



## ***Bolsa Chica Reopens for Group Activities! Volunteers Get Reacquainted***

***By Thomas Anderson***

The Amigos de Bolsa Chica held the first of two “Get Reacquainted Tours” on June 12 to celebrate the opening of the Bolsa Chica Ecological Reserve and Bolsa Chica State Beach Visitor Center to in-person group activities. Thank you to the 19 volunteers, naturalists, and citizen scientists who participated in the day’s outing: Annie Daw, Barbara Felburg-Jackson, Barbara Stewart, Charles Falzon, Elissa Warrantz, Jennifer and Jim Robins, Joana Tavares, Karen Belville, Linda and Lauren Fillet, Mel Nutter, Ron Davis, Sharon and Doug Von Dollen, Terry Jorris, Tom Anderson, Tom Pfeifer, and Vic Leipzig. Your involvement in the Amigos’ education and outreach efforts is much appreciated and needed now more than ever!

We were treated to a beautiful, sunny day. While many in the group have been meeting via Zoom regularly since April of 2020, only a few have seen each other in person. There was much to catch up on, and much to see in the walk to the first overlook. A Shovelnose Guitar Fish was spotted in the eelgrass, and dozens of recently hatched California Least Terns were among the highlights. Once at the overlook, we discussed new programs (Live from the Wetlands and Informal Friday Bird Walks), current summer activities (see page 2), and the return of First Saturday of the Month Free Public Tours (starting August 7),



***Get Reacquainted continued on page 5***

# Summer Events with the Amigos

## UCI's YES Program: Encouraging Young Scientists

This summer, Amigos de Bolsa Chica is collaborating with UC Irvine's Young Engineers & Scientists (YES) program. The YES program seeks to encourage an interest in science in K-5 students around exciting hands-on curricula grounded in community environmental issues. The two one-week programs this July are geared toward second and third graders and will focus on teaching about environmental science and stewardship. The UCI YES program will be guiding the students to learn more about nature and how to care for it using the process of science and engineering design.

This is a no-cost online program sponsored by California Subject Matter Project. It brings together UCI faculty and students in science and engineering, elementary teacher leaders, and local non-profits like the Amigos de Bolsa Chica with the goal of supporting science and engineering at the elementary school level. All students in the program will receive free books and materials aligned to the Next Generation Science Standards. While the summer program has filled to capacity, a fall program for grades 4-5 is being planned.

Due to COVID precautions, the entire YES program will be online and through Zoom this summer. Our role as Amigos will be to lead two 30-minute tours of the wetlands (July 14 & 21). We will be using the "Live from the Wetlands" format we developed this spring and will connect with the students through Zoom. Along with the volunteer Naturalists talking with the students over Zoom, we have another volunteer hosting the Zoom session remotely, and another volunteer to film, work the microphone, and use a telephoto lens when needed to allow the students to really see more of the birds, plants and wildlife. COVID has challenged us to be creative, collaborative, and really learn to utilize technology!

The Amigos are very excited to have this opportunity to share about the wetlands with these future scientists!

## Huntington Beach Central Library

Amigos de Bolsa Chica is collaborating with the Huntington Beach Central Library on two dates in

July. Our first activity on July 12 will be a make-and-take project for 50 children that focuses on a bird that is frequently seen outside the children's library window and also occasionally at the wetlands: Owls! Additional items in the bags will include a scavenger hunt card and a map to encourage families to visit Bolsa Chica Wetlands, a poem about an owl who says "Give a hoot, don't pollute", a link to a related children storybook, "Owl Babies," and links to Amigos de Bolsa Chica website for further information about our programs and videos.

The second activity will be an Amigos member being filmed reading a wetlands/nature book appropriate for K-5 aged children. The film will be loaded to the library's YouTube website, and children will be given a link to watch the film. Lauren Fillet has volunteered for the reading. We are looking forward to a continuing collaboration with the library for other wetlands and ocean related projects.

## Girl Scouts Love State Parks 2021

This annual celebration is the largest and most popular outdoor event created by the Girl Scouts. On September 12, Girl Scouts from across the nation will engage in nature related activities in all 50 states. Bolsa Chica State Beach and Bolsa Chica Ecological Reserve have been chosen as host sites for Orange County. Amigos is hoping to lead up to 90 girls in groups of 10 from the south parking lot to the first overlook and back. We hope to stagger these tours to begin every 15 minutes so that docents/naturalists can lead several of them. These tours should take around 45 minutes and cover high interest topics that are easily seen on that day. As this will probably be our first guided tours in over a year and a half we are actively seeking docents/naturalists to lead them. Some of us may be a bit rusty on specific details that usually are featured in our tours. However, most of these girls will be quite young and we hope to point out the basics. Birds, pickleweed and endangered species seem to be the focal points of this tour. Our naturalists will receive a Girl Scout patch for their efforts. Please join us as we prepare for this wonderful event

*If you are interested in volunteering for any of these events, please email us at [info@amigosdebolsachica.org](mailto:info@amigosdebolsachica.org). Your support is much needed and appreciated.*



# Microplastics and Reducing Plastic Pollution in the Ocean

By *Cristina Robinson*

Excerpted from <https://defenders.org/blog/2021/03/cristina-robinson-making-ocean-my-office>

I first fell in love with the ocean as a six-year-old girl exploring the tidepools of Crescent City, in Northern California. I helped my father find pieces of a 6 million- to 6.4 million- year old lignitic (partially coalified fossil) forest for his master's thesis at Humboldt State University. He was a disabled Army veteran, single dad and geology student, so I often accompanied class lectures and field trips. I carefully went tidepooling to look for pieces of this forest in the intertidal zone that was uncovered during the 1997-1998 El Niño event. These experiences ignited my curiosity to learn all I could about the ocean and my desire to one day make it my office.

Learning about whales and dolphins and their behaviors and intelligence captivated and fueled me to pursue my marine biology career goals, regardless of how challenging the road became. After finally graduating with my B.S. in marine biology from California State University, Long Beach, I worked for an environmental consulting company, MBC Aquatic Sciences, where one of my duties included microscopic sorting of various coastal benthic samples. This microscope sorting introduced me to microplastics, tiny sesame seed-sized pieces of plastic and microfibers (these shed from synthetic clothing) mixed with organic material and invertebrates in almost every sample jar. This was my lightbulb moment! It opened my eyes to the ubiquitous impacts of our plastic pollution and how interconnected humans are to our environment, whether we realize it or not. I started sharing plastic pollution information with friends and family and looking into solutions.

This felt like something I HAD to do because it's something I CAN do. So much of my fieldwork with both OC Coastkeeper and Laguna Ocean Foundation highlighted litter and plastic pollution in my local watersheds. Seeing littered beaches and picking up trash while surfing drove me to want to do something to prevent this litter from turning into marine debris and harming sea life. Years ago, I started grabbing five pieces of plastic while walking back to my car after every surf session, then asked my friends to do the same and I was pleasantly surprised to learn that some of them even do this on days we don't surf together. This is something I encourage everyone

to do anytime they go outside. Realizing I help change others' behavior and knowing I am making a difference feeds the resilience and motivation that keeps me going. Helping to protect the ocean and its inhabitants has increasingly resonated as my life's purpose over the years, and that passion continued to drive me when I struggled with my career path. I am really proud of my younger self for trusting my gut instincts to not pursue work with any scientists who made me feel uncomfortable as a young woman and for learning from those experiences instead. I know that I can stand up for myself and my scientific integrity, even to scientists I once admired, if their behavior is inappropriate and unprofessional, I will not be intimidated by their achievements in the field as I forge ahead on my own path and create my own accomplishments.

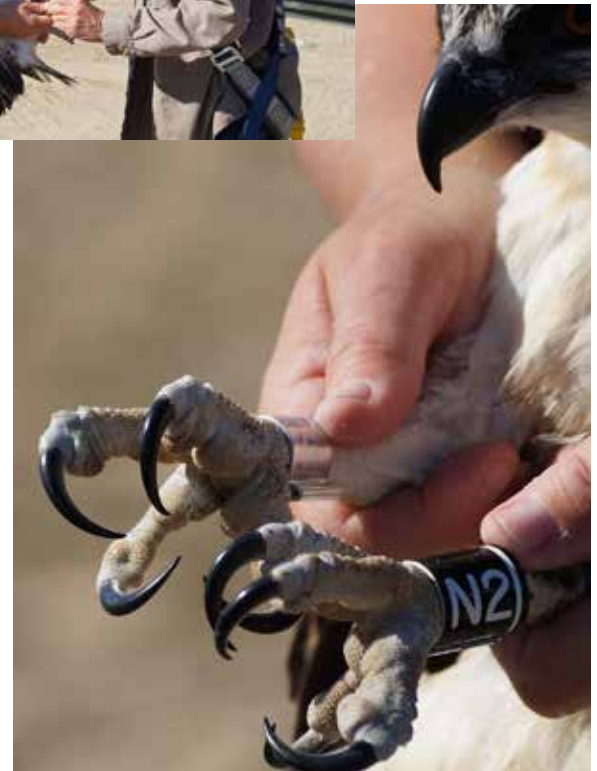
One of the accomplishments I'm most proud of is what I created last year with one of my favorite friends (and trash-removing partner in crime) Janine Rodriguez. We designed stickers encouraging people to protect our planet from pollution and started picking up one pound of trash for every \$1 sticker sold. We started this year with a goal of removing 1,000 pounds of trash. To chip away, we've been doing weekly cleanups and by the end of May 2021 we already collected about 1,100 pounds and surpassed our sticker goal as well! The last week of January we had a big rainstorm so I planned to head down for a beach cleanup that weekend. But I was not expecting and have never seen so much trash in one area before. I managed to collect 124 pounds, but there were bulky furniture items, shoes galore, lots of facemasks, tons of single-use food and beverage containers, toys, endless pieces of Styrofoam and lots of broken up plastic. It quite frankly moved me to tears. Thanks to wonderful friends who heard my call for help, we removed almost 400 pounds of trash the following day. I am simultaneously so proud of these efforts, but sad that this much trash was there to begin with, and that so much trash remains.

What is left will undergo photodegradation where sunlight breaks larger plastic debris into microplastics that can end up everywhere. Every water particle in the ocean eventually circumnavigates the planet

*Microplastics continued on page 5*



*Clockwise from top left: a closeup of N2. The female defends the young birds. Melissa Loebel holds the juvenile while Peter Bloom applies the band. A closeup of the Osprey's powerful talons. The male parent returns when the banding is done with a halibut. Photos by Kim DiPasquale.*



## **Osprey Banded at Bolsa Chica**

*By Thomas Anderson*

For the first time since the Osprey began nesting at the BCER, two young birds, a male and female (now known as N1 and N2) were banded by zoologist and raptor expert, Peter Bloom, PhD, on April 29, 2021. Thanks to the efforts of the City of Huntington Beach, California Resources Corporation and the California Department of Fish and Wildlife, Bloom rode a boom 50 feet to the nesting platform to briefly capture the two chicks who were about seven weeks old.

The birds were carefully placed in backpacks to alleviate some of the stress of being removed from their nest. The female parent was extremely displeased by this activity and repeatedly dive-bombed Bloom. He was then lowered to the ground to apply the durable plastic bandings to each fledgling. Osprey talons are not only sharp, they are many times more powerful than the grip of a human hand and must be dealt with carefully. The bands will allow the birds' whereabouts to be tracked if and when they move away from the area. After the procedure, which lasted about 20 minutes, he placed each bird back in its pack, rode the boom back up to return the birds safely to their nest. At almost the same moment, the male parent returned to the nest with a large halibut.

The mother of the birds had been banded by Bloom several years ago at Upper Newport Bay. The father had not been banded. Locally banded Osprey have been found as far north as Mono Lake and as far south as Guanajuato, Mexico. At this writing, the juveniles successfully fledged but have not left the area, likely a testament to the biodiversity at Bolsa Chica and its ability to support an abundance of life.



### ***Get Reacquainted continued from page 1***

and Last Saturday of the Month Bird Walks and Trash Cleanups (July 31). Private scheduled tours are available again, and the Amigos now have the ability to accommodate educators virtually *and* in-person. FLOW will also be resuming in the coming weeks. Discussion on how activities will be conducted as programs resume was enthusiastic and productive. The second “Get Reacquainted Tour” is being held on June 26 as this issue of the Tern Tide is published. Photos by Thomas Anderson.



### ***Microplastics continued from page 3***

through our ocean currents and those currents carry trash and plastic across the globe (some float and some sink, depending on the chemicals used during production). We are still learning how high levels of plastic-associated toxins impact wildlife health and how they bioaccumulate and biomagnify throughout food webs. Plastic pollution can cause entanglement, be ingested and act as a vector for diseases and contaminants in the environment. This global issue threatens all our marine animals, and animals on land as well. Plastic is now found in our deepest ocean trenches and ice core samples from our polar regions. From our tiniest animals (zooplankton and krill) to our larger megafauna (marine mammals and turtles),

scientists have documented plastic pollution impacts in at least 700 marine species alone. A report from Oceana found that 88% of 1,800 recorded animals (40 species) suffering from plastic entanglement or ingestion are species listed as threatened or endangered under the Endangered Species Act.

Throughout the pandemic I have noticed a new type of trash category: PPE litter. After seeing so many face masks wherever I do a cleanup, I am investing in a new clicker to count PPE litter for my data. On top of masks (and please cut your ear straps when disposing to prevent wildlife entanglement) and gloves, I've also

***Microplastics continued on page 6***

# Action to Prevent Car Break-ins at Bolsa Chica

By Tom Van Huss, Sea and Sage Audubon Treasurer

For many years there has been an ugly side to a visit to Bolsa Chica: the threat of crime, specifically theft from cars in the parking lot. Thieves target photography and optical equipment, wallets, purses, and other items.

Last November Sea and Sage Audubon Society's Board of Directors appointed a committee to learn more about the situation and to work with local authorities and agencies in finding solutions to curb this problem. Since then, our committee has met weekly. We began by conducting a survey of victims to gather data about these crimes.

From the nearly 30 responses we obtained, we learned many details, including:

- The break-ins can occur on any day of the week, and at any time of the day.
- The average value of items stolen was over \$2,000.
- There was usually additional expense for repair of damage to car trunks and doors.
- In most cases the incident was reported to the Huntington Beach Police Department, even though Bolsa Chica Ecological Reserve is not officially in their jurisdiction.
- Beyond the monetary damage, many of the victims do not return to Bolsa Chica, or if they do return, they do so with great trepidation.

## Microplastics continued from page 5

noticed a soar in plastic food packaging litter from the increase in people ordering take-out, to reusables not being accepted and restaurants using more single-use containers for every condiment. One way I am trying to combat this is by refusing any single-use plastics when ordering my takeout and trying to remember to ask again before accepting my food. I don't remember every time, but practice makes perfect.

Though there are so many environmental problems, I do the best I can. While I'm not currently studying whale populations, I feel I am safeguarding them by advocating for plastic pollution prevention like the Plastics Free California ballot initiative, which Defenders of Wildlife also endorsed. I think my motto of "Refuse, Reduce, Reuse, Recycle, Grab 5" is one that enables people to take action starting today and allows them to see their efforts making a positive change. It

Armed with these data, our committee has met with Melissa Loebel, California Department of Fish and Wildlife Reserve Manager for Bolsa Chica; Dan Kalmick, Huntington Beach City Councilman; Julian Harvey, Interim Chief of the Huntington Beach Police Department; and members of all three Bolsa Chica NGOs. All have expressed their commitment to finding solutions to this problem.

Several steps have already been taken or are in the planning stages:

- New temporary signage has been posted at the Pacific Coast Highway parking lot. Larger, more visible signage is being designed and will be installed later this year.
- HBPD has designed a camera surveillance system for both parking lots. Sea and Sage is currently working with HBPD and all NGOs to raise funds to purchase and install these cameras.
- HBPD has pledged to respond to all calls from the Reserve.

In addition, volunteers will be recruited and trained to be a presence in the PCH parking lot and throughout the BCER, both to welcome visitors and provide information about the wetlands.

is an honor to educate and empower future scientists of all backgrounds and passions, to contribute in different ways to help a variety of conservation efforts. Having students share feedback that they enjoy my OC Coastkeeper presentations (even virtually) on all things encompassing plastic pollution and how they can make a positive impact is so rewarding. I am optimistic about the future of the ocean and planet because mother nature is resilient and I know my generation and those to come will continue fighting for our blue planet. This is how we ensure a healthy ocean for future children to explore the tidepools and go whale-watching, letting their curiosity turn into their passion for nature and connecting the dots for continuing conservation efforts.

*Christina Robinson is a former student of Amigos board member Jerry Donohue.*



# Update on the Elegant Tern Tragedy

By Thomas Anderson

The story has become international news: Between 1500 and 2000 Elegant Terns abandoned their eggs when a drone crashed amidst their nesting area on May 11. This is devastating news, caused by those who do not understand that the Bolsa Chica is an Ecological Reserve we share with wildlife, not a personal playground. Drones are not permitted in any State Ecological Reserve. Elegant Terns nest only in a few select places in California and Baja, Mexico. They will not return to Bolsa Chica this year. A second drone crashed in the California Least Tern nesting area but fortunately those birds returned.

The U.S. Department of Fish and Wildlife is currently working with local, State and Federal agencies to investigate the incident with the drone and Elegant Tern and will provide a full report once it is complete. The California Department of Fish and Wildlife will be the lead on the investigation.

Melissa Loebl, BCER Manager said, "I want to thank you for support and efforts to help us spread the word and talk with the community. The owner of the drone is being investigated by the DA offices and we plan to press charges. In the future if you see violations, document them and send to me. I plan to work with the officers to find solutions and cite those who do violate the rules and regulations."

While members and supporters of the Amigos de Bolsa Chica are aware of the rules when visiting the Ecological Reserve, far too many others are not. ***If you see any illegal activities, call 888-334-2258.*** While it



**Elegant Tern eggs were abandoned after a drone crash on Tern Island in May. Photo by CDFW.**

may not prompt immediate response from a Fish & Wildlife Warden, it will help the department know what's happening at Bolsa Chica and take action.

**Enjoy your time in nature and observe the following rules:**

- **No dogs.**
- **No drones.**
- **No bikes.**
- **Fishing is permitted only in the designated area along Warner Avenue near the Interpretive Center.**
- **Please stay on the trails. The mud is a fragile home to small creatures that birds and fish depend on.**
- **Do not litter. Please take your trash with you, especially any food scraps.**
- **Do not feed the birds or any wild animal.**

The Tern Tide is published quarterly by

**Amigos de Bolsa Chica**

P. O. Box 1563, Huntington Beach, CA 92647

(714) 840-1575

[www.amigosdebolsachica.org](http://www.amigosdebolsachica.org), [info@amigosdebolsachica.org](mailto:info@amigosdebolsachica.org)

Editor & Graphic Design: Thomas Anderson

**President:** Charles Falzon

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**Free First Saturday of the Month tours of the Bolsa Chica Ecological Reserve led by Amigos Naturalists resume August 7, 9:00 - 10:30 a.m.**

**Free Last Saturday of the Month Bird Walk and Trash Cleanup led by Amigos Naturalists resumes July 31, 9:00 a.m.**

**Free monthly tours are on a first come, first served basis. Reservations and carpooling are encouraged as parking at the Bolsa Chica Ecological Reserve is limited. All tours begin at the south parking lot, Pacific Coast Highway between Warner Ave. and Seapoint St.**



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**THE TERN TIDE**

Volume 45, Issue 2  
www.amigosdebolsachica.org  
info@amigosdebolsachica.org  
(714) 840-1575

**AMIGOS DE BOLSA CHICA MEMBERSHIP APPLICATION**

I support the specific and primary purpose of Amigos de Bolsa Chica, which is to advocate the preservation, restoration and maintenance of the Bolsa Chica, to encourage the public acquisition of all the wetlands and sufficient surrounding open space to create a viable ecosystem, and to provide education about the importance of wetlands.

**ANNUAL DUES**

- \$ 10 Student
- \$ 25 Individual
- \$ 40 Family
- \$100 Sustaining
- \$1000 Life Member

Name: \_\_\_\_\_

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**Additional Contribution:**

\$ \_\_\_\_\_ Fund operational expenses    \$ \_\_\_\_\_ Fund education projects    \$ \_\_\_\_\_ Total enclosed

**Please check if you are interested in volunteering for:**

FLOW Citizen Science  Naturalist training/wetland tours  Wetlands cleanups  Fundraising  Grantwriting

All contributions to Amigos de Bolsa Chica are tax-deductible as allowed by law under IRS Code Section 501(c)3.  
No goods or services were provided in consideration of this gift.

Return application to: Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647