Cabrillo Journal

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Welcome to Cabrillo National Monument
Whether you came to relax and enjoy some remarkable views of San Diego, to learn about the fascinating story of Juan Rodriguez Cabrillo, or to get your feet wet in the tidepools, Cabrillo National Monument has exciting activities for everyone.

Throughout this issue of the Cabrillo Journal you will find information about many of the various activities that occur at Cabrillo National Monument, and we invite you to participate as much as you’d like. Take a stroll down the Bayside Trail, catch a film in the auditorium (shown on the hour), or attend a ranger-led interpretive program. After you leave the park, stop by Spanish Landing to witness the building of Cabrillo’s flagship, the San Salvador.

More than anything, we ask that you make yourself at home and take pride in calling Cabrillo National Monument, San Diego’s National Park, your National Park. Be safe, have fun, and don’t hesitate to stop a park employee for any questions or concerns.

Enjoy your stay at Cabrillo National Monument!

Tom Workman
Superintendent

Experience Your America Cabrillo National Monument

Fort Rosecrans Goes to War!

Cabrillo to Kick Off Its Centennial December, 2012

Emily Floyd
Park Ranger

Cabrillo National Monument will celebrate its centennial in 2013! As part of our 100 year birthday celebration we will be hosting many new and exciting events starting in December 2012 and culminating in a rededication ceremony on October 14, 2013.

This December marks the 71st Anniversary of the attack on Pearl Harbor and the United State’s entry into the Second World War. On December 8 and 9, from 9:00am-4:30pm, Cabrillo National Monument will host a World War II Living History event to commemorate this pivotal moment and its impact on San Diego.

History will come alive as Cabrillo National Monument is transformed back into 1940s Fort Rosecrans. Historical re-enactors will represent the men and women of the US Army and members of the 19th Coast Artillery. World War II vehicles, tents, and various displays will be set up around the park. Historic structures, including the army radio station and one of the observation bunkers, will be open for viewing. Join Cabrillo National Monument for this unique opportunity to understand and commemorate San Diego’s important role during the early days of World War II.

The WWII re-enactment weekend will include a WWII era Liberty Dance on December 8, 2012 from 5:00pm to 9:00pm. This entire weekend of events will be the official kick-off of Cabrillo National Monument’s year-long centennial celebration! For more information on upcoming and centennial events, visit cabrillocentennial.org.

Tom Workman
Superintendent

Experience Your America Cabrillo National Monument
Visitor Activities
Things to do while you’re in the Park

VISITOR ACTIVITIES

How do you want to spend your visit to Cabrillo National Monument? A visit to Cabrillo offers tremendous views of the San Diego region and excellent opportunities to explore the natural and cultural history of the area. At Cabrillo National Monument, San Diego’s National Park, you can be as active or as relaxed as you like. Here is a list of some of the most popular activities that the park has to offer. Please feel free to ask for more information at the park Visitor Center.

HIKING

The Bayside Trail is a scenic 2-mile trail that takes you through a prime example of the endangered coastal sage scrub habitat. This walk will bring you within 100-feet of the San Diego Harbor, giving you up-close views of the ships cruising in and out of San Diego. Take time to smell and enjoy the many wildflowers along the trail. If you would like help identifying plants, ask for a plant guide from the Visitor Center. Remember to pack water and use the restrooms before your hike, as these facilities are not available on the trail.

TIDEPOOLING

On the western sides of Point Loma lies the rocky intertidal zone, a window into the ocean ecosystem that lies along San Diego’s coast. From late Fall until Spring, periods of low tide cause pools of water to form along the shore in rocky depressions. In them, you may see an assortment of colorful plants and animals, including sea anemones, brittle stars, octopi, and a host of other creatures. Ask a ranger when low tide is today to find out the best time to explore the tidepools. If you are interested in learning more about the tidepools and the creatures that live there, also ask about showtimes for On the Edge of Land and Sea: The Tidepools of Cabrillo National Monument, which shows daily in the Visitor Center auditorium.

SELF-GUIDED HISTORICAL TOURS

History is a critical mission to many national parks, and Cabrillo National Monument is no exception. Sixteenth century exploration, 19th century lighthouses and military history are all important elements here. From Juan Rodriguez Cabrillo’s journey here in 1542 to the US Army’s Fort Rosecrans here in World Wars I and II, Point Loma has become an area of vast historical importance. Feel free to visit any of our numerous exhibit rooms for more information on these fascinating and complex histories.

JUNIOR RANGER PROGRAMS

Cabrillo National Monument is a great place for kids of all ages. Two Junior Ranger Programs and the new Climate Change Junior Ranger (ages 8+) are fun ways to find out more about the park. When you’ve finished this self-guided scavenger hunt, you can receive a Junior Ranger badge and a Certificate. Inquire at the Visitor Center for more information on this exciting activity!

WHALE WATCHING

Each year, the Pacific Gray Whale (Eschricticus robustus) migrates from the Arctic seas to Baja, California and back. From late-December until the middle of March, visitors can see these enormous mammals just off the coast of Cabrillo National Monument. Check out a pair of binoculars in the Visitor Center (valid ID required), head up to the new Kelp Forest and Whale Overlook, and enjoy watching as the whales head to the lagoons of Baja.

EDUCATION PROGRAMS

Are you a teacher? If so, you may be interested in scheduling a ranger-led education program. These hour long, curriculum-based programs can be scheduled twice a day, Monday through Friday, and are completely free. Ask a ranger at the Visitor Center for more information. Distance learning trips are also available if your class cannot physically make it to the park.

Left: A dewy artemisia californica in the early morning.

Right: A Western Fence Lizard perched on a post.
Calendar of Events

2012

September 30 - Dusty Socks Club Hike (Mission Trails Regional Park)
October 28 - Dusty Socks Club Hike (Torrey Pines)
November 25 - Dusty Socks Club Hike (Birch Aquarium)
December 8 & 9 - Fort Rosecrans Goes to War: WWII re-enactment 9:00am to 4:30pm
December 8 - WWII era Liberty Dance 5:00pm - 9:00pm
December 30 - Dusty Socks Club Hike (Presidio Park)

2013

January 6 - Volunteer Recruitment, 10:00am (RSVP required)
January 12 - Tidelock Education and Restoration Program volunteer training (RSVP required)
January 27 - Dusty Socks Club Hike (Tijuana Estuary Reserve)
February 9 & 10 - Whale Watch Weekend and Intertidal Life Festival 10:00am - 4:00pm
February 24 - Dusty Socks Club Hike (Tealotol Canyon)
March 31 - Dusty Socks Club Hike (Anza Borrego)
April 28 - Dusty Socks Club Hike (Sweetwater Regional Park)
May 7 - Volunteer Recruitment (RSVP recommended)
May 26 - Dusty Socks Club Hike (Living Coast Discovery Center)
June 8 - Parks and Open Spaces Day 10:00am - 4:00pm
August 25 - Lighthouse Open Tower Day 10:00am - 3:30pm
September 7 - Volunteer Recruitment (RSVP required)
September 29 - Dusty Socks Club Hike (Location TBD)
October 28 & 29 - Cabrillo Festival
October 28-29 - Tidelock Education and Restoration Program volunteer training (RSVP required)
October 14 - Centennial Commemorative Ceremony 6:00pm
October 12, 13, 14 - Centennial Celebration Festival 10:00am - 4:00pm
October 27 - Dusty Socks Club Hike (Location TBD)
November 15 - Lighthouse Open Tower Day 10:00am - 3:30pm
November 24 - Dusty Socks Club Hike (Location TBD)
December - Artist-In-Residence Art Exhibition (Visitor Center)
December 8 & 9 - Fort Rosecrans Goes to War! WWII era Historic Re-enactment 9:00am - 4:30pm
December 29 - Dusty Socks Club Hike (Location TBD)

DATES AND HOURS

Cabrillo National Monument is open 364 days a year (closed December 25), including weekends and holidays, from 9:00 AM to 5:00 PM. All other facilities remain open until 5:00 PM.

WEATHER AND CLIMATE

Generally sunny and mild year-round, there isn’t a bad time of the year to visit Cabrillo National Monument. The Pacific Ocean has a strong influence on weather conditions, and Springtime visitors should be prepared for cool, windy, and foggy conditions, even if it is sunny, hot, and dry further inland. There is little chance of rain in the Spring, but an oceanic marine layer can develop near the coast at any moment. During the Summer months the temperature frequently reaches the 80s, but the fog can still roll in at any time. A well-prepared visitor to Cabrillo National Monument will dress in layers throughout the year to accommodate changes in weather conditions, and will remember the sunscreen and hat for sunny days.

GETTING AROUND

It’s easy to get around Cabrillo National Monument. State Highway 209, also known as Cabrillo Memorial Drive, is the only road leading into the park, and it is signed and well-marked. Wide, paved paths and sidewalks lead visitors to the Visitor Center Complex, Lighthouse area, Whale Overlook, and Military History Exhibit. If a member of your party is unable to walk to the Lighthouse area, stop in at the Visitor Center for a pass that will enable you to drive there. Wheelchairs and a walker may be checked out at the Visitor Center. Smoking is prohibited at the park except in the parking lots.

PUBLIC TRANSPORTATION

The San Diego Metropolitan Transit System (MTS) offers bus service throughout the county, including hourly stops daily at Cabrillo National Monument via Route 28, Monday through Friday only. For added convenience, the bus stop is located right at the Visitor Center complex. Taking the bus to the park is a great choice to reduce congestion and pollution, and a relaxing way to enjoy the scenic road on top of Point Loma. Please note that the bus does not go to the tidepool area on the west side of the park.

LODGING

As the park is a day-use area, there are no accommodations located within Cabrillo National Monument. However, your visit here may include an overnight stay at one of the many lodging establishments located within the city of San Diego.

PETS

For the health and safety of native wildlife and your animal companions, pets are not allowed in the park, except in the coastal and tidepool areas. While there, they must be on a leash of no more than six feet. If you bring your pet to the upper portion of the park, it must be left in your vehicle. Working service animals are always allowed.

RESERVATIONS

You’re welcome to visit Cabrillo National Monument any time that we’re open. No reservations are required for the general public. If you will be visiting the tidepools and your group is larger than ten people, we ask that you make a reservation and obtain a free tidepool permit. See the ranger at the Visitor Center, call the park at 619-557-5450, or visit our website for more information: www.nps.gov/cabr.

PASSES

Cabrillo National Monument, as part of the National Park System, participates in the Interagency Pass Program, and honors those passes, including the Annual Pass, Military Annual Pass, Senior Pass, and Access Pass. These passes, along with the Cabrillo National Monument annual pass, are available at the Entrance Station and Visitor Center.

ENTRANCE FEES

Did you know that 80% of your entrance fee stays right here at Cabrillo National Monument to support park programs that directly affect visitors? Also, did you know that your entrance receipt is good not only for the day you visit, but for the following six days as well? You can come back as many times as you like for seven full days!

Passenger vehicle $5.00 per vehicle
Walk-ins, bicyclists, motorcyclists $3.00 per person
Annual Cabrillo Pass $15.00
Commercial vehicle (1-6 passenger capacity) $35.00
Commercial vehicle (7-25 passenger capacity) $45.00
Commercial vehicle (26+ passenger capacity) $100.00
The Green Flash

Fact or Fiction?

Carol Morris
Former
Park Ranger

The cold wind bit at my red nose and numb fingers as I struggled to keep my ranger hat atop my head. This blustery December evening wasn’t about to stop me; I just knew this was going to be the night I finally witnessed it. It was my third year working at Cabrillo National Monument and I felt destined to observe this phenomenon that had been so elusive to me in the past. The conditions were perfect. The horizon was crystal clear, not a cloud...or smog bank in sight. I stood behind the Old Point Loma Lighthouse looking toward the setting sun eager with anticipation. Slowly at first, and then more quickly, the brilliant orange sun sank below the horizon and...then, at long last, the final fiery ray sank below the horizon and...NOTHING! I trudged back down the hill, foiled once again.

A year earlier I had read the following passage written by Jules Verne in his 1882 novel, Le Rayon-Vert (The Green Ray), in which he describes his observations of the green flash:

"A green which no artist could ever obtain on his palette, a green of which neither the varied tints of vegetation nor the shades of the most limpid sea could ever produce the like! If there is a green in Paradise, it cannot be but of this shade, which most surely is the true green of Hope"

WOW! I immediately added this green flash to my “Things to see before I die” list and set out determined to witness this rare illuminary event. After countless futile attempts and a set of chapped lips, I decided that the flash must either be a figment of the weary sailor’s imagination or perhaps another whale tale to pass time on an endless voyage. But then again, night after night I heard other rangers comment, “Did you see the flash?” It was a good one tonight!” I was now determined to find out what caused the flash and why I hadn’t seen it yet.

The earliest accounts of the green flash are from the 19th century. Most reports were from observers at sea so it was speculated that the flash of green was sunlight shining through crests of distant waves. There have been several other theories regarding the cause of the green flash; however modern explanations seem much more fathomable. Astronomers have discovered that the atmosphere acts as a prism, separating colors of visible light. Each wavelength represents an individual color of light being refracted or bent, at a different angle. When we are watching the last sliver of sun dip below the horizon the sun is actually already below the horizon. (See figure1.) All we are seeing is the light rays bent by the atmosphere. Blue light is bent more than other colors but is scattered by air molecules and aerosol particles. That is why the sky is blue. The scattering of blue light leaves green as the last wavelength to be seen as the sun sets. This effect can also occur at sunrise but instead of green being the last ray you see it will be the first.

Alas, seeing the green flash at sunrise is even more difficult than witnessing it at sunset. In addition to having a clear and distant horizon, you must have a good idea of where the sun will first appear since you only have a couple of seconds to see the flash. Whether sunrise or sunset, your chances of observing this phenomenon increase with altitude. You may want to try standing on a mountain top or tall building, or even try taking an evening flight on an airplane.

As for myself, I head up to the lighthouse to watch and wait. The western sky fills with red and yellow hues. A cool breeze blows and rattles the loco weed. I watch, once again, as the radiant sun slips slowly into the blue deep. And as the final fiery ray disappears...I see a large emerald flash of light before my eyes. I turn to the family standing next to me. “Did you see THAT?” I ask in disbelief. Indeed they had.

Critter Corner

Neat Feet

Kaye London
Park Ranger

What’s with a foot? Why is a foot designed the way it is? A bird’s foot can tell you a lot about what it might eat, where it might live and how it moves along.

Birds that perch such as the small song birds and some raptors (hawks, eagles and falcons) have 3 toes that face forward and one toe that points backward in order to grip the branch or prey item. This is called ANISODACTYL.

There is another way a bird’s foot can be designed and that is where there are 2 toes facing forward and 2 toes facing backwards. This allows for a bird to pick up some heavy prey. This is called ZYGODACTYL.

Many owls have feet like this to help them while they are hunting. There are other specialized adaptations that birds can have with their feet like having webbed toes. If 3 toes are webbed and facing forward, this is called PALMATE. This design is for birds that swim sometimes but spend a lot of time on land like gulls and ducks.

Some birds have all 4 toes webbed designed for swimming quickly and strongly. This is called TOTIPALMATE. Many species that dive and swim, such as cormorants and pelicans, have this type of foot.

Match the bird species with the type of foot. You can find all of these species in the park year-round. If you see them, think about how they use their feet and the importance of the special design of their neat feet!

Bird Species:
- California Towhee
- Great Horned Owl
- Brown Pelican
- Western Gull

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Cabrillo Wants You!
Volunteer for your National Park

The plants of Cabrillo National Monument inhabit two ecosystems: the Coastal Mediterranean ecosystem on the peninsula and the Marine ecosystem off the coast. The Mediterranean ecosystem at Cabrillo National Monument is one of only five places that this unique plant community exists in the world. Invasive, non-native species present a substantial threat to this community. Cabrillo National Monument (CABR) is committed to removing all non-native plant species within the park by 2016, the centennial anniversary of the National Park Service. To achieve this ambitious goal, the park needs to map out the locations of non-native plant species, and subsequent removal treatments in the three unique sub-regions found within CABR.

This Invasive Plant Mapping and Native Habitat Restoration project began in 2010 as part of the Vegetation Monitoring Program. The process consists of GPS surveys, habitat restorations, native propagation, invasive removal, and rehabilitation. My role as a GIS Specialist volunteer for CABR is to turn this project into a workable map using the ESRI ArcMap product. The work area map will be used to help locate the areas of treatment with image cards provided and tools at hand. The goal of the mapping project is to identify where the impact of these invasive non-native plants is happening within the park’s boundary so decisions can be made, drawing up the conclusion of how best it can be managed on the ground. Maps are a very important visual tool for public awareness; they help with informing citizens that native plants in the Southern California region, which comprise one of the rarest ecotypes in the world, are worth protecting.

In July 2011, we presented the first map for CABR at the ESRI User International Conference at the San Diego Convention Center. As the presenter, I was exposed to many other agencies that have similar problems with non-native plants in their parks. Representatives of these agencies took an interest in how best to apply similar mapping technique for their endeavors. This map is an ongoing project and will continue to monitor the health of the park’s endangered native habitats. I would like to thank my team Ranger Mark, Ranger Keith and Intern Tara from UC Davis for being part of the project!

Become a Volunteer!
Have you ever had an office with the greatest view of San Diego? As a volunteer at Cabrillo National Monument you can tell all your friends that you do! Cabrillo National Monument seeks volunteers interested to work with Rangers on anything from conservation projects to educational programming. Volunteering at Cabrillo is a fun way to gain professional experiences, meet new people, provide assistance in research studies, learn new skills, get out of the house, and support the only National Park Service unit in San Diego.

From the sophomoric student to the retired professional, Cabrillo National Monument has a volunteer opportunity for you. The Monument seeks your help in protecting and interpreting our rich cultural and natural resources to the public. We hold regular (September, January, May) recruitment sessions which introduce you to the Volunteer-In-Parks program, work assignments at Cabrillo National Monument and the appropriate training needed to achieve your goal. These two hour sessions begin in the auditorium and end with a site tour, which allows you to get connected and inspired by our unique resources. Journey with a ranger and get introduced to the sights, smells and sounds of Cabrillo National Monument. Come on out to the Point and discover this beautiful time capsule of San Diego history.

For more information regarding volunteer recruitment or internships come to one of our upcoming volunteer recruitment days, dates and times can be found on the calendar on page 3. Volunteer Coordinator Tavio del Rio can be reached at 619-523-4565 or at tavio_del_rio@nps.gov.
Support Your Park
The Cabrillo National Monument Foundation

The Cabrillo National Monument Foundation is a private, non-profit cooperating association of the National Park Service, whose purpose is to support operations at Cabrillo NM:

Support your park by becoming a member today!

Product Spotlight
An Account of the Voyage of Juan Rodriguez Cabrillo

This fully illustrated record of Cabrillo's California voyage is filled with maps, photos, illustrations and commentary which, when combined with a new translation of the account of Cabrillo's voyage as reported by surviving members of the exploration's crew, paints a historically accurate description of his exploration of the California and Baja California coast.

"Cabrillo National Monument Foundation is dedicated to enhancing the efforts of the National Park Service to preserve and promote the natural environment, cultural resources, and quality visitor experience by supporting its educational, interpretive, and scientific programs."

Membership Benefits

- All memberships are valid for one year from date of purchase and include:
  - Annual Cabrillo National Monument Pass
  - Opportunity to participate in members-only activities, lectures and special evening events.
  - Subscription to monthly E-newsletter
  - 15% discount on all purchases at the Cabrillo bookstore
  - Discounts at participating Cooperating Association bookstores in other National Park sites
  - CNMF pin
  - CNMF decal

Membership Options

- INDIVIDUAL — $35
- DUO (2 people in same household) — $60
- FAMILY — $75
- SUPPORTING — $100
- SUSTAINING — $500
- BENEFACCTOR — $1000

Benefits listed above plus CNMF tote bag

- CNMF pin
- CNMF decal

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Cabrillo National Monument is quite accessible to our visitors with mobility and sensory impairments. If anyone in your party is unable to walk up the hill to the Old Point Loma Lighthouse area, accessible parking permits are available in the Visitor Center. If you parked in the main parking lot and have received a permit, then head out of the parking lot and turn left back onto Cabrillo Memorial Drive to drive back above the main parking lots. Then turn right at the sign that states “Authorized Vehicles Only.” From here, bear right around the Lighthouse. Parking is south of the Old Point Loma Lighthouse.

Tidepool Access
Because of their protected status, some of the best tidepools in California can be found right here at Cabrillo National Monument.

Tidepooling Tips
For optimum viewing, a negative low tide is a must. The very best time for tidepooling is during the winter months (Nov.-Apr.). Please note that a vehicle is recommended to get to the lower area of the park where the tidepools are located.

Shoes with good gripping soles are best, as rocky areas become slippery with water and algae.

Rules of the Road
Catalina Blvd., the road approaching Cabrillo National Monument, has a maximum speed of 35 MPH. The speed is reduced to 15 MPH as you near the entrance station.

Traffic and Travel Tips
Watch the roadways for wildlife.

Please be aware that the monument is surrounded by Navy property, and access to those areas is strictly limited.

Fog, low clouds, and mist can occur at any time of the year and reduce visibility considerably. Use caution in these conditions.

Bayside Trail Access
The trailhead to the Bayside Trail, a scenic 2-mile hike, is located immediately before the Old Point Loma Lighthouse.

Bayside Trail Tips
The Bayside Trail is open from 9:00 AM to 4:00 PM every day. Bicyclists and pets are not allowed on the Bayside Trail. There is no water or restrooms and smoking is prohibited on the trail.

Pick up a “Natural History Checklist” site bulletin from the Visitor Center for more information about the plants and animals you are likely to see along this route.
Become a Junior Ranger!

Anyone ages 3 and up can earn a badge while exploring the park! Follow these steps to become a Junior Ranger. If you are over the age of 7, go to the Visitor Center to pick up a different activity book.

With an adult, go and see as much of the park as you can. See page 7 of this guide for a park map. As you go, walk quietly, watch, listen, and think. Oh yeah, and have FUN!

When you are done with the four activities on this page, return to the Visitor Center and you will be sworn in as a Junior Ranger.

1. Discover with your Senses

While visiting the park, try to use all of your senses to discover as much as you can.

What is the weather like? Ask the ranger for the temperature:

What else do you notice about the weather? Is it sunny? Is it cloudy? Is it windy?

Now fill out the following:

I see: __________________________
I smell: ________________________
I hear: _________________________
I touch: ________________________

2. Cabrillo: A Man of Mystery

On September 28, 1542, Juan Rodriguez Cabrillo became the first European to set foot on land that later became the west coast of the United States.

In the Visitor Center, try on a helmet and some armor. Do you feel like one of Cabrillo’s soldiers?

There were no photographs or portraits of Cabrillo, so nobody knows what he looked like. What do you think he looked like? Use the outline here to create your own portrait of Cabrillo!

3. Be a Naturalist!

Look for these animals that are common at Cabrillo National Monument. If you see one, circle it and color it in. Where were you when you saw it? What was the animal doing?

Remember, don’t feed the animals!

4. The Old Point Loma Lighthouse:

Connect the dots to the Old Point Loma Lighthouse.

Go up to the second floor of the Old Point Loma Lighthouse and look into the children’s room. How would you feel if this was your home?