

http://www.nps.gov/pub\_aff/oceans/conserve.htm

# **National Park Service**



## Above and Below the Waves: Coastal and Oceanic Treasures in the National Park System



"In every outthrust headland, in every curving beach, in every grain of sand there is the story of the earth."-- Rachel Carson

Have you ever wanted to dive on a vibrant coral reef, witness the majesty of a towering glacier, or stroll along a remote barrier island? The National Park Service (NPS) offers opportunities to do all of those things and more. National Parks contain more than 5,100 miles of beaches, coral reefs, kelp forests, wetlands, historic shipwrecks and forts, and other features that attract more than 75 million visitors every year. In 74 parks spanning 25 coastal states and U.S. territories, people come to camp, fish, snorkel, scuba dive, boat, and watch wildlife.

Each of these Parks maintains a rich legacy of ocean wildlife, native culture, U.S. maritime history, and beautiful landscapes above and below the waves. Marine life abounds in coral reefs in Florida, U.S. Virgin Islands, and the Pacific Islands, and in kelp forests in California and the Pacific Northwest. Salt marshes framed by barrier islands provide a haven for birds, and fish and wildlife along the Atlantic and Gulf Coasts. Glaciers and fjords offer a stunning backdrop to thousands of years of native traditions and tribal culture in Alaska, and shipwrecks and maritime museums record centuries of commerce and military history.

Established for their natural beauty and national significance, these Parks play a critical role in conserving our nation's ocean and Great Lakes heritage. The National Park Service is proud to manage and conserve these jewels above and below the waves on behalf of the American people. As one of the premier conservation agencies the National Park Service will strive to prevent the loss of productive fisheries, habitats, and wildlife, and continue conserving our ocean resources and the recreational opportunities they afford to park visitors. In that effort, an Ocean Park Stewardship Action Plan has been developed by the NPS for restoring and maintaining the rich legacy of ocean parks for current and future generations.

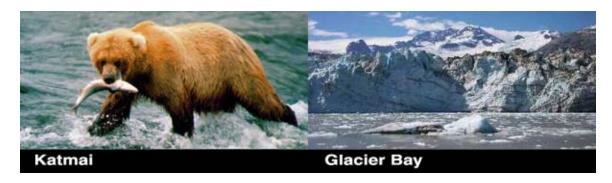
#### The Ocean Park Stewardship Action Plan seeks to:

- 1. Establish a seamless network of ocean National Parks, National Wildlife Refuges, National Marine Sanctuaries, and National Estuarine Research Reserves
- 2. Discover, map, and protect ocean parks
- 3. Engage visitors in ocean park stewardship
- 4. Increase NPS technical capacity for ocean exploration and stewardship

Explore this web site to learn about our many parks and programs that conserve underwater and oceanic treasures and address various conservation issues associated with these unique resources. Below is a sampling of National Park Service sites that can help visitors gain an understanding of these unique resources.

## National Park Sites that Conserve Coastal and Oceanic Treasures

#### Alaska



Aniakchak National Monument and Preserve, AK: In creating Aniakchak National Monument and Preserve, Congress recognized the outstanding wildlife and recreational values of the Aniakchak River by designating it a wild river within the National Wild and Scenic Rivers System. The parklands boundaries also contain other important resources. West of the caldera lies the waterfowl and migratory bird habitat of Bristol Bay's coastal plain. To the east, rugged bays and inlets of the Pacific coast and offshore islands provide habitat for sea mammals and sea birds.

**Bering Land Bridge National Preserve, AK:** The Bering Land Bridge National Preserve is one of the most remote national park areas, located on the Seward Peninsula in northwest Alaska. The Preserve is a remnant of the land bridge that connected Asia with North America more than 13,000 years ago. The majority of this land bridge, once thousands of miles wide, now lies beneath the waters of the Chukchi and Bering Seas.

During the glacial epoch this was part of a migration route for people, animals, and plants whenever ocean levels fell enough to expose the land bridge. Archeologists agree that it was across this Bering Land Bridge, also called Beringia, that humans first passed from Asia to populate the Americas. The Preserve's western boundary lies 42 miles from the Bering Strait and the fishing boundary between the United States and Russia.

Cape Kruesenstern National Monument, AK: Cape Krusenstern National Monument is a coastal plain dotted with sizable lagoons and backed by gently rolling limestone hills. Cape Krusenstern's bluffs and its series of 114 beach ridges record the changing shorelines of the Chukchi Sea over thousands of years.

Glacier Bay National Park and Preserve, AK: The marine wilderness of Glacier Bay National Park and Preserve provides opportunities for adventure, a living laboratory for observing the ebb and flow of glaciers, and a chance to study life as it returns in the wake of retreating ice. Amidst majestic scenery, Glacier Bay offers us now, and for all time, a connection to a powerful and wild landscape.

The park has snow-capped mountain ranges rising to over 15,000 feet, coastal beaches with protected coves, deep fjords, tidewater glaciers, coastal and estuarine waters, and

freshwater lakes. These diverse land and seascapes host a mosaic of plant communities ranging from pioneer species in areas recently exposed by receding glaciers, to climax communities in older coastal and alpine ecosystems. Diverse habitats support a variety of marine and terrestrial wildlife, with opportunities for viewing and research that allow us to learn more about the natural world.

**Katmai National Park and Preserve, AK:** Katmai is famous for volcanoes, brown bears, fish, and rugged wilderness and is also the site of the Brooks River National Historic Landmark with North America's highest concentration of prehistoric human dwellings (about 900).

**Kenai Fjords National Park, AK:** Sweeping from rocky coastline to glacier-crowned peaks, Kenai Fjords National Park encompasses 607,805 acres of unspoiled wilderness on the southeast coast of Alaska's Kenai Peninsula. The park is capped by the Harding Icefield, a relic from past ice-ages and the largest icefield entirely within U.S. borders.

Visitors witness a landscape continuously shaped by glaciers, earthquakes, and storms. Orcas, otters, puffins, bear, moose and mountain goats are just a few of the numerous animals that make their home in this ever-changing place where mountains, ice and ocean meet.



Lake Clark National Park and Preserve, AK: Lake Clark National Park and Preserve is a composite of ecosystems representative of many regions of Alaska. The spectacular scenery stretches from the shores of Cook Inlet, across the Chigmit Mountains, to the tundra covered hills of the western interior. The Chigmits, where the Alaska and Aleutian Ranges meet, are an awesome, jagged array of mountains and glaciers which include two active volcanoes, Mt. Redoubt and Mt. Iliamna. Lake Clark, 40 miles long, and many other lakes and rivers within the park are critical salmon habitat to the Bristol Bay salmon fishery, one of the largest sockeye salmon fishing grounds in the world. Numerous lake and river systems in the park and preserve offer excellent fishing and wildlife viewing.

**Sitka National Historical Park, AK:** Sitka is located on Baranof Island on Alaska's southeastern panhandle. In addition to the historical sites of the park, Sitka National Historical Park offers visitors a chance to experience the natural world. You can walk in a temperate rain forest under towering trees, observe migrating salmon, explore the intertidal zone, and study wildlife. Park rangers present a variety of naturalist programs to assist visitors in their understanding of the park's natural environment.

#### **American Samoa**

National Park of American Samoa, American Samoa: Two rain forest preserves and a coral reef are home to unique tropical animals including the Flying Fox, Pacific Boa, sea

turtles, and an array of birds and fish. The park contains paleotropical rain forests, pristine coral reefs, and magnificent white sand beaches. A new park visitor center is located in Pago Plaza office building located on the island of Tutuila. The park was authorized on October 31, 1988. Park lands are on three separate islands; Tutuila, Ofu and Tau, and total 9,000 acres. All of the lands are leased from the respective villages. The Park was recently expanded to include an additional 1,500 acres of coral reefs and 1,000 acres of uplands with important cultural resources on the islands of Ofu and Olesenga.

### **California**



Cabrillo National Monument, CA: Cabrillo National Monument (NM) is located in San Diego, California on the Point Loma peninsula. The peninsula encompasses more than 267 hectares (660 acres) of native habitat and the monument is located on 67 hectares (160 acres) of the southern-most point. The peninsula is bordered by the Pacific Ocean on the west, the San Diego Bay on the east, and an urban development on the north. It also is home to regionally diminishing stands of coastal sage scrub habitat.

Channel Islands National Park, CA: Comprised of five in a chain of eight southern California islands near Los Angeles, Channel Islands National Park is home to a wide variety of nationally and internationally significant natural and cultural resources. Over 2,000 species of plants and animals can be found within the park. However only four mammals are endemic to the islands. One hundred and forty-five of these species are unique to the islands and found nowhere else in the world. Marine life ranges from microscopic plankton to the endangered blue whale, the largest animal to live on earth. Archeological and cultural resources span a period of more than 10,000 years. The park consists of 249,354 acres, half of which are under the ocean, and include the islands of San Miguel, Santa Rosa, Santa Cruz, Anacapa, and Santa Barbara. Even though the islands seem tantalizingly close to the densely populated, southern California coast, their isolation has left them relatively undeveloped, making them an exciting place for visitors to explore.

Golden Gate National Recreation Area, CA: Golden Gate National Recreation Area is also rich in natural resources—it is comprised of 19 separate ecosystems in 7 distinct watersheds and is home to 1,273 plant and animal species. With 80 sensitive, rare, threatened, or endangered species —including the Northern Spotted Owl, California Redlegged Frog, and Coho Salmon— the park has the fourth largest number (33) of federally protected or endangered species of all units.

Point Reyes National Seashore, CA: Point Reyes National Seashore contains unique elements of biological and historical interest in a spectacularly scenic panorama of thunderous ocean breakers, open grasslands, bushy hillsides and forested ridges. Native land mammals number about 37 species and marine mammals augment this total by another dozen species. The biological diversity stems from a favorable location in the middle of California and the natural occurrence of many distinct habitats. Nearly 20% of the State's flowering plant species are represented on the peninsula and over 45% of the bird species in North America have been sighted. The Point Reyes National Seashore was established by President John F. Kennedy on September 13, 1962.

**Redwood National Park, CA:** Redwood National and State Parks are home to some of the world's tallest trees: old-growth coast redwoods. They can live to be 2000 years old and grow to over 300 feet tall. Spruce, hemlock, Douglas-fir, berry bushes, and sword ferns create a multiple canopied understory that towers over all visitors. The parks' mosaic of habitats include prairie/oak woodlands, mighty rivers and streams, and 37 miles of pristine Pacific coastline.

Santa Monica Mountains National Recreation Area, CA: The Santa Monica Mountains are one of the last remaining examples of a relatively undisturbed Mediterranean-type ecosystem in the world. A unique climate, diverse topography, and other factors create a complex assemblage of vegetation types including oak woodland, several types of chaparral, coastal sage scrub, valley oak savanna, grassland, riparian woodland, wetland, and coastal marsh. This vegetation diversity provides abundant habitat for animal species, including 50 species of mammals, close to 400 bird species, and over 35 reptile and amphibian species. These natural resources occur within and adjacent to Los Angeles, the second largest urban area in the nation.

#### **District of Columbia**

Chesapeake Bay Gateways Network, DC, MD, VA, WV, NY, PA: As the largest estuary in North America, the Chesapeake Bay has touched and influenced much of the American story – early settlement, commerce, the military, transportation, recreation and more. The Bay and its surrounding 64,000 square mile watershed hold a treasure trove of historic areas, natural wonders and recreational opportunities. Experience the diversity of the Chesapeake Bay through the Chesapeake Bay Gateways Network – a system of over 120 parks, refuges, museums, historic communities and water trails in the Bay watershed. Each of these sites tells a piece of the vast Chesapeake story.



#### Florida

Biscayne National Park, FL: The lands and submerged bottomlands of Biscayne National Park are rich with archeological remains that document the cultural history of southern Florida and the Florida Keys. Submerged archeological sites include an array of shipwrecks and other representations of maritime casualties, demonstrating the international maritime heritage encompassed in the waters of Biscayne National Park. The archeological remains of many shipwrecks have been found in our waters. The earliest identified shipwreck site is from the mid 18th century. Since historical records document that early European exploration of this region began in the early 16th century, it is possible that earlier remains are waiting to be found here. Some days, Biscayne Bay's shallow waters are glassy smooth, a window on another world.

Canaveral National Seashore, FL: Canaveral National Seashore is on a barrier island which includes ocean, beach, dune, hammock, lagoon, salt marsh, and pine flatland habitats. The barrier island and adjacent waterways offer a blend of plant and animal life. Records show that 1,045 species of plants and 310 species of birds can be found in the park. Visitors may enjoy walking the nature and historical trails during the cool winter months. Throughout the year opportunity for recreational activities include; lagoon and surf fishing, boating, canoeing, surfing, sunbathing, swimming, hiking, horseback riding and backcountry camping.

**DeSoto National Memorial, FL:** De Soto National Memorial is embraced by the waters of Tampa Bay and the mouth of the Manatee River, and includes over thirty acres of intertidal mangrove forest and coastal hammock uplands. Daily, this unique environment is flooded by tidal waters from Tampa Bay and the Manatee River. These nutrient rich tidal waters nourish specialized plant and animal communities which are dependent upon the ebb and flow of the tide. The park's raised boardwalk offers visitors an opportunity to experience the mangrove ecosystem first hand. As you travel over this tangle of branches and prop roots, you can easily imagine the same area during the spring of 1539. Place yourself in the boots of the conquistadors, trudging through this seemingly impenetrable natural barrier.

Dry Tortugas National Park, FL: 70 miles west of Key West, Florida are the rare and beautiful coral reefs, seagrass beds, and remote keys known as Dry Tortugas National Park, with historic Fort Jefferson, the Civil War era military outpost at its center. Here creatures like the queen conch, the aptly-named brain coral, and endangered sea turtle coexist, interconnected in their plight to survive. Coral formations shelter dozens of colorful fish. A walk along the fort's moat wall provides ample opportunity to see an assortment of marine creatures thriving in sea grass meadows. Sea grasses are vital to the neighboring corals as they block polluting sediments from reaching these living animals. While its beauty is stunning, some of the park's most treasured wonders are at risk. Elkhorn and staghorn corals are listed as threatened under the Endangered Species Act. Fragile coral formations, displaying hundreds of years of growth, can be destroyed in seconds by a carelessly placed boat anchor or snorkel fin. Water pollution and sediments, from land or boats, muddy the clear waters that sustain the reef. Non-native plants and animals interfere with natural processes. The new Research Natural Area provides protection from fishing and anchoring and hope for restoration of corals, fish and seagrass.

**Everglades National Park, FL:** Spanning the southern tip of the Florida peninsula and most of Florida Bay, Everglades National Park is the only subtropical preserve in North America. It contains both temperate and tropical plant communities, including sawgrass prairies, mangrove and cypress swamps, pinelands, and hardwood hammocks, as well as marine and estuarine environments. The park is known for its rich bird life, particularly large wading birds, such as the roseate spoonbill, wood stork, great blue heron and a variety of egrets. It is also the only place in the world where alligators and crocodiles exist side by side.

**Gulf Islands National Seashore, FL/MS**: Gulf Islands National Seashore is known for its snowy white-quartz beaches, and emerald blue-green waters that stretch 160 miles from Cat Island in Mississippi to the eastern tip of Santa Rosa Island in Florida. Natural beauty, recreational opportunities and historic richness abound at Gulf Islands National Seashore. Offshore islands with sparkling white sand beaches, historic forts and related historic structures, nature trails and adjacent open waters describe the nation's largest national seashore.



**Timucuan Ecological and Historic Preserve, FL**: The 46,000 acre Timucuan Ecological and Historic Preserve was established to protect one of the last unspoiled coastal wetlands on the Atlantic Coast, and to preserve historic and prehistoric sites within the area. The estuarine ecosystem includes salt marsh, coastal dunes, and hardwood hammocks, all rich in native vegetation and animal life.

#### Georgia

**Cumberland Island National Seashore, GA**: Cumberland Island is 17.5 miles long and totals 36,415 acres of which 16,850 are marsh, mud flats, and tidal creeks. It is well known for its sea turtles, wild turkeys, wild horses, armadillos, abundant shore birds, dune fields, maritime forests, salt marshes, and historic structures. Visit Cumberland Island National Seashore for a natural experience: sun and sand, beautiful vistas and relaxing atmosphere. Be prepared with all supplies including food and water (See Activities).

**Fort Pulaski National Monument, GA**: The 5400 acre Monument consists of tidal marshes and mud flats that are subject to daily inundation of a six to ten foot tide. These two islands that make up the site were, before human intervention, primarily salt marsh. Judging from the composition of existing vegetation, Cockspur Island probably supported some coastal hammock forest or woodland. McQueens Island makes up the largest portion of land holdings for the Monument (about 4,900 acres) and the majority of this consists of salt marsh.



#### Guam

War in the Pacific National Historical Park, Guam: This unique National Park is the only site in the National Park System (comprised of 385 parks) that honors the bravery and sacrifices of all those who participated in the Pacific Theater of World War II. This includes the United States, Japan, and the Allied nations; Australia, Canada, China, France, Great Britain, New Zealand, the Netherlands, and the Soviet Union. At War in the Pacific National Historical Park (NHP), the former battlefields, gun emplacements, trenches, and historic structures all serve as silent reminders of the bloody battles that ensued on the Island of Guam, over 58 years ago. The park's marine area includes coral reefs with a rich assemblage of marine life and submerged historic shipwrecks from the battle of Guam.

### Hawaii

**Haleakala National Park, HI:** The Park preserves the outstanding volcanic landscape of the upper slopes of Haleakala on the island of Maui and protects the unique and fragile ecosystems of Kipahulu Valley, the scenic pools along Oheo Gulch, and many rare and endangered species. Haleakala, originally part of Hawaii National Park, was redesignated as a separate entity in July 1961. Haleakala National Park was designated an International Biosphere Reserve in 1980. Of its 30,183 acres, 24,719 acres are designated wilderness.

**Hawai'i Volcanoes National Park, HI**: Hawai'i Volcanoes National Park, established in 1916, displays the results of 70 million years of volcanism, migration, and evolution -- processes that thrust a bare land from the sea and clothed it with complex and unique ecosystems and a distinct human culture. The park encompasses diverse environments that range from sea level to the summit of the earth's most massive volcano, Mauna Loa at 13,677 feet. Kilauea, the world's most active volcano, offers scientists insights on the birth of the Hawaiian Islands and visitors views of dramatic volcanic landscapes.

Kalaupapa National Historical Park, HI: The park contains the Kalaupapa Peninsula, adjacent cliffs and valleys, and submerged lands and waters out to 1/4 mile from shore. Hawaiian people inhabited the peninsula and valleys for hundreds of years prior to the establishment of the isolation settlement at Kalawao in 1866. Evidence of this occupation in four *ahupua* 'a (historic Hawaiian land divisions) on the peninsula and in valleys is relatively undisturbed and represents one of the richest archeological preserves in Hawai'i. Spectacular north shore sea cliffs, narrow valleys, a volcanic crater, rain forest, lava tubes and caves, and off-shore islands and waters are in the national park, including 2,000 acres of ocean waters including corals and a diverse variety of marine plants and

animals. Several of these areas provide rare native habitat for threatened or endangered Hawaiian plants and animals. For example, Hawaiian Monk seal pups have been born on Kalaupapa's beaches. These endangered mammals require solitude; Kalaupapa's physical isolation provides perfect habitat to support these births and subsequent care.

Kaloko-Honokohau National Historical Park, HI: Established in 1978 for the preservation, protection and interpretation of traditional native Hawaiian activities and culture, Kaloko-Honokohau NHP is an 1160 acre park full of incredible cultural and historical significance. The park's ocean resources encompass 700 acres of nearshore waters with a coral reef community of fish, invertebrates and plant. It is the site of an ancient Hawaiian settlement which encompasses portions of four different ahupua'a, or traditional sea to mountain land divisions. Resources include fishponds, kahua (house site platforms), ki'i pohaku (petroglyphs), holua (stone slide), and heiau (religious site).

**Pu'uhonua o Honaunau National Historical Park, HI:** The peaceful waters of Honaunau Bay lap upon shores of Keone'ele Cove. The majestic waters of the blue pacific stretch out before you beyond the stark lava landscape. Perhaps you will spot a green sea turtle swimming nearby or encounter a native Hawaiian plant along the trail. The power and beauty of the natural landscape surrounds you at Pu'uhonua o Honaunau.

**Pu'ukohola Heiau National Historic Site, HI:** With less than 10 inches of annual rainfall, this is one of the driest locations in the Hawaiian archipelago. Ruins of Pu'ukohola Heiau ("Temple on the Hill of the Whale"), built by the great King Kamehameha lie adjacent to marine waters where sea turtles, fish and other creatures move together with the ocean's rhythms.

**USS** *Arizona* **Memorial**, **HI:** Oil droplets bubble to the surface of Pearl Harbor above the sunken battleship, USS *Arizona*, creating a vivid link to the past. On a quiet Sunday morning, December 7, 1941, Japanese naval air forces launched a surprise attack on the island of Oahu leaving the Pacific Fleet and the surrounding airfields in smoldering ruins. Here, peace was interrupted and World War II began in the Pacific. In a few hours, 2,390 futures were taken. Nearly half of these casualties were from the USS Arizona. Behind the shadows of destroyed airfields, aircraft and ships, America fought fear and a determined enemy by responding with an unrivaled war effort. In the wake of the "day of infamy", an epic battle for democratic ideals and world freedom would bloody the fields of Europe and the islands of the Pacific over the next four years. The USS Arizona Memorial became a national shrine in 1962. To many, it symbolizes American sacrifice and resolve. Through this national tragedy, a new America emerged. The United States would reluctantly assume global power and with it, new global responsibilities. Today, the USS Arizona stands as a reminder of the events of that Sunday morning. It has different meanings for the millions who visit here but to all of them, it speaks silently and eloquently of the distance yet to be traveled before the world lives in peace.

#### Indiana

**Indiana Dunes National Lakeshore, IN**: Indiana Dunes National Lakeshore is a treasure of diverse natural resources located within an urban setting. The lakeshore features communities that have both scientific and historic significance to the field of ecology. In addition, four National Natural Landmarks and one National Historical Landmark are located within its boundaries. The park is comprised of over 15,000 acres of dunes, oak

savannas, swamps, bogs, marshes, prairies, rivers, and forests. It contains 15 miles of Lake Michigan shoreline spanning the distance from Gary to Michigan City. Lake Michigan itself is one of the largest lakes in the world. The fine beaches of the national lakeshore, washed by the warmest waters of the lake, are the most significant recreational resource in the park.

#### Louisiana

**Jean Lafitte National Historical Park and Preserve, LA:** South Louisiana is known for alligators, Spanish moss, and live oak trees, but it is also home to armadillos, otters, and hundreds of species of birds. The Barataria Preserve south of New Orleans is the park's wildest site with 20,000 acres of swamp, marsh, trails, and waterways, a living laboratory of Louisiana's endangered wetlands. The preserve's 20,000 acres include bayous, swamps, marshes, forests, alligators, nutrias, and over 300 species of birds.



#### Maine

Acadia National Park, ME: Acadia National Park is a land of contrast and diversity. Comprised of a cluster of islands on the Maine coast, Acadia is positioned within the broad transition zone between eastern deciduous and northern coniferous forests, and hosts several species and plant communities at the edge of their geographic range. Steep slopes rise above the rocky shore, including Cadillac Mountain, which at 1,530 feet is the highest point on the U.S. Atlantic coast. While surrounded by the ocean, the entire fabric of Acadia is interwoven with a wide variety of freshwater, estuarine, forest, and intertidal resources, many of which contain plant and animal species of international, national and state significance.

#### Maryland

Assateague Island National Seashore, MD, VA: Marine and terrestrial life functioning in concert offer a closer look at a natural and cultural world shaped by forces larger than our own. Storm tossed seas, as well as gentle breezes shape Assateague Island. This barrier island is a tale of constant movement and change. Bands of wild horses freely roam amongst plants and native animals that have adapted to a life of sand, salt and wind. Special thickened leaves and odd shapes reveal the plant world's successful struggle here. Ghost crabs buried in the cool beach sand and tree swallows plucking bayberries on their southward migration offer glimpses of the animal world's connection to Assateague.

Chesapeake Bay Gateways Network, DC, MD, VA, WV, NY, PA: As the largest estuary in North America, the Chesapeake Bay has touched and influenced much of the American story – early settlement, commerce, the military, transportation, recreation and more. The Bay and its surrounding 64,000 square mile watershed hold a treasure trove of

historic areas, natural wonders and recreational opportunities. Experience the diversity of the Chesapeake Bay through the Chesapeake Bay Gateways Network – a system of over 120 parks, refuges, museums, historic communities and water trails in the Bay watershed. Each of these sites tells a piece of the vast Chesapeake story.

#### Massachusetts

**Boston Harbor Islands National Recreation Area, MA**: Boston Harbor Islands National Park includes 34 islands situated within the Greater Boston shoreline. The islands are rich in natural and cultural resources. Imagine a place where you can explore tide pools, walk through a Civil War era fort, climb a lighthouse, hike lush trails and salt marshes, camp under the stars, or relax while fishing, picnicking or swimming...all within reach of downtown Boston. The 34 islands are managed by a unique, 13-member Partnership which includes the National Park Service and other public and private organizations. An advisory council provides a mechanism for public involvement.



Cape Cod National Seashore, MA: Cape Cod National Seashore comprises 43,604 acres of shoreline and upland landscape features, including a forty-mile long stretch of pristine sandy beach, dozens of clear, deep, freshwater kettle ponds, and upland scenes that depict evidence of how people have used the land. A variety of historic structures are within the boundary of the Seashore, including lighthouses, a lifesaving station, and numerous Cape Cod style houses. The Seashore offers six swimming beaches, eleven self-guiding nature trails, and a variety of picnic areas and scenic overlooks.

## **Michigan**

Isle Royale National Park, MI: In the northwestern portion of Lake Superior exists a unique and remote island archipelago. Isle Royale National Park preserves 132,018 acres of land-based wilderness that was federally designated on October 20, 1976. The park consists of one large island surrounded by about 400 smaller islands, it encompasses a total area of 850 square miles including submerged land which extends 4 1/2 miles out into the largest fresh water lake in the world. Due to Isle Royale's biological and ecological uniqueness, it was designated an International Biosphere Reserve in 1980. These isolated islands have barely 20 species of mammals compared to over 40 found on the surrounding mainland. Some species have come and gone, often due to the influences of humans. All in all, Isle Royale is a fascinating ecosystem, responding to influences seen in very few places in all of North America or the world.

**Pictured Rocks National Lakeshore, MI**: Multicolored sandstone cliffs, beaches, sand dunes, waterfalls, inland lakes, wildlife and the forest of the Lake Superior shoreline

beckon visitors to explore this 73,000+ acre park. Attractions include a lighthouse and former Coast Guard life-saving stations along with old farmsteads and former logging trails. The park is a four season recreational destination where hiking, camping, hunting, nature study, and winter activities abound. At its widest point the Lakeshore is only five miles and hugs the Superior shoreline for more than 40 miles. This was the first National Lakeshore and was authorized in 1966.

**Sleeping Bear Dunes National Lakeshore, MI**: 35 miles of Lake Michigan coastline, on the mainland of Michigan, as well as around North and South Manitou Islands, are protected at this site. The park was established primarily for its outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena. The Manitou Passage State Underwater Preserve is adjacent to the Lakeshore. The Preserve protects more than 80 shipwrecks, many in shallow water. Beachcombers often discover shipwreck timbers that they then report to park officials as historic artifacts.

## **Mississippi**

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### **New Jersey**

Gateway National Recreation Area, NJ, NY: Gateway NRA is a 26,000 acre recreation area located in the heart of the New York metropolitan area. The park extends through three New York City boroughs and into northern New Jersey. Swimming, sailing, surfing and fishing; --Learning about ecosystems and their relationship to city life; -- Touring historic military sites; --Gardening, photography and poetry readings; --Opera, symphony, and contemporary music and cultural festivals; --Organized athletics --soccer, football, baseball, tennis and cricket; --Bird watching, beach clean-ups and nature talks; --Camping, cycling and ...sunset walks.

#### New York

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**Fire Island National Seashore, NY**: Pristine ocean shores, an ancient maritime forest, legacies of lighthouse keepers, and the historic estate of William Floyd are just a few of the recreational, natural, and cultural resources of Fire Island National Seashore. Fire Island National Seashore was established "for the purpose of conserving and preserving for the use of future generations certain relatively unspoiled and undeveloped beaches,

dunes, and other natural features... which possess high values to the Nation as examples of unspoiled areas of great natural beauty in close proximity to large concentrations of urban population." Public Law 88-587 (Sept. 11, 1964).



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#### **North Carolina**

Cape Hatteras National Seashore, NC: Stretched over 70 miles of barrier islands, Cape Hatteras National Seashore is a fascinating combination of natural and cultural resources, and provides a wide variety of recreational opportunities. Once dubbed the "Graveyard of the Atlantic" for its treacherous currents, shoals, and storms, Cape Hatteras has a wealth of history relating to shipwrecks, lighthouses, and the U.S. Lifesaving Service. These dynamic islands provide a variety of habitats and are a valuable wintering area for migrating waterfowl. The park's fishing and surfing are considered the best on the east coast.

Cape Lookout National Seashore, NC: The seashore is a 56 mile long section of the Outer Banks of North Carolina running from Ocracoke Inlet on the northeast to Beaufort Inlet on the southeast. The three undeveloped barrier islands which make up the seashore - North Core Banks, South Core Banks and Shackleford Banks - may seem barren and isolated but they offer many natural and historical features that can make a visit very rewarding.

#### **Oregon**

Lewis & Clark National Historical Park, OR, WA: Lewis & Clark National Historical Park incorporates state parks in Washington and Oregon along with the current Fort Clatsop National Memorial Park. The sites preserved in these parks allow you to walk where Lewis and Clark and the rest of the Corps of Discovery walked. Ecosystems within the park vary from estuarine mudflats and tidal marshes to shrub wetlands, forested swamps, and coastal temperate rainforest dominated by Sitka spruce as large as six feet in diameter. Wetlands comprise approximately half the park's acreage and include the tidally influenced Lewis and Clark River, low-gradient brackish sloughs, freshwater

ponds, and several small freshwater streams and springs. These wetlands provide valuable habitat for a number of threatened and sensitive fish, amphibian, bat and bird species. Bald eagles nest in the area and can often be seen in flight or perching along the river.

#### **Pennsylvania**

Chesapeake Bay Gateways Network, DC, MD, VA, WV, NY, PA: As the largest estuary in North America, the Chesapeake Bay has touched and influenced much of the American story – early settlement, commerce, the military, transportation, recreation and more. The Bay and its surrounding 64,000 square mile watershed hold a treasure trove of historic areas, natural wonders and recreational opportunities. Experience the diversity of the Chesapeake Bay through the Chesapeake Bay Gateways Network – a system of over 120 parks, refuges, museums, historic communities and water trails in the Bay watershed. Each of these sites tells a piece of the vast Chesapeake story.

#### **Texas**

Padre Island National Seashore, TX: Padre Island National Seashore is the longest section of undeveloped barrier island in the world, protecting rare coastal prairie; a complex, dynamic dune system; and the Laguna Madre, one of the few hypersaline lagoon environments left in the world. The National Seashore and surrounding waters provide important habitat for marine and terrestrial plants and animals, including a number of rare, threatened, and endangered species. Situated along the Central Flyway, Padre Island is a globally important area for over 350 migratory, overwintering, and resident bird species. The National Seashore's remote location also makes it one of the few places where the public can find quiet and solitude relatively near a major urban area and where one can observe the night sky with minimal interference from light pollution. The National Seashore is also one of the few places the public can go to see sea turtle hatchlings being released into the wild.

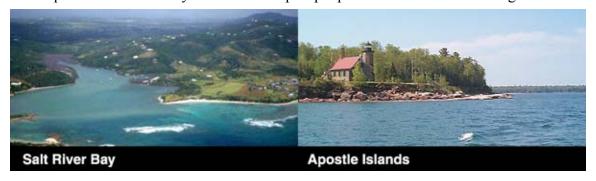


### **U.S. Virgin Islands**

Buck Island Reef National Monument, Virgin Islands: Buck Island Reef National Monument was established to preserve "one of the finest marine gardens in the Caribbean Sea." The Monument was expanded in 2001 to over 19,000 acres, and designated as a fully-protected marine reserve. The 176-acre island and surrounding coral reef ecosystem support a large variety of native flora and fauna, including several endangered and threatened species such as hawksbill turtles and brown pelicans. The elkhorn coral barrier reef that surrounds two-thirds of the island has extraordinary coral formations, deep grottoes, abundant reef fishes, sea fans and gorgonians. At the eastern most point of the reef is the famous underwater trail; both novice and expert snorkelers will enjoy the

passages through the reef. The island has an overland nature trail and white coral sand beaches. Visitors can take daily trips to the park for half or full day. Once there they can enjoy a leisurely swim in the crystal clear waters, or snorkeling or SCUBA diving through the fantastic reef to witness tropical marine life, or hike over the island enjoying native flora and fauna while getting a birds-eye view of the reef and sea below.

Salt River Bay National Historic Park & Ecological Preserve, Virgin Islands: Salt River Bay's natural history, its vitally important ecosystem of mangroves, estuary, coral reefs, and submarine canyon, has witnessed thousands of years of human endeavor. Every major period of human habitation in the Virgin Islands is represented: several South American Indian cultures, the 1493 encounter with Columbus, Spanish extermination of the Caribs, attempts at colonization by a succession of European nations, and enslaved West Africans and their descendants. More than a dozen major archeological investigations since 1880, together with historical research, reveal this remarkable story. Few places engage the imagination so completely, drawing visitors into the spirit of the place and its beauty and sanctity. You can help ensure that this park and its unique stories will always be here to inspire people about our shared heritage.



**Virgin Islands** Coral Reef National Monument, Virgin Islands: The clear waters surrounding St. John support a diverse and complex system of coral reefs. The health of these reefs is closely tied to its component plants and animals as well as adjacent noncoral marine environments such as sandy bottoms, seagrass beds, and mangrove forests. The monument includes 12,708 acres of federal submerged lands within the 3-mile belt off of St. John, including Hurricane Hole and areas north and south of St. John.

Virgin Islands National Park, Virgin Islands: Virgin Islands National Park, renowned throughout the world for its breathtaking beauty, covers approximately 3/5 of St. John, and nearly all of Hassel Island in the Charlotte Amalie harbor on St. Thomas. Within its borders lie protected bays of crystal blue-green waters teeming with coral reef life, white sandy beaches shaded by seagrape trees, coconut palms, and tropical forests providing habitat for over 800 species of plants. To these amazing natural resources, add relics from the Pre-Colombian Amerindian Civilization, remains of the Danish Colonial Sugar Plantations, and reminders of African Slavery and the Subsistence Culture that followed during the 100 years after Emancipation - all part of the rich cultural history of the Park and its island home.

## **Virginia**

Assateague Island National Seashore, MD, VA: Marine and terrestrial life functioning in concert offer a closer look at a natural and cultural world shaped by forces larger than

our own. Storm tossed seas, as well as gentle breezes shape Assateague Island. This barrier island is a tale of constant movement and change. Bands of wild horses freely roam amongst plants and native animals that have adapted to a life of sand, salt and wind. Special thickened leaves and odd shapes reveal the plant world's successful struggle here. Ghost crabs buried in the cool beach sand and tree swallows plucking bayberries on their southward migration offer glimpses of the animal world's connection to Assateague.

#### Washington

**Ebey's Landing National Historical Reserve, WA**: Within the fast growing Puget Sound region, Ebey's Landing NHR has quickly become the remaining area where a broad spectrum of Northwest history is still clearly visible in the landscape. The historical landscape of the reserve appears to today's visitors much as it did a century ago, when New England sea captains were drawn to Penn Cove. Historic farms are still farmed, forests harvested and century-old buildings used as homes or places of business.

Olympic National Park, WA: Olympic National Park's 73-mile long wilderness coast is a rare treasure in a country where much of the coastline is prime real estate. The rocky headlands, beaches, tidepools nurturing a living rainbow of colors and textures, off shore sea stacks topped by nesting seabirds and wind-sheared trees—all are a remnant of a wilder America. In 1988, Congress added much of the narrow coastal strip of the park to a national system of designated wilderness. The intertidal areas, where the Pacific Ocean tides shape life, are also within the boundary of the Olympic Coast National Marine Sanctuary. The offshore islands with their colonies of nesting seabirds and rocky haulouts for seals and sea lions, lie within the Washington Maritime National Wildlife Refuge Complex. Peer into a tidepool and your view may take in hundreds of animals crowded into an area the size of a dinner plate. Cold, nutrient-rich waters upwelling from the Pacific Ocean floor feed a food chain extending from tiny invertebrates to many-ton whales. In the intertidal, that abundance is stacked in layers determined by the tides, competition and the reach of predatory neighbors.

San Juan Island National Historical Park, WA: San Juan Island National Historical Park preserves and protects a diverse variety of natural features, ecological communities, ecosystem components, and niche habitats in its two units on San Juan Island. San Juan Island is one of the two largest islands in the San Juan Archipelago. North of Puget Sound, the San Juan Islands are nestled between Canada's Vancouver Island, the Strait of Georgia, the inland coast of northwest Washington state, and the Strait of Juan de Fuca. The San Juan Islands lie in the center of the geographically, culturally and ecologically defined region known as the Salish Sea. The environmentally sensitive coastal areas of the San Juan Islands are regarded as among the more diverse intact marine ecosystems in the nation.

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ponds, and several small freshwater streams and springs. These wetlands provide valuable habitat for a number of threatened and sensitive fish, amphibian, bat and bird species. Bald eagles nest in the area and can often be seen in flight or perching along the river.

#### West Virginia

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### Wisconsin

Apostle Islands National Lakeshore, WI: Set in a matrix of Lake Superior, the largest and most pristine of the Great Lakes, the Apostle Islands archipelago includes 22 islands and is located in far northwestern Wisconsin, off the Bayfield Peninsula. Twenty-one of these islands, and a 12-mile segment along the shore of Wisconsin's north coast, comprise the Apostle Islands National Lakeshore. The beauty of the islands are enhanced by the area's geology. Colorful precambrian sandstone has eroded into interesting cliff formations, including sea caves, and there is a highly diverse collection of sandscapes, including sandspits, cuspate forelands, tombolos, a barrier spit, and numerous beaches. The islands offer various water-based recreational opportunities such as sailing, power boating, sea kayaking, fishing and scuba diving.

## National Park Service Underwater, Oceanic or Coastal Related Projects, Programs, Publications and Web Sites

## **Submerged Resources Center**

Learn about the underwater projects of the Submerged Resources Center, often in partnership with other organizations, including the U.S.S. Arizona and U.S.S. Utah at Pearl Harbor, ships and planes in Palau and Guam, and numerous historic shipwrecks in Dry Tortugas National Park and off Isle Royale National Park. http://home.nps.gov/applications/submerged/.

## **Marine Resources Conservation Program**

The Marine Resources Conservation Program provides Service-wide policy and guidance for marine resource protection; coordinates NPS activities relating to Marine Protected Areas; coordinates NPS activities relating to the protection of coral reefs; develops a Service-wide coastal watershed assessment and protection strategy; provides guidance and technical support to NPS units for marine resource management and planning; and provides NPS liaison and coordination with NOAA and the National Marine Sanctuaries Program. http://www.nature.nps.gov/water/marine.htm

### **Coral Reefs in the National Parks**

Congress and the American public have entrusted the National Park Service with managing and protecting more than 275,000 acres of coral reefs in ten National Park units. Two of these units are located in South Florida, four in the U.S. Virgin Islands, two in the Hawaiian Islands and two are in the Indo-Pacific (Guam and American Samoa). These Parks are not only outstanding places to enjoy snorkeling, SCUBA diving, fishing, and boating; they contain some of the most biologically rich and economically important coral reef resources in the world. http://www.nature.nps.gov/water/coral.htm

## **NPS Coastal Geology Program**

At least 97 National Park System units contain coastal and freshwater shorelines shaped by meteorologic, hydrologic, oceanic and geologic processes. Shoreline processes may occur gradually, as with the movement of sandbars, spits, and deltas, or catastrophically, during landslides and storm-induced sediment transport. The NPS Coastal Geology Program provides technical and policy assistance to parks on monitoring, mapping and research of shoreline resources, land use planning, and protection of natural and cultural resources. http://www2.nature.nps.gov/geology/coastal/

## NPS Inventory & Monitoring Networks

As part of the National Park Service's effort to "improve park management through greater reliance on scientific knowledge," a primary role of the Inventory and Monitoring (I&M) Program is to collect, organize, and make available natural resource data. Thirteen NPS Inventory and Monitoring (I&M) Networks acquire and integrate scientific information to support conservation of ocean and coastal resources in the National Park System. http://science.nature.nps.gov/im/index.cfm. For a map of the I & M Parks and Inventory Networks: http://science.nature.nps.gov/im/networks.cfm.

## **Maritime Heritage Program**

The Maritime Heritage Program works to advance awareness and understanding of the role of maritime affairs in the history of the United States. We survey and evaluate historic maritime properties, provide guidance for preserving these resources, and educate the public about maritime history and preservation through our web site, publications, and technical assistance. <a href="http://www.cr.nps.gov/maritime">http://www.cr.nps.gov/maritime</a>

#### **NPS Maritime Resources**

Access a list of links to lighthouses, ships, and other maritime resources within the National Park System. http://www.cr.nps.gov/maritime/maripark.html

## **National Maritime Heritage Grants Program**

Provides information about this new grants program which supports maritime heritage education and preservation projects. http://www.cr.nps.gov/maritime/grants.htm

#### **National Maritime Initiative Publications**

Provides a number of useful publications addressing standards for preservation and guidance in documentation and evaluation of maritime resources. http://www.cr.nps.gov/maritime/nmipub.htm

## **Additional Publications and Websites**

## **Maritime History at Point Reyes**

http://www.nps.gov/pore/history\_maritime.htm

## Shipwreck - Cape Hatteras

http://www.nps.gov/caha/shipwreck.htm

Submerged Cultural Resources Study: USS Arizona

http://www.nps.gov/usar/scrs/scrs.htm

Updated: December 4, 2006