



Pacific Ocean Newsletter



Stewardship Without Boundaries: Conserving Our Ocean Ecosystem from Baja to the Bering Sea

MILLIONS OF PEOPLE VISIT national parks on the Pacific to experience our nation's heritage where land meets water and life is entwined with the sea. Rocky coasts, sandy beaches, fjords, coral reefs, tidewater glaciers, kelp forests, wetlands and estuaries support abundant life and contain significant cultural and historical resources. Congress charged the National Park Service with conserving both natural and cultural resources unimpaired for the enjoyment of current and future generations. Their benefits to the nation as places for recreation, sanctuaries for ocean wildlife, and sources of local economic activity are unsurpassed.

Since the establishment of the first coastal park in 1916, marine resources in the National Park System have grown to include more than three million acres of ocean and 5,000 miles of coastline. The Pacific West and Alaska Regions are comprised of 34 diverse coastal national park units and 40 sites that are connected to the ocean by watersheds, weather, and routes for migration and trade.

In recent years, the Department of Interior and the National Park Service have placed greater emphasis on the management and stewardship of ocean

resources. This emphasis addresses the challenges facing our coastal and oceanic systems. Climate change is one of the most daunting of these challenges and threatens to diminish the integrity and beauty of ocean ecosystems, as well as their recreational opportunities.

Using the vision provided in the Pacific Ocean Park Stewardship Action Plan, the current and future challenges confronting parks will be addressed through the following strategies:

- Establish a seamless network of ocean parks, sanctuaries, refuges and reserves;

- Inventory, map and protect ocean parks;
- Engage visitors in ocean park stewardship; and
- Increase NPS technical capacity for ocean exploration and stewardship.

With the recognition that the ocean stretches far beyond the boundaries of the National Park Service and coastal waters, the Pacific Ocean Stewardship Action Plan will protect these outstanding resources so that future generations may also have the opportunity to become entwined with the sea.



Marine mammals face an increasing number of threats, including the impacts of climate change, but they can benefit from stewardship that protects their habitats.

A Seamless Network of Parks, Sanctuaries, Refuges & Reserves

With so many federal, state and local agencies, and conservation organizations sharing responsibility for protecting marine resources, the idea of a cooperating network of parks, sanctuaries, refuges and reserves is gaining momentum.

In August 2006, an interagency agreement was signed by the National Park Service, National Marine Sanctuary Program, US Fish & Wildlife Service and the National Estuarine Research Reserves. This network will result in more effective interagency coordination and operational efficiencies, specifically:

- Increased understanding of marine natural and cultural resources,
- Enhanced public awareness and education,
- Improved resource protection and rescue capabilities, and
- Increased effectiveness of resource planning.

The Pacific Ocean Parks Strategic Plan outlines specific opportunities to enhance marine resource conservation and education. Strategies include establishing marine reserves, convening multi-agency workshops, participating in the West Coast Governor's Oceans Working Group and the Alaska Marine Ecosystem Forum, and studying the feasibility of a Pacific West and Alaska Ocean Center of Excellence. The strategic plan also calls for facilitating international partnerships with Canada, Mexico and neighboring Pacific Islands.

Cooperating in a seamless network of protected areas is crucial to the conservation of marine habitats, coastal heritage resources, and other valuable marine resources.

Life Entwined with the Sea: The Non-Coastal Park Connection

FROM THE INUPIAT VILLAGES of Cape Krusenstern National Monument to the coral reefs of the National Park of American Samoa, our sites and resources are entwined with the sea. Some park sites may appear divorced from the ocean today, but even they were once teeming with ocean life or are connected to the sea by watersheds, weather, rivers, migration routes or trade.

The geologic bones of many of our inland parks including John Day Fossil Beds National Monument, Death Valley and Great Basin National Parks were created from creatures and plants that once thrived in those ancient oceans. Fossil evidence tells the story of life and changing environments. Without this vast initial maritime deposition for the forces of erosion to work upon, our parks would not exist as we know them today.

The health of our society and national parks are also linked with the sea. Climate change impacts weather patterns and water availability for all terrestrial life. A clockwise circulation

of water, known as the North Pacific Gyre generally dominates the North Pacific and regulates the temperature of the water. This pattern of circulation is comprised of several smaller – but no less important – currents, such as the Alaskan Current, the Californian Current and the North Equatorial Current which eventually forms the Kuroshio Current (also called the Japan Current). This warm, saline currents warm the shores of the western Pacific and generates weather conditions not only for the coastal areas but also far into the interior. Fluctuations in current temperature such as El Niño or La Niña have far ranging effects on weather in the interior of the country such as droughts, severe weather systems, and higher or lower than normal summer and winter temperatures.

As divorced from the ocean as land bound parks may seem, they too have been and are being shaped by ocean processes. “Eventually the ocean consumes everything from feathers to continents, yet... something new is always being born.” - Unknown



Today, Death Valley National Park may seem far removed from the ocean, but the ancient, watery past of Death Valley is evident in the limestone composition of the Grapevine Mountains.

Take the Plunge into Ocean Stewardship

PACIFIC OCEAN NATIONAL PARKS are a great place to learn about and explore our oceans. Many of these parks are located near major cities and provide hands-on activities that help us connect to the amazing ocean world. Even national parks in remote areas can help us learn about how people impact the ocean and how nature tries to balance these changes.

As more and more people move to coastal areas, their daily needs for fresh water, food, and waste disposal puts more pressure on the ocean. We need to learn about the current condition of our oceans and watersheds, as well as study the impacts of climate change and growing coastal populations. Armed with knowledge, we can change some of our daily habits, and then lessen our negative impacts to help preserve our oceans.

There are many ways we can enjoy and explore Pacific Ocean national parks. We can work in them as rangers, biologists, or volunteers. We can visit the parks in person, on-line, or as teachers and students. We can attend ranger-led programs that highlight the connections between the land and sea. Many



While visiting Pacific Ocean national parks, students can actively learn about the ocean and expand their appreciation for its health.

people use ocean parks as an amazing, living classroom by participating in marine camps and beach clean-ups. Although each Pacific Ocean national park may have very different climates, landscapes, animals and plants, they

share their ocean connections. Coastal parks invite you to learn about, care for, and protect our oceans.

To learn more, follow us on Twitter at [PacificOceanNPS](#).

Nearshore Vertebrates in Four Hawaii Parks

THE OCEAN'S RESOURCES HAVE been dwindling for decades both on local and global scales. Today, coastal resources in Hawaii and elsewhere are facing unprecedented negative changes due to factors such as coastal development, global climate change, and over-



A diver surveys the sea floor in Kalaupapa National Historic Site.

exploitation. Marine vertebrates, especially fishes, have suffered enormous declines. For example it is estimated that the global decline of large predatory fishes exceeds 90%. To help document this trend, a recent inventory for marine vertebrates was done at four national park units in Hawaii.

Finding organisms in fragile marine communities, where most take shelter in holes and crevices, can be a challenge. Despite these obstacles, researchers found a total of 178 fish species, including 48 endemic species. Marine reptiles and mammals such as threatened green sea turtles (*Chelonia mydas*), dolphins, and whales

were commonly observed. The endangered Hawaiian monk seal (*Monachus schauinslandi*) is a frequent visitor to Kalaupapa NHP, and has been observed at the other Hawaiian parks as well.

This inventory adds to the crucial foundation of knowledge from which to assess future conditions of marine vertebrates in Hawaii. Knowing what our shared resources are like now will help us to detect how they are changing in the future. Through educated and collective stewardship of the near shore communities, let's strive to achieve a future where conditions will only improve each time we enter the water.

Ocean Stewardship: A Commitment to Collaboration



The iconic rocky coast of Olympic National Park symbolizes the grandeur of ocean resources for future generations.



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

THE NATIONAL PARK SERVICE has a long history of commitment to ocean resource stewardship through active scientific research, water resource protection, and education programs. The National Park Service's commitment and success can be enhanced by collaboration with partners like you, your schools or businesses. Sharing our expertise, passion, and enjoyment of ocean resources can benefit every living thing.

The Pacific Ocean Parks Strategic Plan: Conserving Our Coastal, Island and Marine Resources offers a call to action for the National Park Service to fulfill its leadership role as an

ocean conservation agency. Research Learning Centers, like the Sea Life Center in Seward, AK provide an outlet for the public to engage in scientific learning through exhibits, online media, and hands on workshops. They also may serve as facilitators for technical workshops, symposia and training to enhance knowledge of ocean issues.

Working with you and other community partners we can restore and conserve the grandeur of National Park System ocean resources, from the mountain to the sea, for future generations.

