximum total count for the season was 900. Females again gave birth to pups at two new sites at Chimney Rock beach area (north end of Drakes Beach) and at South Beach. They also pupped in small numbers at several pocket beaches along the Point Reyes



Headlands. Surveyors of seals included graduate students and local elementary school students who assisted in counting and tagging seals.



© Susan Van Der Hul

Western snowy plover, Dr. Sarah Allen tagging amidst the elephant seal colony, and elephant seal bull



Monitoring of Harbor Seals Continues

Harbor seals are part of a long-term monitoring program of marine mammals at Point Reyes National Seashore and a component of the vitals signs monitoring program of the San Francisco Bay Area Network of National Parks. The project is largely supported by dedicated volunteers and collaboration with partner agencies and organizations including the National Marine Fisheries Service, the Marine Mammal Center, the Gulf of the Farallones National Marine Sanctuary, and the Point Reyes Bird Observatory. Volunteers survey seal haul out sites during the harbor seal pupping season from March through July. The surveyors document the number of seals present, the pup production for each haul out site, and any human disturbance to the seals. From this study we have determined that the seal population at Point Reyes is the largest concentration in the State of California, representing around 20% (about 5,000 seals) of the state population. The results of this study have guided management at the parks and by other agencies, spawning a stewardship program to educate the public and protect seals.



© Chris Peterson

In 1997, and again in 2000, surveyors reported a die off of harbor seals. Due to the quick response and identification of the die off by the monitoring program, park biologists and partners were able to document the occurrence of two new viruses in the harbor seal population and to monitor the spread of the disease between several haul out sites. Both of these events also enabled the park to establish baseline information on wildlife diseases present in the local population.



© Richard Allen

Harbor seals and pups and elephant seal battle



Highlights

Working Outside the Boundaries

A cooperative project to achieve watershed objectives

Through the NPS-Natural Resource Preservation Program funded Coho and Steelhead Restoration Project, Point Reyes National Seashore has been working with organic farmers in Pine Gulch Creek to develop and implement a project to protect late summer flows in this steelhead bearing creek. In an area where water use for agriculture and the needs of the fish are well established and documented, this project will create an infrastructure on the property of the legal water users to protect low flows critical to federally threatened steelhead trout. Construction of off-stream riparian storage ponds and installation of lower rate diversion pumps will allow farmers to balance pumping impacts throughout the growing season, and stop riparian pumping when flows in the lower portions of the watershed are determined to be at a critically low level.

While promoting agricultural sustainability within the ever-expanding Marin County, the fruits of this cooperative effort will be even greater. Through state and local means, the project has been granted more than \$100,000 for the installation of agricultural infrastructure. It is through this infrastructure that the farms will have increased sustainability and the next phases of watershed restoration may be triggered.

More importantly, installation of the infrastructure will trigger a broad planning effort between state and federal agencies, including the NPS, for the reintroduction of coho salmon to the watershed. With the last documented sighting in 1979, the National Marine Fisheries Service, California Department of Fish and Game, and National Park Service view Pine Gulch Creek as a prime candidate for reintroduction of this federally threatened anadromous population. It is not without the cooperative watershed effort between the private landowners, the NPS, and the community that this project, of both regional and national significance, has been developed and will soon be accomplished.



Restoring the Headwaters of Tomales Bay

In February 2000, the National Park Service acquired the Giacomini Dairy. Located at the head of the ecologically sensitive and significant Tomales Bay, the property has separated Lagunitas Creek from the Bay and confined the estuary to the leveed stream channel for nearly 60 years. The NPS acquisition is the first step in reversing this trend, and will lead to implementation of full scale restoration when the land is relinquished in 2007. Important for more than just its herring runs and oysters, Tomales Bay and the Lagunitas Creek estuary are important to anadromous, catadromous, and marine aquatic species.

The restoration of more than 500 acres of tidal wetland will add significantly to the already diverse aquatic and terrestrial ecology.



© Bruce Farnsworth

The restoration of the 500 acre parcel and removal of the levees will have much broader ecological and regional benefits. The San Francisco Bay Region has listed Tomales Bay on the federal 303 (d) list as impaired by sediment, nutrients, and fecal coliform. The restored wetland/floodplain will attenuate flooding and delivery of these pollutants to the Bay. Not only did the acquisition include the land, but a significant senior appropriative water right which the NPS will plan to dedicate to in-stream flow for the protection of aquatic species, including federally threatened coho salmon and steelhead trout, within the stream and estuary. Land acquisition was just the first of a series that will be taken over the next six years resulting in restoration of the Giacomini Wetland.

Critical Acquisition Completed—RCA Property now in Park

Located about half way to the Point Reyes Lighthouse, the RCA Building was purchased this year along with the 21 acres that surround the property. The National Park Service completed acquisition with funding from an anonymous donor and the generous donation of part of the property by the MCI Corporation. For decades, the historic complex received communications from throughout the Pacific Rim. Although new technology has made the site obsolete, the park now has the opportunity to tell the fascinating Marconi/RCA story in this nationally significant facility.



Tomales Bay mudflats and Marconi/RCA building



Highlights

New Population of Endangered Sonoma Spineflower Discovered

Until 2000, Point Reyes National Seashore was home to the only known population of a federally endangered plant - the Sonoma spineflower (*Chorizanthe valida*). Plant collections from the 1800s indicate that this annual once had a much broader range in Marin and Sonoma Counties.

The plant was believed to be extinct until its "rediscovery" in 1980 in Point Reyes by botanist Wilma Follette.

In 1999, the Point Reyes National Seashore Association (PRNSA) provided funds to hire a seasonal Biological Technician, Brook Edwards, to monitor and evaluate the existing Sonoma spineflower population, and to develop a management plan for the species. The USFWS Recovery Plan for this taxon requires annual monitoring and states that the spineflower could be considered for downlisting only if two additional populations are established and sustained.

By referencing historic records and soils maps, conducting field searches to identify potentially suitable habitat, and consulting with local plant taxonomists, we identified a site we felt was suitable for a seed trial. One thousand seeds were planted in Fall of 1999. In 2000, PRNSA again provided funds to hire a Biological Technician, Michelle Coppoletta. Michelle relocated the 1999 seed trial plot and discovered 34 new Sonoma spineflower plants, all of which were producing flowers.

It is too early to know if this new population will persist over time, but the establishment of a second population is significant, as it means the species is less likely to become extinct due to catastrophic loss.



Sonoma spineflower (*Chorizanthe valida*)



Digital Vegetation Mapping Underway

The vegetation mapping efforts, initiated in 1995 after the Vision Fire, passed a major milestone this year with the delivery of a draft digital vegetation map. The aerial photographers interpreters delineated over 12,000 land-cover polygons within the 155,000 acre mapping area which includes Point Reyes National Seashore, Golden Gate National Recreation Area, Tomales Bay State Park, Samuel P. Taylor State Park, and Mount Tamalpais State Park. In addition to the map, a draft botanical classification following the California Native Plant Society's and national standards was developed for the region. A statistically rigorous accuracy assessment is currently being conducted to evaluate how well the photo interpreters labeled the 79 land-cover types delineated in the draft map.



© Siuan Van Der Wal

To date, field crews have visited 1,200 points on the ground as part of the accuracy assessment efforts. Concurrently, methods to locate and describe wetlands using the vegetation map were developed and used to map and describe several hundred wetlands that were not previously delineated by the U.S. Fish and Wildlife Service's wetland inventory program. Future uses of the vegetation map include conducting an analysis of the vegetation within the Vision fire perimeter, comparing pre-fire conditions with current conditions, and cross-walking the

classification to fuel models that will be used for planning and implementing the park's fire management and research programs.



© Siuan Van Der Wal



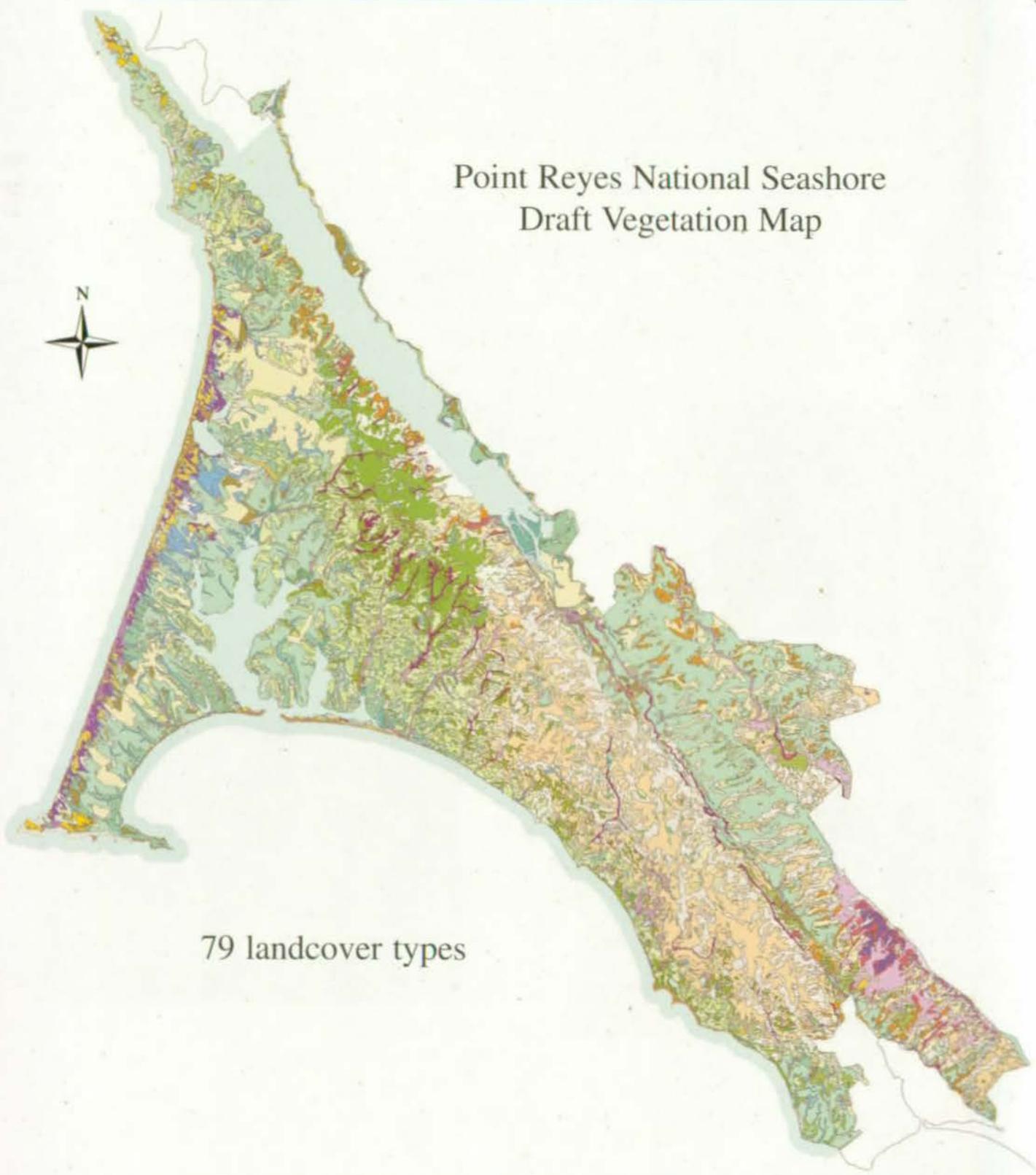
© Alessandra Krause

Douglas iris, California poppy, and Ceanothus gloriosus are three of over 875 species of plants found within the Seashore



Highlights

Point Reyes National Seashore
Draft Vegetation Map



14

Cultural Resource Program Gains Momentum

Approximately \$1.1 million was spent on cultural resources this year. This program now has four, full-time staff and two seasonal employees working on the Seashore's cultural resource program. Some highlights for the year include:

- Created a Point Reyes Preservation Crew and completed 16 major projects throughout the park.
- Finished rehabilitation of the historic Hagmaier Complex in Olema Valley.
- Completed major structural repairs on C Ranch Main House. Completed contract roofing and painting projects on historic building throughout the park.
- Hired a park archivist to begin organizing park records, photographs, documents and research and create an accessible park archive.
- Secured funding for a new curatorial storage facility for the park's extensive museum collection.
- Completed phase II of an assessment of archeological sites.

In 2001, the park will continue to expand its preservation program. Visitors should expect to see the sign "Preservation Work in Progress - Point Reyes Historic Preservation Crew" in many areas of the park.



Reroofing project at Truttmann Ranch and completed porch at Wilkins Ranch by NPS Preservation Crew



Highlights

Pacific Coast Learning Center

Learning centers are part of the Natural Resources Challenge, a strategic long-term approach to the management and care of the nation's most precious resources found within the 383 parks in the National Park System. The Challenge is a five-year action plan to expand the National Park System's ability to inventory, monitor, and care for the historical and natural resources under its care.

The Pacific Coast Learning Center will address four major goals: 1) to conduct research on coastal ecosystems; 2) to facilitate research and preservation of the rich cultural history of Point Reyes; 3) to advance research on fire ecology and the methodology of prescribed fire; and 4) to provide educational and training materials and programs to the diverse audiences of the San Francisco Bay Area.

The Center will use the existing facilities at the historic Hagmaier Ranch complex within the Seashore. Collaborating schools, universities, organizations, and agencies will be provided with office space, a laboratory, accommodations, and access to computer information systems, including geographic information system.



The Center will nurture the next generation of scientists that will guide future management of our planet through the 21st Century.



Pacific Coast Learning Center at Hagmaier Ranch complex

New Focus on Tomales Bay

This year, the park began a program to enhance its boat patrol of Tomales Bay. Faced with an increasing use of the Bay by kayakers and motor boats, the park established a new ranger position to patrol the Bay on a regular occurrence. These patrols will help the park ensure campers are properly educated about proper sanitation, camping responsibility, protection of park resources, and safety. The ranger staff has already assisted numerous visitors in hazardous conditions on the Bay.

The park also established a new fee demonstration camping permit program on Tomales Bay that establishes overnight use levels and educates the public about the Bay's resource issues. The park also facilitated the Tomales Bay Guidelines document. These guidelines were a collaborative effort with other jurisdictional agencies and the public. These broad-based guidelines will ensure protection of Tomales Bay as they are adopted through various agencies and their public process.

Facility Management

In addition to the continued commitment by maintenance staff to provide a high level of daily maintenance and repair activities, the Division successfully completed a number of significant rehabilitation and repair projects in 2000.



Trails crews completed a three year effort to repair trails, footbridges, and culverts that were damaged or destroyed by 1998 El Niño winter storms. This effort completed repair work costing in excess of \$350,000 and in 2000 included the following projects: construction of 51 drainage devices on the Ridge Trail; a 3,168 LF trail reroute of the Palomarin Beach Trail; culvert replacement on the Glen Loop Trail; Coast Trail Bridge repairs at Palomarin; and culvert replacements on the Olema Valley Trail.

In addition to storm repairs the Trails Branch completed a significant amount of routine trail maintenance projects that greatly enhanced visitor access and use of park trails. This work included 29.4 miles of trail brushing on 21 individual trails, 557 drainage devices on 20 individual trails, and cut and cleared 158 downed trees from 18 individual trails.

Additional projects completed in 2000 by the Facility Management Division included completion of the third phase of undergrounding electrical transmission poles along the Limantour Road corridor, rehabilitation of the Limantour water system, restoration of the historic Hagmaier Ranch House, parkwide roofing and painting projects.



Highlights

National Park Advisory Board Visits Point Reyes

This past April, the National Park Advisory Board visited the National Seashore. The Board is appointed by the Secretary of the Interior and provides broad guidance to the National Park Service on park issues. The Director of the National Park Service, Robert Stanton, accompanied Board members as they toured the park. Although the weather was overcast, the day was spectacular. The Board reviewed the park's wildlife monitoring program, reviewed habitat restoration programs, and learned about the growth of the park's tule elk population. To top off the day, the group saw a sauntering gray whale and calf off Limantour Beach traveling north. For over ten minutes, the group watched the "blow" or exhale and the backs of these two whales as they slowly moved in Drakes Bay.



(left to right) Director Stanton reaching in a pitfall trap, Advisory Board listening about elk relocation at Limantour Beach, Director Stanton with USGS Research Biologist Dr. Gary Fellers and Blue Ridge Parkway Superintendent Dan Brown



FINANCIAL RESOURCES

Financial resources available to achieve the park's FY 2000 annual goals included a base operating budget of approximately \$3,950,000. Achieving our FY 2000 annual goal performance target was critically dependent on our base funding and on additional project funds, volunteer assistance, partnerships and donations. Therefore, in order to plan the year's goals, to organize the year's work to accomplish the goals, and to communicate, and document them, all funding and staffing sources, and major alternative sources of support and work, are included in developing our Annual Performance Plan.

Highlights of the park's operating base budget, which funds specific goals in the annual performance plan, include:

\$500,000 for resource preservation and management. These funds provide programs to protect the park's resources, conduct scientific research and monitoring, control exotic plants, enhance native species, and restore areas when feasible.

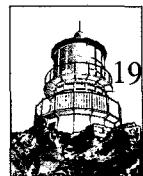
\$1,700,000 to address visitor services. Visitor services includes providing law enforcement, operating three visitor center, providing educational programs, and conducting interpretive programs.

\$1,600,000 for facility operations and maintenance. These funds are used to maintain the park's infrastructure and operate park facilities such as water treatment plants and sewage systems. Funding is used to maintain the park's 147 miles of trails and 100 miles of roads.

\$150,000 for park administration. These funds are used to fund the basic administration services for the park.

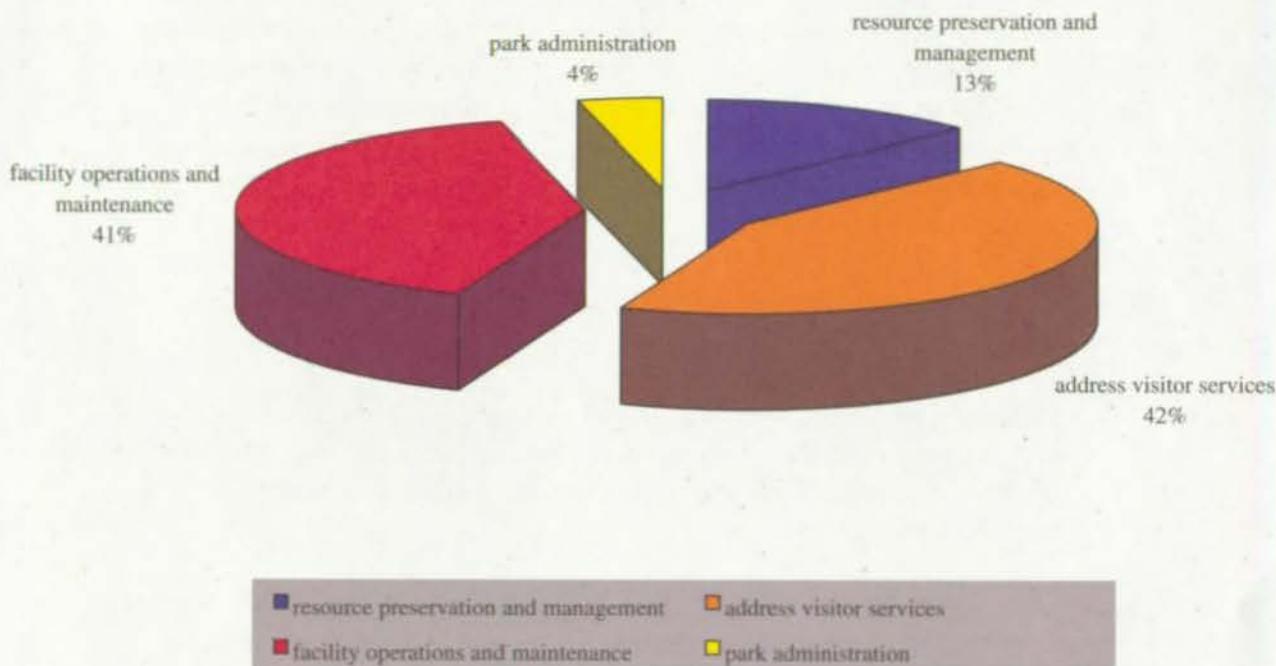
With the annual visitation of the park at 2.5 million visitors, the park is able to serve each visitor at an operating cost of approximately \$1.58 per visitor.

In addition to the above funding, the park receives about \$500,000 in fee revenues and special national park funding for specific maintenance and other projects. For example, the park received about \$1.5 million in one-time funding this year for cyclic maintenance on historic structures and other natural resources projects.



Financial Resources

Fiscal Year 2000 Operating Budget



Human Resources

The park has an outstanding and dedicated staff. Currently the park has about 70 permanent staff and 35 temporary staff working on a variety of projects and programs. This represents about 95 FTE (full time equivalents or one person for a full year). During the peak summer months, the park staff increased to about 130 staff members, including the Youth Conservation Corps enrollees that provide outstanding assistance to Point Reyes National Seashore. This work force was supplemented by 22,000 hours of among others, Volunteers-in-Parks service, and three Student Conservation Assistants.



Point Reyes National Seashore Purpose Statement

Point Reyes National Seashore was established to preserve and protect wilderness, natural ecosystems, and cultural resources along the diminishing undeveloped coastline of the western United States.

Located just an hour's drive from a densely populated metropolitan area, the Seashore is a sanctuary for myriad plant and animal species and for the human spirit - for discovery, inspiration, solitude, and recreation - and exists as a reminder of the human connection to the land.

The Seashore serves as an outdoor classroom and laboratory for the study of geological and ecological processes and changing land-use values that will foster a greater understanding of and caring for America's public lands.





© Alexandra Krause

*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

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Rainbow over Tomales Bay

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