

Santa Barbara Conservation Efforts and Student Opportunities

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Project Introduction

The aim of this paper is to document conservation efforts taking place in and around Santa Barbara, as well as documenting the organizations that are in charge of these conservation efforts. This information has been compiled below for the use of all UCSB students, with the hope that students will learn more about what is going on around us locally, and be exposed to opportunities including volunteering, interning, and working in paid positions.

What is conservation?

Conservation is the careful preservation and protection of something; specifically, the preservation of a natural resource or area.

What are conservation efforts?

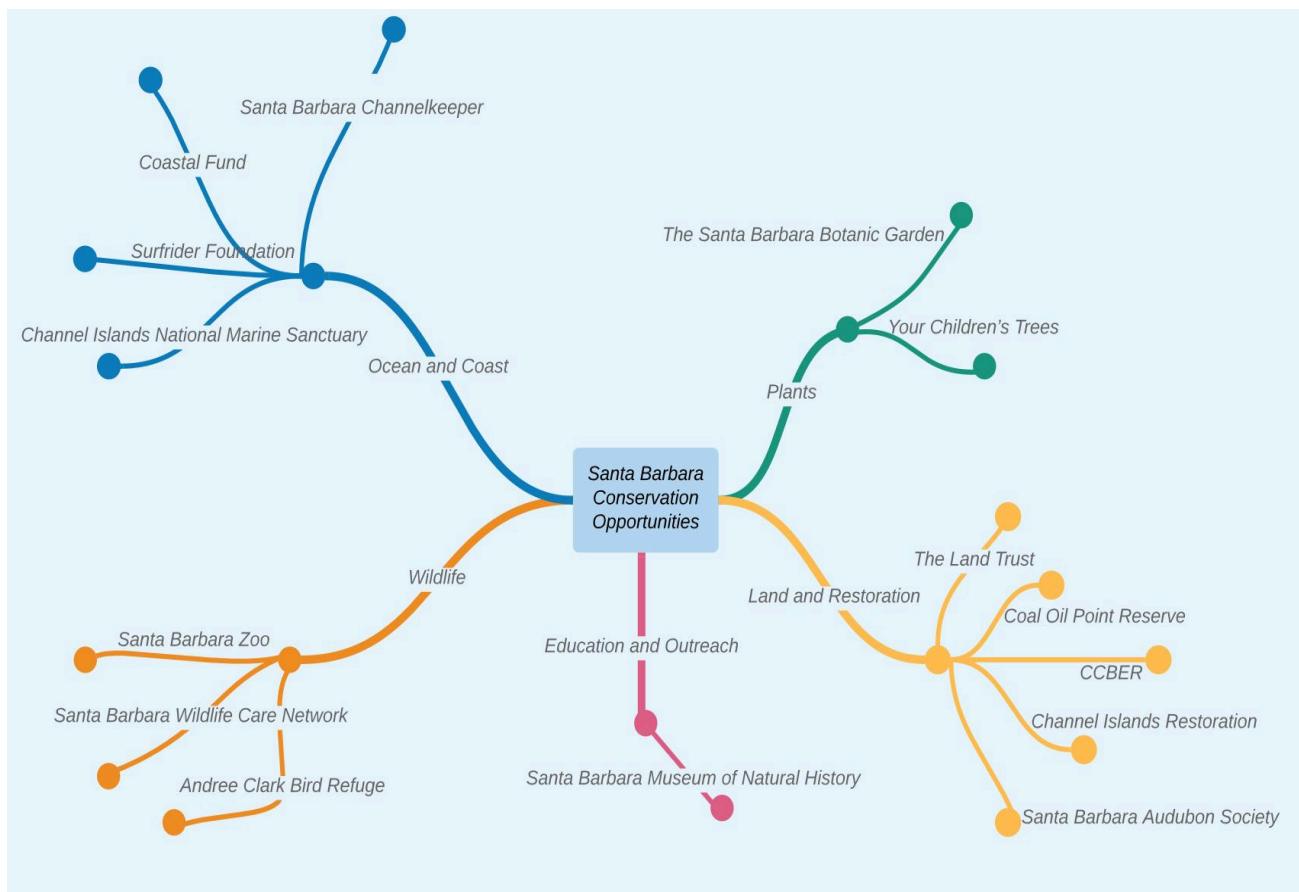
Conservation efforts are projects with a focus on the preservation of any natural resource, including plants, animals, water, and air.

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Opportunities Overview

This diagram illustrates the various categories of conservation along the main branch, and the organizations that fall into each category on the branches that stem further out. To learn more about a specific organization, refer to the table of contents for the associated page number.



Wildlife



Image of a racoon wading through water, courtesy of SBWCN.

Santa Barbara Zoo

The Santa Barbara Zoo contributes to local conservation efforts by harboring and protecting animals, and participating in Species Survival Plans (SSP). These Species Survival Plans are aimed at managing species in order to preserve genetic diversity and work against extinction.

One such animal involved in these conservation plans is the California Condor. The SB Zoo originally became involved with California Condor conservation in the mid to late 1990s, when the zoo asked the Fish and Wildlife Service if they needed any help with their condor work. The program involves active nest monitoring, veterinary support, and habitat restoration and maintenance for condors living near Hopper Mountain and Bitter Creek National Wildlife Refuges (located in Ventura and Kern counties respectively). The SB Zoo works with the US Fish & Wildlife Service to carefully monitor the birds in the wild in order to learn more about how they live and how their population can be better supported.

As the nests and condors were monitored over time, it was noted that nest success was drastically different in some areas compared to others; and for the local condors in

the wild, there was only 10% nesting success compared to 40% success in other areas. This led to the adoption of a nest guarding program, which involved routine nest entries as well as continual monitoring.

It was also observed that the condors were having lots of trouble with trash. Because condors have high calcium needs, they actively collect bones and shells to feed to their young. As they rely on visible cues such as size and shininess to identify these objects, they often mistakenly collect metal or other trash. As such, part of the Condor Conservation program involves active management and trash pick up in the regions the condors live. Additionally, the condors are vaccinated as needed in order to combat the West Nile Virus. Now, they are trapped two times per year for checkups.

The California Condor recovery program takes part in the zoo as well as out in the wild. As of now, there are six condors living at the zoo facility. While the SB Zoo is not large enough to act as a captive breeding facility, the condors are kept there until they are breeding age and need to be transferred to another facility, or until they can be released into the wild. Or, if the condors are unable to be released into the wild and their genes are not needed in the gene pool, they simply stay at the SB zoo facility.

Active management of the condors in the wild was originally only meant to last for a few years, and the program is beginning to slow down. However, there are still ways to help the condors, including participating in activism and education programs, or by simply visiting and supporting the zoo.

OPPORTUNITIES

Accepting interns: No.

Accepting staff: including Animal Keeper, Educator, and Maintenance technician.

Accepting volunteers: Yes, for administrative roles, educating visitors, and ground maintenance.

More info on:

<https://www.sbzoo.org/about/volunteer/>

<https://www.sbzoo.org/about/careers/>

Santa Barbara Wildlife Care Network

The Santa Barbara Wildlife Care Network (SBWCN) is a nonprofit organization dedicated to caring for Santa Barbara and Ventura County's wildlife through rescues, rehabilitation, treatment, and release. The Wildlife Care Network primarily treats birds, reptiles, amphibians and small mammals. Animals commonly arrive at SBWCN due to being injured, sick, orphaned, oiled, or displaced.

The SBWCN also contributes to conservation efforts by educating the public about wildlife needs and requirements, and by sharing information with other animal care providers and partners regarding optimal care methods.

Volunteers have been the backbone of this organization since its founding. There are many ways in which volunteers can be of assistance, such as by participating in animal husbandry tasks, answering the helpline, transporting wildlife, writing grants, and more.

OPPORTUNITIES

Accepting interns: Yes.

Accepting staff: Accounting and Payroll Coordinator, Animal Care Assistant, Intake Team Lead, Songbird Team Lead, and Veterinary Technician.

Accepting volunteers: Yes, for animal care, helpline response, transportation, and more.

More info on:

<https://www.sbwcn.org/volunteer>

<https://www.sbwcn.org/careers>

Andree Clark Bird Refuge

The Andree Clark Bird Refuge is a 42 acre open space that is managed by the Parks Division of the city of Santa Barbara. The park is home to an artificially modified estuary, with brackish wetlands, which support a wide variety of birds, fish, and a few species of native and non-native turtles. So far, over 200 bird species have been documented here. Species of special status include the tidewater goby, southwest pond turtle, and bird species protected by the Migratory Bird Treaty act.

OPPORTUNITIES

Accepting interns: No.

Accepting staff: No.

Accepting volunteers: Yes, for creek restoration, trail maintenance, habitat restoration, planting, playground maintenance, cleanup projects, and tree planting.

More info on:

<https://www.santabarbaraca.gov/gov/depts/parksrec/parks/volunteer/getinvolved.asp>

Land and Restoration



View of coastal saltmarsh habitat on Coal Oil Point Reserve.

The Land Trust for Santa Barbara

The Land Trust works to conserve open space, sustainable farmland, and natural areas for current and future generations. They are a nonprofit organization, and as such, they preserve land by working with local landowners, a variety of agencies, and community organizations, and through monetary and land donations. In addition to attaining land with the intent of preservation, The Land Trust works on restoration and community education projects.

The Land Trust contributes to local conservation efforts through their many open space preserves which the public can visit, including Arroyo Hondo Preserve (782 acres), Burton Mesa/Mackie Mountain (7 acres), Burton Ranch Preserve (95 acres), Carpinteria Bluffs (52 acres), Carpinteria Salt Marsh (35 acres), Coronado Butterfly Preserve (9 acres), El Capitan Ranch (650 acres), Fairview Gardens, Goleta (12 acres), Hot Springs Canyon (462 acres), More Mesa (36 acres), Midland School Ranch (2727 acres), Modoc Preserve (25 acres), Point Sal, Santa Maria Area (130 acres), Rincon Bluffs Preserve (21 acres), San Ysidro Oak Woodland (44 acres), Sedgwick Preserve (5896 acres), South Parcel Nature Park (68 acres).

OPPORTUNITIES

Accepting interns: Yes, GIS Intern.

Accepting staff: Office Coordinator.

Accepting volunteers: Yes, at Arroyo Hondo Preserve, Carpinteria Salt Marsh Nature Park, Sedgwick Reserve, and Carpinteria Bluffs.

More info on:

<https://www.sblandtrust.org/for-volunteers/>

<https://www.sblandtrust.org/employment/>

or email volunteer@sblandtrust.org

Coal Oil Point Reserve

Coal Oil Point Reserve (COPR) is a large plot of coastal land with a variety of habitat types, including beaches, dunes, vernal pools, fresh and saltwater marshes, grassland, and coastal scrub mix. The reserve is owned by UCSB and is part of the UC Natural Reserve system. It provides a space for research, teaching, education, and recreation, and serves as a region for outreach.

Coal Oil Point Reserve staff and volunteers do conservation, restoration, and monitoring work on the land, as it is home to many sensitive species, including the Snowy Plover, Ventura Marsh Milkvetch, California Least Tern, Tide Water Goby, and Western Pond Turtle. The restoration programs aim to reduce invasive species and repair degraded habitats in order to support the sensitive species listed above, as well as all other native species on the land. Monitoring programs seek to document the reserve's habitats and wildlife in order to learn more and ensure the health of the reserve. Staff, volunteers, docents, community members, and partners such as the SB Audubon Society all play a role in monitoring the reserve.

OPPORTUNITIES

Accepting interns: Yes, as nature docents and restoration interns.

Accepting staff: No.

Accepting volunteers: Yes, as tour guides, nature docents, Snowy Plover docents, and for restoration work.

More info on:

<https://copr.nrs.ucsb.edu/get-involved>

Cheadle Center for Biodiversity and Ecological Restoration

The Cheadle Center for Biodiversity and Ecological Restoration (CCBER) is aimed at studying, understanding, preserving, and restoring natural habitats in and around the UCSB school campus. CCBER has twelve distinct management areas, with the largest being North Campus Open Space (NCOS), a 136 acre area of upland and wetland habitats. The management areas are ecologically important in that they provide habitat

for a variety of plant, animal, fish, and bird species, including the Snowy Plover and Burrowing Owl. With a total of over 300 acres of open space and a variety of habitat types, these management areas are an important source of refuge, and are known to be biodiverse. Additionally, these sites are valuable for outdoor recreation such as hiking, biking, and bird watching, and for nature education for both elementary and college age students.

The Cheadle Center also has its own greenhouse and nursery, which provide the plants for local restoration projects. This ensures the integrity of the local genotype. All greenhouse and nursery plants are grown from seed, which is collected by CCBER staff, and all of the soil and compost is mixed by staff on site. The greenhouse and nursery also serve as educational tools by involving students, who are able to learn about the work done on site and become involved in the process of plant propagation and growth.

CCBER is also home to a huge collection of botanical and zoological specimens, including a collection of algae, vascular plants, diatoms, lichens, vertebrates, mammals, reptiles and amphibians, and invertebrates. These collections serve as an important source of knowledge for present and future students, staff, and associates, and are crucial for informing public policy on topics such as restoration and invasive species. Online specimen data portals help to make the collections and information at CCBER widely accessible to the public.

OPPORTUNITIES

Accepting interns: Yes, for restoration ecology, natural history collections, and more.

Accepting staff: No.

Accepting volunteers: Yes.

More info on:

<https://www.ccber.ucsb.edu/education-0>



A look inside the CCBER nursery.

Channel Islands Restoration

Channel Islands Restoration (CIR) is a nonprofit organization with over twenty years of habitat restoration experience. CIR is dedicated to restoring and protecting the beautiful and unique native habitats in the Channel Islands National Park and along the adjacent mainland, with a specific focus on rare and endangered species. Their restoration work is accomplished using a variety of methods, including the removal of non-native plants, planting native species, installing irrigation systems, conducting vegetation surveys, and active management of restored sites. In addition to conducting restoration work, CIR takes part in other conservation related activities, such as conducting ecosystem services inventories and analyses, water resource value analyses, and vegetation mapping. Their work is done in conjunction with a variety of other organizations, such as the National Park Service and The Nature Conservancy.

Channel Islands Restoration also strives to educate the public about the importance of preserving our native habitats. This education occurs through hands-on volunteering experiences with schools and youth groups, teen tours, and natural history

tours. CIR outreach also takes place through their newsletters, public presentations, flyers and brochures, virtual webinars, and online publications.

OPPORTUNITIES

Accepting interns: No.

Accepting staff: On-Call Restoration Landscape Worker

Accepting volunteers: Yes.

More info on:

<https://cirweb.org/jobs/>

<https://cirweb.org/volunteer>

Santa Barbara Audubon Society

The Santa Barbara Audubon Society (SBAS) is an organization composed of bird lovers who are dedicated to protecting wild, native birds and their habitats. The Audubon society advocates for habitat protections, with a specific focus on riparian areas and large open spaces. This advocacy is done in a variety of ways, including through public comments, meeting with local officials, and reaching out to the Santa Barbara community. SBAS also has a Conservation and Science Committee, which meets monthly to discuss local conservation issues pertaining to birdlife. The Science committee is also responsible for increasing knowledge of local ecosystems, which they accomplish through wildlife surveys at various times throughout the year.

The Santa Barbara Audubon Society is also engaged in educating the public about local birdlife. This is accomplished through twice monthly bird walks, monthly field trips, virtual presentations, and educational experiences at the Santa Barbara Natural History Museum.

The Audubon Society is a national organization, and while internship and staff positions are not specifically available with the Santa Barbara chapter, there are opportunities available in other regions.

OPPORTUNITIES

Accepting interns: Yes.

Accepting volunteers: Yes, for wildlife education.

Accepting staff: Yes.

More info on:

<https://santabarbaraudubon.org/eyes-in-the-sky/>

<https://www.audubon.org/about/careers>

Plants



Wildflowers at the Santa Barbara Botanic Garden.

The Santa Barbara Botanic Garden

The Santa Barbara Botanic Garden (SBBG) is a botanical garden that aims to protect, conserve, understand, and restore the native plants and habitats of California. The Garden has a particular emphasis on vegetation of California's Central Coast and the offshore islands. The Botanic Garden exists as more than just a pretty place to visit; it is a living museum which houses not just 78 acres and over 1,000 native taxa, but also a library collection and herbarium with over 150,000 specimens. With over 5 miles of trails throughout the garden, there is plenty to explore and learn about.

The Botanic Garden's work extends far beyond the 78 acres of land; they also take part in research and restoration projects locally, such as on San Nicolas island and in San Clemente. The SBBG aims to protect entire ecosystems, and as such, they examine entire areas in depth, not just single species. Many times, this work takes the form of conducting vegetation surveys or invasive plant impact surveys.

At the herbarium, the Botanic Garden conducts seed banking, and grows and propagates plants in order to conserve species. These plants can then be reintroduced to

their native regions. The Botanic Garden also has a nursery, from which visitors and locals can buy their own California native plants.

The Botanic Garden also participates in education and outreach in a variety of ways, including classes, workshops, lectures, school programs, presentations, publications, internships and mentorships, a conservation symposium, and community outreach.

OPPORTUNITIES

Accepting interns: Yes.

Accepting staff: Retail Sales Coordinator, Maintenance Technician, Interpretation and Exhibitions Curator, Guest Services Associate, Maintenance Associate, Camp Counselor, Molecular Systematics Technician, Applied Ecologist.

Accepting volunteers: Yes, for gardening, education, events, conservation and research, and visitor services.

Also accepting unpaid apprenticeships for special training opportunities.

More info on:

<https://www.sbbg.org/get-involved/join-our-team>

<https://www.sbbg.org/get-involved/volunteer>

Your Children's Trees

Your Children's Trees (YCT) is a nonprofit organization which aims to reforest public, urban areas within Santa Barbara by planting and caring for trees. In addition, Your Children's Trees plants trees on restoration sites in ecological reserves, such as North Campus Open Space. This organization also takes part in educational activities, such as by partnering with elementary schools throughout Goleta. Your Children's Trees leads "tree walks," in which students can learn about the different types of trees and roles they play in ecosystems. Additionally, Your Children's Trees takes part in education by participating in science nights at local elementary schools.

OPPORTUNITIES

Accepting interns: No.

Accepting staff: No.

Accepting volunteers: Yes, through both YCT and YCT UCSB. YCT UCSB will begin accepting new volunteers in October.

More info on:

<http://www.yourchildrenstrees.org/special-events/>

Ocean and Coast



A view of the local coastline.

Santa Barbara Channelkeeper

Santa Barbara Channelkeeper is an organization which was originally founded as a program of the Environmental Defense Center, though it became an independent nonprofit in 2001. Santa Barbara Channelkeeper's mission is to help clean, protect, and restore the Santa Barbara Channel and local watersheds. This work is done through education and community engagement, field work, advocacy, and enforcement. On a day to day basis, SB Channelkeeper's work varies greatly, but some of their regularly occurring programs include educational boat rides and patrols for young students, beach clean ups, stream monitoring, marine protection area monitoring, outreach events, and research.

Despite only being founded in 1999, and being a small organization, Santa Barbara Channelkeeper has accomplished a lot. Their successes include filing a lawsuit against Halaco Engineering Co. and contributing to the shutdown of their facility, launching citizen science teams to monitor water quality, advocating for enforcement of wastewater discharge laws, restoring eelgrass at Anacapa Island, launching a cruise ship monitoring program, reducing urban runoff, and much more.

OPPORTUNITIES

Accepting interns: No.

Accepting staff: Part-time Program and Administrative Assistant, Development Professional.

Accepting volunteers: Yes, for a variety of activities.

More info on:

<https://www.sbcc.org/?s=career>

Coastal Fund, University of California, Santa Barbara

The Coastal Fund, run by students of the University of California, Santa Barbara, is an organization which allocates funds to groups who aim to research, protect, and restore local coastal regions. Available grants include minor funds, which are one thousand dollars or less, as well as major funds, which are over one thousand dollars. In the past, Coastal Fund has supported projects such as internships at CCBER, research on the bottom waters of the SB Channel, SB Channelkeeper internships, lead and micro trash removal in the Santa Ynez Mountains, and much more.

OPPORTUNITIES

Accepting interns: Yes.

Accepting staff: Yes.

Accepting volunteers: No.

More info on:

<https://coastalfund.as.ucsb.edu/projects/jobs-and-internships/>

Surfrider Foundation

The Surfrider Foundation, established in 1984, is a nonprofit organization dedicated to the protection of the ocean and coasts. They believe that through conservation, activism, research, and outreach, the ocean can be protected and preserved for the enjoyment of all people. Surfrider Foundation is a national organization, but the Santa Barbara chapter focuses on local issues, such as opposing the proposed development of various local sites, opposing the boulders being added to Goleta beach, and working on issues pertaining to local oil extraction. Surfrider also has various programs in place aimed at protecting our ocean, such as the Ocean Friendly Restaurants program, which helps local restaurants minimize their impact on the environment, and Rise Above Plastics, which helps to raise awareness of the dangers of plastic pollution.

OPPORTUNITIES

Accepting interns: Yes.

Accepting staff: Yes, at locations beyond just the SB chapter. Club Network Coordinator, West Coast Associate Director of Development, East Coast Regional Director, West Coast Regional Director, Clean Border Water Campaign Manager.

Accepting volunteers: Yes, for conservation, education, and clean-up projects.

More info on:

<https://www.surfrider.org/careers>

<https://santabarbara.surfrider.org/get-involved/>

Channel Islands National Marine Sanctuary

The Channel Islands National Marine Sanctuary is a large refuge complete with kelp forests, sea caves, and numerous coves, and the refuge is home to twenty-seven species of whales and dolphins, five species of pinnipeds, and sixty species of seabirds. The Channel Islands Marine Sanctuary's primary mission is to protect the ecosystems and biodiverse life present in the ocean just off the coast of the islands. The sanctuary works in conjunction with many other partner agencies to accomplish this task.

The Marine Sanctuary also offers many recreational activities, including diving, boating, fishing, kayaking, and paddleboarding, though it is important for visitors to be aware of how their actions can impact the fragile ecosystems. In order to protect the sanctuary's resources, various regulations are in place, and permits are required for activities such as fishing. Regular research and monitoring are also conducted in order to assess the health of the Marine Sanctuary's various ecosystems and regions. Sanctuary staff use a variety of methods to conduct this research, including research vessels, NOAA divers, aircraft surveys, and other technology.

The sanctuary also works to further the public's understanding of marine areas and their importance through outreach and education programs such as Teachers at sea, Students at sea, public events, and much more.

OPPORTUNITIES

Accepting interns: Yes.

Accepting staff: No.

Accepting volunteers: Yes, for whale watching, outreach events, leading island hikes, and conducting research.

More info on:

<https://channelislands.noaa.gov/involved/intern.html>

<https://channelislands.noaa.gov/involved/apply.html>

Education and Outreach



An exhibit at the Museum of Natural History.

Santa Barbara Museum of Natural History

The Santa Barbara Museum of Natural History is a museum dedicated to educating community members and visitors of all ages about Santa Barbara's unique, interesting, and important natural history, from way back in the past up until the present day. Through interactive exhibits and outdoor areas, the museum is able to simultaneously educate people about nature and inspire them to conserve and protect it. With over three and a half million specimens, the museum is rich in knowledge regarding mammals, birds, marine life, geology, astronomy, paleontology, and anthropology. Specimen and collection data is even available online for public access. Current exhibits at the museum include butterflies, hummingbirds, dinosaurs, sharks, and regional mammals.

In addition to educating the public through museum exhibits, several interactive educational programs are also taking place. These include a bird class for adults, nature-adventure camps and classes for kids, and field trips for schools and teachers. The

Museum of Natural History also runs the Sea Center on Stearns wharf, where visitors can interact with creatures such as swell sharks, rays, sea stars, urchins, and anemones.

OPPORTUNITIES

Accepting interns:

Accepting staff: Assistant Groundskeeper, Event Planner, Sea Center Operations Manager, Nature Adventures Camp Instructor, Outdoor Education Coordinator, Staff Accountant, Legacy Giving Manager, Anthropology Collections Manager.

Accepting volunteers: Yes.

More info on:

<https://www.sbnature.org/connect/careers/current-opportunities/>

<https://www.sbnature.org/volunteer/adult/>

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