

Quarterly News

ENVIRONMENTAL NEWS

Sandy Shore Ecosystem

By Wendy Berube

There are many different types of shorelines, but when many of us picture the beach, it is sandy. The sand is where we dig holes, build castles, and lie on our towels to enjoy the sunshine. There are many other organisms that enjoy that sandy habitat also. You may have seen marine mammals such as harbor seals (*Phoca vitulina*) or sea lions (*Zalophus californianus*) resting on the sandy shore or rocky outcroppings, but not all sandy beach organisms are so obvious. Some are well camouflaged or hide in the sand, so you may not even know they are there. Some even come under cover of the night.

One of the most fascinating visitors to the sandy beach ecosystem is the grunion (Laureshtes tenius). From March to August during nighttime, high tides caused by a full or new moon, these fish will swim up onto the beach and strand themselves to spawn. The female will dig herself into the sand using her tail, and then deposit her eggs two to three inches below the surface. The males swim all around her, depositing their milt (which contains their sperm) on the sand, where it flows down the body of the female and fertilizes the egg. The fertilized eggs will incubate for about two weeks, safe under the sand until the next high tide washes them out. These spawning events can turn into huge spectacles with thousands of fish on the beach at once, which can sometimes draw large crowds of observers.

Beaches in our area which have had Grunion runs include San Clemente Pier Beach, Doheny State Park, Corona del Mar State Beach and Newport Municipal Beach.



Photo Courtesy by California Beaches

If you have been to the beach, you have undoubtedly seen shorebirds. From the ubiquitous Gulls (genus *Laurus*) to the shy Sanderlings *(Calidris alba)*, the sandy shoreline provides a habitat for

Species Spotlight

Wolf Hunting

By Kim Yumul

What is happening?

In the 1900s, wolf populations within the U.S. were almost hunted to extinction due to fear of their effects on livestock. In 1973, wolves became federally protected under the Endangered Spe-cies Act (ESA) and were protected for many years until 2011, when it was decided that wolf populations had successfully recovered. With rising wolf populations in many areas, federal agencies began to step back and passed the management of this species to state governments. States along the northern Rocky Mountains began to propose laws that would ease and expand the hunting and killing of gray wolves in these areas. In the past few months, 500 wolves in northwestern states, such as Idaho and Montana have been hunted and killed by game hunters. This sets a maior drawback to the successful species reintroduction in the region for the past few decades.



Photo Courtesy by Ken Canning | The Guardian

Montana

Wolf population in Montana was down to about 60 individuals in the 1990s. Due to a successful species reintroduction project, which consists of intentionally introducing a species in a habitat for the purpose of conserving their population, the state now has about 800-1200 wolves. State agencies removed wolves under their listed species in 2021, with proposed laws that seemed too lax even in the eyes of many avid game hunters. With these new laws, hunters can acquire a permit that would allow them to do things such as bait and kill however many wolves they see fit. During the 2021-2022 hunting season, hunters killed about 327 wolves, which is about 35% of Montana's wolf population.

ldaho

In May 2021, the governor signed a new law that permitted hunters to kill 90% of their gray wolf population. This was the largest amount of wolf kills that the state had ever permitted. Proponents of this law claimed that the wolf population in the state had gotten out of hand since they became protected in 1973. Like the proposed laws in Montana, the new laws in Idaho allowed hunters to kill an unlimited number of wolves and kill them by shooting them down from an airplane. This type of hunting enraged conservationists and some game hunters who viewed this to be outrageous.



many birds. Some birds, like the endangered California Least Tern (*Sternum antillarum browni*) and the Western Snowy Plover (*Charadrius alexandrinus nivosus*) make their nests right in the sand and raise their chicks on the beach. Others, such as Spotted Sandpipers (*Actitis macularius*) and Egrets (*Adrea alba*) come to the beach to find food. While a gull would be happy with the leftovers of your sandwich, many shorebirds such as the various sandpiper species are looking for tasty treats buried in the sand.



Sandpiper using their long beak to forage for food deep in the wet sand.

The long beaks of these shorebirds can probe deep into the substrate where the burrowing organisms they are looking for try to hide by digging into the sand. This doesn't always work, and sometimes the digging creates clues as to where they are hiding. You may have seen dozens of little Vshaped patterns in the receding tide as you walk out to the surf. These are made by one of the most well-known of the sediment dwellers, the sand crab *(Emerita analoga).* Children love to dig for sand crabs and watch them burrow back into the sand. This burrowing behavior is part of their feeding strategy. When a wave washes up the beach, the sand crabs come out of their burrows and extend their feathery antennae to try to capture food particles suspended in the water. As the water flows back down the beach, they must again burrow into the sand to avoid predation. As they are feeding this way, they get moved slowly down the beach with the current.



Shore crabs popping their heads out of the sand to feed. Photo Courtesy by Monterey Bay Aquarium

Clams also leave clues to their location under the sand. If you see a dimple or small hole in the sand after the water has washed out, you might be look-

Why is this important?

Wolf-hunting by humans can help in regulating ungulate and other wolf prey populations in the area. Done properly, this can be a way to maintain the balance in the ecosystem while helping some hunters to put food on their tables. The problem here is that new hunting laws are too permissive to the point that game hunters are bringing down the wolf population to an unhealthy size.

As apex predators, gray wolves play an important role in their ecosystem. Like mountain lions, wolves are keystone species. This means that their presence largely defines the health and status of their entire ecosystem. Wolves help maintain biodiversity by keeping the prey population levels in check, therefore providing an opportunity for many plants and other animals to persist. Removing gray wolves from the ecosystem can lead to overpopulation of their prey (e.g. ungulates and squirrels), which can strip the vegetation in the area and ultimately lead to the decline of biodiversity in the ecosystem. Scavengers, like ravens and raccoons, benefit from the carcasses that wolves leave behind after successful hunting and feeding.

Right now, environmental conservationists and researchers from northwestern states are petitioning government agencies to reconsider the new wolf hunting laws in these states.



Infographic on the importance of gray wolves in the ecosystem. Photo Courtesy by Earthjustice

Volunteer of the Quarter



Tom Gee has been with OC Habitats since the first day our organization was founded. He was a



ing at evidence of a clam. These holes, called clam shows result from the clam digging into the sand and squirting out the water that they absorbed during the digging process. In Orange County, you might find razor clams (Siliqua patula), pismo clams (Tivela stultorum), or littlenecks (Leukoma staminea). These were an important source of food for the indigenous people who originally inhabited these lands. Deeper in the sand dwell blood worms (genus Glycera), nature's sand cleaners. They eat the sand that they burrow into and their bodies digest the organic material coating the sand grains. The clean sand is then deposited back on the beach. These worms can be found at the mid-tide level where the sand is slightly pockmarked and has a different consistency.



These burrowing animals live in the swash zone, the area where the waves actively wash back and forth across the beach. A bit farther up the beach, we can find other burrowing animals that live in a very special microhabitat on the sandy

Photo Courtesy by Washington Department of Fish & Wildlife

beach. Beach wrack, the name given to piles of seaweed that lie along the high tide line, is an extremely important component of the sandy beach habitat. Beach wrack is like the ocean's daily Grub -Hub delivery for the shoreline. The wrack is the main source of vegetation in this ecosystem, so it forms the basis of a large food web. In addition to kelp, the wrack also brings in tiny organisms and decaying matter from the sea. Two very common wrack inhabitants are beach hoppers (Orchestoidea californiana), small crustaceans often called sand fleas, and isopods (Excirolana kincaidi), which are similar to the roly-polies that we find in terrestrial settings. These, as well as kelp flies (Coelopa frigida), rove beetles (family Staphylinidae), and sometimes crabs and other small crustaceans, break down the wrack and pass its nutrients up the food chain. These tiny animals burrow under the beach wrack during the day to avoid predation and keep from drying out.

Unfortunately, many Orange County beaches actually remove this beach wrack when they "groom" the beaches. Beachgoers do not like the smell of decaying beach wrack and do not appreciate the beach hoppers and kelp flies that live there; sand flies bite, and can raise a nasty welt or even a blister. But this can have powerful negative effects on the sandy beach ecosystem. Without the beach wrack, food supplies for shorebirds are severely diminished, and an entire microhabitat is destroyed. In fact, a <u>California Sea Grant study from</u> <u>2019</u> showed that urban beaches contain 50% fewer species than their non-urbanized countervolunteer with the City of Newport Beach before that and when Stacey recruited him to follow her to OCH, he came along and has been an incredible support and asset to OC Habitats. Tom started out going to school at UC Berkeley, entered the army, and then finished his electrical engineering degree at California State University, Los Angeles. He started working as an electrical engineer in the defense industry and after a few years changed course to study and work as a computer programmer. He worked for a variety of different companies through the years that took him all over Orange County, Los Angeles, Santa Clara and San Francisco. San Francisco being one of his favorite locations, which he hopes to return to sometime in the future. His passion for the environment began in San Francisco where he volunteered for U.S. National Parks at the Presidio. He was even given his own area that he worked on exclusively while he was there. This area has since had further restoration done by the parks and Tom says it is filled with native vegetation and animals that are thriving. He came back down to Orange County to help his son with their children and has had a wonderful and close relationship with many of his grandchildren and great-grandchildren over the years and still. Besides being "super-granddad", he decided to volunteer at Bolsa Chica Conservancy when he was in Seal Beach and then with Project Grow and the City of Newport Beach when he moved down to the Balboa Peninsula. Once on the peninsula, he simply looked out his window to see that there was work to be done right on the local beaches he was living near and he began to work on the nonnative species on the beaches. He became connected with the City of Newport Beach and met our founder, Stacey. He has received the Volunteer of the Year award from OCH in 2017 and deserves to again be recognized for his hard work and dedication to the mission of OCH to protect, preserve, and conserve our native habitats in Orange County. We hope to always be connected to Tom and will always consider him a part of our OCH Family.



What's New

NEW STAFF MEMBERS

A warm welcome to our two newest staff members for the summer—Gina and Sam!



parts . The wrack also plays a role in establishing dunes on the beach. It can trap windblown sand and anchor it in small hummocks and dunes. These dunes play an important role in protecting areas behind the beach from storm surges and coastal flooding.



Snowy plover on the hunt for food in and around the beach wrack.

The beach is truly a treasure trove of beautiful and fascinating organisms. From adorable marine mammals that come to the shore to rest or give birth, to the tiny sand fleas that we try to avoid, all of these organisms have an important place in the ecosystem. So, next time you are walking down the beach and see a pile of beach wrack crawling with beach hoppers and kelp flies, look at it as an integral part of this very special and sensitive habitat.

To learn more about the shifting sands on our beaches, the preservation of watersheds and wild-life, the effects of rising sea levels, and more check out our Coffee & Conservation below on <u>Sand</u> <u>Movement</u>!

Sustainable Cities

By Samantha Grable

Driving through the endless houses and development of Orange County, I begin to think about all of the things that could make our cities more sustainable. We as individuals often want to make ourselves more sustainable and eco-friendly, but what about the cities we live in, how can these be designed and modified with the environment in mind.

The sustainability of cities can be seen in policies and programs implemented and by the design of the city itself. When a city implements programs that are designed with pedestrians in mind or incentivize renewable energy, it indicates that a city may be greener, compared to others. This change makes the choices of the individual much easier, they help us waste less, emit less, and overall limit our ecological footprint.

What does it mean to design a sustainable city?



Gina Thompson is super excited to be back at OC Habitats as a staff member! She has been volunteering with OCH for years and had a yearlong internship starting in August of 2020. Throughout her internship she led several C&C presentations along with helping with restoration, education, and outreach projects. She is currently getting her bachelor's degree at Oberlin College in Ohio, majoring in Environmental Studies with a possible double major in English. Gina is looking forward to getting even more experience with OCH's many fulfilling and impactful projects as a staff member. She will carry that experience and knowledge with her as she continues her education with the hope of informing more people about environmental issues and furthering the work being done to solve the global climate crisis.



Sam Grable is working towards getting a bachelor's of Science in Environmental Science with a concentration in physical science from the University of California Berkeley. She has worked on projects in Environmental education with nonprofit Wholly H20 and in Environmental and Food Justice with the UC Berkeley Alternative Breaks Program. She Joined OC Habitats as a volunteer in 2017 when it first began and has worked on restoration and other projects with us since then. As an environmental science student, Sam is interested in the large-scale effects of climate change and pollution, as well as mitigation of these problems. With OC habitats, she hopes to expand her knowledge in a variety of environmental areas as well as gain skills in education about these pressing issues. As a staff member, she will work in restoration, and education as well as other projects. She hopes to help make a difference in our local ecosystems to keep them healthy for future generations of animals, plants, and humans alike.

We're very excited to continue our work with these women environmentalists!





A sustainable city works to be environmentally friendly in a multitude of areas, taking small steps that sum up to a big impact, including transportation, energy, waste management, and the creation of community spaces.

Many American cities are designed for transportation in personal cars and vehicles, but this is not the most sustainable way to travel around the city. The bus, train, or even just walking are more sus-tainable. With the car in mind, cities are spread out, split between residential and commercial, made less walkable and more drivable. But if we were to integrate our cities, making the places where people work and live closer, we could reduce emission by reducing the distance people commute to work, school, and home. If your workplace is just a couple of blocks away, you are much more likely to walk, bike, or utilize public transportation. Walkability and available public transportation make cities not only more ecofriendly, but also more appealing to live. With reliable and developed public transportation infrastructure, a city can cut back on its greenhouse gas emissions on a large scale, just by reducing the number of cars on the road. One person switching from a 20-mile commute by car to one by public transit can reduce their annual CO2 emissions by 48,000 pounds in a year. On a larger scale, in the US, public transportation already saves 37 million metric tons of CO2 annually, and with more public transportation implemented, even more can be saved. (More information)

Cities can also become greener by becoming less dependent on fossil fuels for their energy. When a city relies more on renewable energy such as solar power or wind power, they have a much lower carbon footprint. Additionally, with integrated electric grids and <u>distributed generation</u>, people can share the excess energy created by their renewable



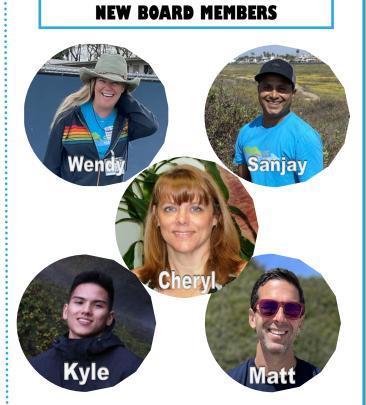
Photo Courtesy by OCTA

INTERNS

During the spring, we welcomed several new interns to our team: Jessica Brogna (CSULB), Tiffany Chao (UCLA), Gabby Lopez (CSULB), and Angela Velazquez (CSULB). Interns that have wrapped up their internship are Wendy Berube (Point Loma) and Vanessa Jorgensen (UCI). Thank you for all of your hard work!



Restoration at the Huntington Beach Wetlands Conservancy is held on every third Saturday of the month where OC Habitats continue our restoration projects in the salt marsh habitat. At the Upper Newport Back Bay, restoration is held every second Saturday of the month, in which we restore the ecological reserve's riparian and salt marsh habitats. OCH is looking for committed restoration volunteers. Interested? Contact <u>volunteer@ochabitats.org</u>.



Our board members are happy to have four new members join, as well as one junior board member. We would like to introduce Wendy Berube (Educator & Naturalist), Sanjas Das (Restoration Lead), Cheryl Dyas (Treasurer), Kyle Fructuoso (Jr Member), and Matt Spooner (Financial Lead). For more information on our board members, you can visit our About page <u>here</u>.



sources, such as the solar panels on their roof, harnessing energy that may otherwise be wasted, and limiting the loss of energy as it travels from generation to implementation. We can then make the smaller community of our cities more reliant on smaller renewable energy technologies. And while renewable energy in the form of solar and wind is not entirely dependable due to limited daylight hours and changing wind patterns, we can find a balance in which fossil fuel energy is used as a backup while we still transition to renewables.

The waste management system of a city is also important in its ecological footprint. When people are educated on waste management and how to correctly dispose of each type of waste, recycling and composting can become much more efficient. With the addition of composting initiatives in cities, food waste can be reduced as well as the greenhouse gas emissions, especially methane, which occurs when organic waste decomposes in a landfill. The city of San Francisco has implemented a comprehensive waste management system, which includes a mandatory recycling and composting program and a long-term goal of zero waste. Their original goal was to divert 75% of waste by 2010 and exceeded this goal by 2008, diverting 80% and cutting its waste disposal in This program has helped the city of San half. Francisco greatly decrease their waste and therefore their ecological footprint. (More Information).

A sustainable city does not just mean an ultraurban area in which everything is very close and infrastructure is well built with sustainability in mind, it also includes the integration of green spaces for the public in the form of parks, open space corridors, and/or green roofs. <u>Green spaces</u> have a number of ecological benefits, including decreasing urban heat islands, mitigating pollution, preventing storm water runoff, and absorbing carbon dioxide. They also have immense benefits on the communities around them, promoting physical and mental wellbeing from leisure activities in a natural setting or serving as meeting spaces and community centers.



Photo Courtesy by Recology

Sustainability is an incredibly broad term that can be implemented in so many ways, from policy to

Education & Outreach

OCH COFFEE & CONSERVATION (C&C)



OC Habitats began hosting live streams on Google Meet or Zoom during the pandemic in an effort to connect and engage with the public. As the pandemic restrictions are lifting, we will slowly begin to move away from our virtual programming and start hosting some in person outreach events. We plan on continuing our habitat, species, and environmental topics through the in-person and recorded programs, and we will post these <u>recorded events on our website</u>.

OCH HABITAT VIDEO SERIES DE DOLZONES SERIES OTTOP YOUR OTTOP YOUR

We have several habitat video series projects in the works that discusses the specific habitats and the species living therein. We are currently finalizing our chaparral and coastal sage scrub video, with the hope of finishing the series by the end of 2022. There is also an indepth look into the tide pool habitat that explores the successes and struggles that various tide pool animals experience in the microhabitats of each zonation. Keep your eyes open for a notification about our habitats of Orange County.

THE NATIVE HABITATS OF OARNGE COUNTY ORANGE COUNTY HABITATS OVERVIEW COASTAL DUNES OAK WOODLANDS RIPARIAN ZONE TIDE POOLS WETLANDS



urban design to waste management. There are a multitude of ways for a city to become more green, far more than mentioned here. If you are interested in learning more about sustainable city design, check out the websites linked throughout this article and the <u>OCH Coffee and Conservation</u> presentation covering Sustainable Cities by Jackie Tran (2021). You can get involved by supporting sustainable legislation in your community by writing to your representative, and by practicing sustainable practices like those mentioned above in your daily life.

Marine Mammal Protection Act

By Sanjay Das

Have you ever felt threatened by intruders breaking into your residence? It happens with us all the time. Human activities such as commercial shipping, petroleum exploration, coastal development, waste dumping, harvesting our kind for commercial or subsistence purposes, ocean acidification, and the rising noise level and temperatures in the ocean have impacted our lives and habitats.

We are collectively known as marine mammals since we rely on the ocean and other marine ecosystems. Some of our kind include seals, whales, manatees, sea otters, and polar bears. We are an informal group; however, we are unified by our reliance on marine environments for feeding and survival. We are classified into four different taxonomic groups: cetaceans (whales, dolphins, porpoises), pinnipeds (seals, sea lions, and walruses), sirenians (manatees and dugongs), and marine fissipeds (polar bears and sea otters). Humans have described 130 species of our kind living in the earth's oceans.



Pair of common dolphins. Photo Courtesy by Caroline Weir

We, marine mammals, support humans and the ecosystem in several ways. We provide food and fur to humans and play critical ecological roles as both predators and prey. For instance, some sea otters are classic examples of keystone species,

HIKING PROGRAM



OCH currently has the goal of doing at least one hike per month at different locations. One of our hikes include a 2.5-mile MPA hike along Little Corona del Mar beach to learn about the habitat and the different species living therein. We are always developing and expanding out hiking program to include new nature hikes, such as hikes along the Santiago Oaks Regional Park Trail, Dripping Cave Trail, San Joaquin Marsh Hike, and more, where you can learn about the various species living in the area and how to leave no trace. If you're interested in joining us on our hikes, space is limited, so register through <u>EventBrite</u>!

KELP FEST

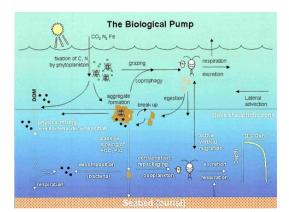


It was OC Habitats first time attending the Laguna Ocean Foundation's annual Kelp Fest! We had an amazing time and had a great number of visitors at our booth. We look forward to participating again next year and were excited to see that we were featured in the <u>LA Times news article</u> about the Kelp Fest event.





since their presence affects the ecosystem more profoundly than their size and number suggest. We have worked to fight against global warming by creating biological pumps, also known as carbon marine carbon pump, (the set of processes by which inorganic carbon, e.g. carbon dioxide, is fixed into organic matter via photosynthesis and then sequestered away from the atmosphere generally by transport into the deep ocean) in the ocean that counteract some damaging impacts of global warming. We can sequester carbon through a range of natural processes that include storing carbon in our bodies, excreting carbon-rich waste products that sink into the deep sea, and fertilizing or supporting marine plants and algae. Despite us helping humans in these many ways, due to exploitation (hunting, killing, capture), ocean traffic and fisheries, habitat loss, and degradation, our population is threatened.



Biological Pump. Photo Courtesy by Hugh W. Ducklow, Deborah K. Steinberg, and Ken O. Buesseler

The genuine fear of human activities causing the depletion or even extinction of us sparked a high alarm for change in the halls of Congress. And on October 21st, 1972, an unexpected event happened that gave us all new hope – the Marine Mammal Protection Act of 1972 (MMPA) was passed under President Richard Nixon to help establish and implement better protections for us that call U.S. water home.

The primary objective of the MMPA is to:

- Prevent marine mammal species and stocks from diminishing because they are no longer a significant functioning part of their ecosystems.
- Restore diminished species and stocks to their optimum sustainable populations.

The U.S. Department of Commerce, through NOAA Fisheries, is charged with protecting whales, dolphins, porpoises, seals, and sea lions. Through the U.S. Fish and Wildlife Service, walrus, manatees, sea otters, and polar bears are protected by the U.S. Department of the Interior. The Animal and Plant Health Inspection Service, a part of the U.S. Department of Agriculture, is responsible for regulating marine mammals in zoos and aquariums under the Animal Welfare Act.

ATHLETA X OCH		
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FRIDAY, JULY 15TH 10 AM - 2 PM		
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OCH is having an <u>outreach event with Athleta at</u> <u>Brea Mall</u> on Friday, July 15th. Athleta is a great company to support since they sustainably source their materials, as well as participate in the fair trade labor for their active wear. Come out to support and say hi to us!

Upcoming Events & Opportunities

July 2022

•July 15th, 10 - 2 PM: Athleta Outreach Event •July 16th, 9 - 12 PM: HBWC Restoration

August 2022

- •August 6th, 10 11 AM: C&C—Guest Speaker
- •August 13th, 8:30 11:30 AM: UNB Restoration
- •August 16th, 8:30 11:30 AM: OC Dream Gala Restoration
- •August 16th, 6 10 PM: OC Dream Gala Fundraiser
- •August 20th, 9 12 PM: HBWC Restoration

September 2022

•September 10th, 7:30 - 9:30 AM: Laguna Coast Coastal Sage Scrub Hike

•September 10th, 8:30 - 11:30 AM: UNB Restoration •September 17th, 9 - 12 PM: HBWC Restoration

*Please check our website or your email for updated event information.

**No MPA Hikes during the summer due to high temperatures and tides.

For new and upcoming events, join our mailing list.

Join our Mailing List

<u>EventBrite</u>



The MMPA prohibits the taking and importation of marine mammals and marine mammal products, where "take" means to harass, feed, hunt, capture, or kill any marine mammal or attempt to do so. However, exceptions to that prohibition may be made for:

• Pre-MMPA specimens were taken before December 21st, 1972.

• International agreements were entered by the United States before December 21st, 1972.

• Alaska native subsistence harvesting.

• Scientific research, public display, enhancing the survival or recovery of a species, and incidental take in commercial fisheries.

Waivers granted by the U.S. government.

This critical law proved a game-changer for us and is certainly worth celebrating. Even after 45 years in place, the MMPA still plays a significant role in protecting us. By 2022, the MMPA will require the U.S to ban imports of seafood that kill marine mammals at a level above what is sent in the U.S. for allowable bycatch. You can continue to ensure more responsible fisheries practices and develop ways to better protect us and our habitats. You can be a part of this incredible act by being aware of what you eat where they source your seafood (for restaurants you can check Seafood Watch App). Also, you can show a little appreciation by posting our pictures in your social media accounts or simply sharing our photos to tell others how much we brighten up your world. To learn more about us or help protect us, you can also join hands with your local non-profits such as OC Habitats, Pacific Marine Mammal Center, Laguna Ocean Foundation, and the Ocean Institute.



Join the OCH Crew!



OCH is looking for people who want to share their talents and time to improve their local environment and habitats. We have many opportunities to get involved and some are listed below.

Volunteer:

- Become a Habitat Monitor
- Join our Habitat Education Team
- Help with Administrative Tasks
- Help with Outreach and Marketing
- Become a Nature Hike Guide
- Work on OCH's Social Media Outreach
- Help with ongoing Restoration Projects
- Work with our Grant Writing Team to secure funding for our organization, programs, and projects.

Internships:

- College Level Students earn credit through CSUF, UCI, Saddleback, CSULB, and more.
- Gain experience in the conservation field, a grassroots nonprofit, business administration, public speaking, education, and more.
- Become a film or art intern for OCH.

Join Our Board:

 We are always looking for people to help us reach our goals and mission. Submit your resume, references, and cover letter to och@ochabitats.org.

We look forward to hearing from you!

Join Our Crew

