



THE PINNIPED PRESS

A Newsletter by and for Noyo Center for Marine Science Volunteers

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Volunteer Opportunities

We are currently in need of volunteers to work in all capacities at the Slack Tide Café, including barista, sandwich maker, dishwasher, and prep work. All shifts.

Volunteers are needed to help with the monthly mussel collection as part of the Red Tide Program. For meeting time and location check the calendar at the end of this newsletter.

Global Oceans Treaty

By Dobie Dolphin

On March 4, 2023, after over a decade of discussions, 191 countries agreed to a “high seas treaty” to protect marine life in international waters outside of national jurisdiction, commonly called the high seas.

While the high seas cover about half of the Earth’s surface, only 1% is currently protected. The goal of the Global Oceans Treaty, or High Seas Treaty, is to protect 30% of the high seas by 2030. The negotiations focused on four key areas:

- Establishing marine protected areas.
- Improving environmental impact assessment.
- Providing finance and capacity building to developing countries.
- Sharing of marine genetic resources.

There were times during these discussions when it looked like an agreement would never be reached. The main issue delaying the completion of the treaty concerned the sharing of marine genetic resources (MGRs), those biological materials from plants and animals in the ocean that can benefit society from pharmaceuticals and industrial processes to

Global Oceans Treaty (continued)

food. As wealthier nations have the resources and funding to explore the deep ocean, poorer nations wanted to ensure that any benefits found would be shared equally.

The treaty also provides legal tools to create marine sanctuaries to protect biodiversity and allow ecosystems to recuperate. Sanctuaries will put limits on how much fishing can take place, shipping routes, and deep-sea mining. It requires environmental impact assessments evaluating the potential damage of commercial activities such as deep-sea mining before they start. The International Seabed Authority will oversee licensing, and “any future activity in the deep seabed will be subject to strict environmental regulations and oversight to ensure that they are carried out sustainably and responsibly.”

Sanctuaries are the best tool to protect biodiversity, restore depleted populations, and give oceans the resilience needed to survive climate change and plastic pollution. According to the International Union for Conservation of Nature (IUCN), an organ of the United Nations, nearly 10% of all marine species face the risk of extinction from overfishing and pollution; 41% are affected by climate change.

This legally binding pact represents the first agreement on ocean protection since adoption of the 1982 UN Convention on the Law of the Sea, which established the high seas as marine areas outside of the 200 nautical mile Exclusive Economic Zone (EEZ) within which coastal nations have jurisdiction over both living and nonliving resources. Outside the EEZ all nations can conduct fishing, shipping, and research.

Laura Meller, Oceans Campaigner for Greenpeace Nordic, said major countries, including the European Union, the United States and China “were key players in brokering the deal,” showing “willingness to compromise”. Additionally, the Group of 77, a coalition of 134 developing countries who promote its members collective economic interests and create an enhanced joint negotiating capacity in the United Nations, “led the way in ensuring the treaty can be put into practice in a fair and equitable way.”

Arlo Hemphill, Greenpeace USA’s senior oceans campaigner, said, “The Global Oceans Treaty agreed on today is the biggest conservation agreement in the history of the world. It provides a pathway to establish marine sanctuaries so that countries can turn their commitment to protect 30% of the ocean by 2030 into a reality. This is the minimum scientists have said we need to prevent ecosystem collapse in the oceans—our great shared resource and the foundation of life on this planet.”

Essam Yassin Mohammed, head of blue economy at the International Institute for Environment and Development, believes that “the only way to guarantee sustainable management and conservation of the interconnected ocean ecosystem is by recognizing it as the common heritage of mankind. It is there to benefit humanity as a whole—whether affluent or not.”

UN Secretary-General António Guterres notes, “This action is a victory for multilateralism and for global efforts to counter the destructive trends facing ocean health, now and for generations to come.”

Official adoption of the treaty will occur later at another UN session after technical editing and translations of the agreed upon pact have occurred. Each country still must formally adopt the agreement. It will “enter into force” when at least 60 countries have ratified the treaty. Signatory countries will then start looking at how these measures can be implemented and managed.

The 30×30 target is a momentous milestone and deserves to be celebrated, but setting a goal is only the beginning. Achieving the goal with meaningful protection will require a gargantuan global effort. According to the Marine Protection Atlas, currently 8.1% of the ocean is protected and only 2.4% is fully or highly protected. Action to increase the area coverage of marine protected areas must start immediately to assure they are managed effectively. Critics point out that countries will conduct their own Environmental Protection Assessments and make the final decision. But other countries can register concerns with the monitoring bodies. There’s lots of work to be done, but this is a huge first step.

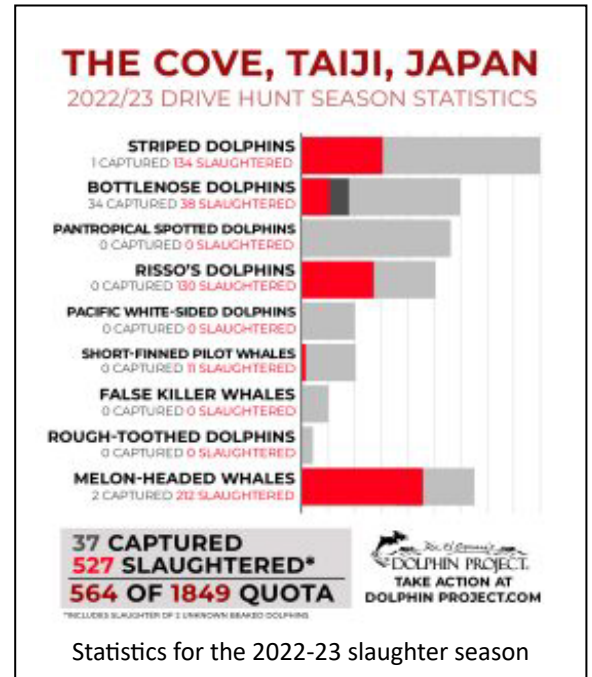
“With every drop of water you drink, every breath you take, you’re connected to the sea. No matter where on earth you live.”
Sylvia Earle

Don't Buy a Ticket!

By Wendi Felson

In 2015, shortly after I retired, I came across a copy of “Ocean Warriors” by Captain Paul Watson, founder of Sea Shepherd Conservation Society (which I had never heard of) in a used bookstore. Although I had little to no experience as an environmental activist, let alone any type of knowledge of the whaling industry, I bought the book. After reading it, I wanted to learn more, so I checked out the Sea Shepherd’s website and got hooked. I decided, what the heck, I’ll go on their only land-based campaign to Taiji, Japan to help bring attention to the dolphin slaughter that happens 6 months out of the year. Within a week I was winging my way to Japan to become a Cove Guardian, and for the 4 weeks I was there it was a horrifying yet life-changing experience that I will never forget.

Between September 1st and February 28th, the government of Japan supports the rounding up of whole pods of dolphins off the coast and herds them into a small cove in Taiji. The dolphins are then systematically slaughtered within hours, although it can take up to 4 days if the pod is large. The dead animals are taken to a nearby slaughterhouse to be packaged and sold, although the meat is loaded with toxic levels of mercury. Our mission was to livestream the whole event from when the killing boats left the harbor to when the last boat returns, and to publicize what was happening in the cove every day. In the short time I was there, 206 dolphins lost their lives, but what was truly the most gut-wrenching was learning what would happen to the 5 dolphins that were picked for a life of captivity. Most captive dolphins from Taiji go to entertainment parks in Japan, China, or Eastern Europe. Dolphins from Taiji drives have gone to 105 facilities in 20 different countries.



While Sea Shepherd no longer sends volunteers to Taiji, Ric O’Barry’s Dolphin Project does. They also bring critical attention to this senseless slaughter of dolphins. To learn more visit: <https://www.dolphinproject.com/about-us/>.



Melonhead dolphins stuck in net in cove, Taiji, Japan.

Photo by Wendi Felson

Since returning from Japan, I have continued to learn more about cetaceans in captivity. I’ve become vegan in the process of wanting to do anything to help save the ocean and its ocean life. I hate to even see a goldfish in a little bowl. I am also a volunteer and a board member of the Noyo Center for Marine Science to help give back. Like I said, life changing.

Here is just some of what I have learned. Currently there are over 3,000 whales, dolphins, and porpoises held in tanks around the world. Dolphins in captivity number 2,000, and there are 227 belugas and 53 orcas held captive by the entertainment industry, swim with dolphin programs, or Marine World type facilities. Today there are 105 orcas and belugas in captivity in N. America. Over 5,000 cetaceans have died in captivity since 1950.

May 13th is Empty the Tanks Day, an international day of protest against the cruel practice of holding cetaceans in small tanks for the entertainment of humans. This day was established by the Dolphin Project, a non-profit founded by former dolphin trainer Ric O’Barry. <https://emptythetanks.org/>.

Don't Buy a Ticket! (continued)

Cetaceans, primarily bottlenose dolphins, beluga whales and orcas, when captured or born into captivity are used as entertainment. They may be forced to swim with, or even tow, humans in small, chlorinated, concrete pools. Their hearing is damaged from being assaulted by loud noises, such as water and cooling pumps that are heard underwater 24 hours a day; people yelling or blaring piped-in music during the day. Many times, dolphins are injured from these encounters with humans, sometimes because of having dangerous things placed in their mouths. The flipper waving, jumping through hoops or swimming up to people are all unnatural behaviors for cetaceans. The “swim with” dolphins are often forced to work 12 hours a day. This stress can result in endless circling, tooth damage from bar/pool chewing, dorsal fin collapse, anxiety, depression, or sitting at the bottom of its tank. Orcas have on rare occasions attacked their human handlers, which has typically never happened in the wild. Life in a tank is so far removed from a cetacean’s natural environment that the effect this has on their mental and physical state is almost inconceivable.

The deepest recorded dive for an orca is more than 400 meters, the deepest tank in the world housing an orca is ~12m. The largest tank in the world is less than 1/10,000th of 1% of many dolphins’ natural range. Wild dolphins can swim up to 100 miles a day. In the wild, orcas have been documented to travel more than 9,400 km in 42 days and reach speeds of 30 miles per hour.

Tank water can become much too hot, and the cetacean’s skin can become blistered and sore from too much sun exposure. Often the tanks are filthy and/or they have high levels of chlorine which also cause sores.

“Naturally cetaceans live in social groups, however in captivity many are kept alone – for example, Kshamenk is an orca who has lived alone for 21 years in captivity, Lolita has been alone for 34 years out of her 42 years in captivity, and mothers and calves are regularly separated. Nothing in their evolution has prepared whales or dolphins for life in captivity. The result is abnormal behaviors, injury, illness, premature death and aggression, not to mention the mental suffering.” More information can be found at <https://www.changeforanimals.org/whales-and-dolphins-in-captivity>.

Dolphins in captivity often have pre-mature deaths caused by refusing to eat, ingesting foreign objects, attacks from other animals, infections and even suicide. The animals are often confined with dolphins that aren’t in their family group or their own species. Captive dolphins are fed dead and frozen fish which they would never eat in the wild, and often are only fed after they have performed a behavior that is wanted by humans. Although they have no danger from predators, boat strikes or entanglements like wild dolphins, many captives live much shorter lives.

Orcas have been held in captivity since 1961. Currently there are 31 captive orcas in 7 different countries. SeaWorld San Diego has 8 orcas today, but at least 48 of SeaWorld’s orcas have died over the years. Corky, at SeaWorld in San Diego, is the longest surviving captive orca. He was captured in 1969; however, none of his 7 offspring have survived. The average time an orca survives in captivity is 4 years. In the wild they have lived up to 90 years.



Sore on a dolphin at an entertainment park in Japan.
Photo by Wendi Felson



Bottlenose dolphin being force fed dead fish. Food is routinely stuffed with antibiotics and sedatives.
Photo by Wendi Felson

Don't Buy a Ticket! (continued)

According to DolphinProject.com, “the captive entertainment industry has often gone to great lengths to misinform and confuse their customers for decades; we are told that they are protecting wild species, rescuing and rehabilitating injured animals, promoting wild conservation, and giving them a better life than they could have in the wild. Yet the fact is that most of this language is marketing, and when we look deeper, very small portions of efforts and expenditures are devoted to this practice. Genuine rescue facilities and sanctuaries limit human interaction to prioritize the well-being of the animals in their care.” More information is available here: <https://www.dolphinproject.com/campaigns/captivity-industry/travel-and-captivity/>.

Scientists, environmentalists, lawyers, and others are working to help end cetacean captivity and to rescue and rehabilitate the animals so that may return to the wild. For those animals that may be so damaged that returning to the wild is not an option, a marine sanctuary could be the answer.

May 5, 2016 was the launch date for The Whale Sanctuary Project with the goal of establishing a permanent cetacean sanctuary in Port Hilford, Nova Scotia, providing as natural an environment as possible. “Overall, at an authentic sanctuary, there is no exploitation, no invasive research, and no breeding.” Lori Marino, The Whale Sanctuary has said.

It is encouraging that many people are working on many levels to bring attention to cetacean captivity and to try to end the suffering. Some recent, hopeful news is that Lolita, an orca who was captured in 1970 when she was just 4 years old, will be released from a Miami theme park after years of effort by the Lummi Nation of the Pacific Northwest and others. On March 30th it was announced that Lolita, the sole orca at Miami Seaquarium, will be returned to her home waters. A question remains whether Lolita will remember her family, but she was recently played recordings of her San Juan Island family and she appeared to recognize the calls.

“Without an audience or tickets sales, whale and dolphin shows will prove unprofitable. Without the whale and dolphin shows, there will be no more captured, bred, and captive whales and dolphins. No more needless suffering.” Excerpted from: <https://weanimalsmedia.org/>

Think twice before buying a ticket to a whale or dolphin show! You may be entertained but those highly intelligent beautiful animals are living lives of enormous suffering for your few hours of pleasure.

For More Information:

Blackfish Never Capture What You Can't Control documentary by Magnolia Pictures

The Cove documentary directed by Louie Psihoyos

Behind the Dolphin's Smile - One Man's Campaign to Protect the World's Dolphins, by Richard O'Barry

Death at SeaWorld --Shamu and The Dark Side of Killer Whales in Captivity, by David Kirby

The Case Against Marine Mammals in Captivity, revised 4th edition, /Oby Humane Society International

<https://marineconnection.org/captivity/>

<https://weanimalsmedia.org/>

<https://www.changeforanimals.org/whales-and-dolphins-in-captivity>

<https://www.dolphinproject.com/>

<https://whalesanctuaryproject.org/>

<https://cetabase.org>

<https://www.paulwatsonfoundation.org/>

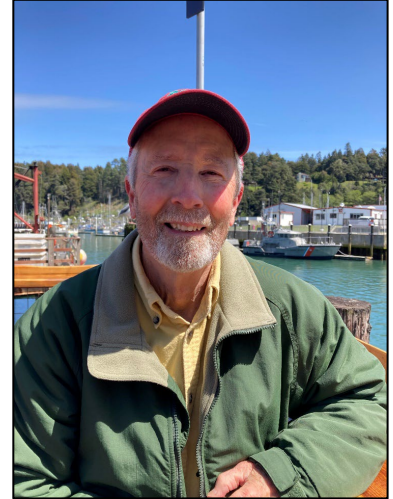


Volunteer Highlight: Tony Boyd

By Linda Francis

Tony was born in Cincinnati, Ohio, and family moved to Southern California when he was just 3 years old. His father always loved airplanes and rockets, and following his father's interests, Tony enrolled in UC Irvine to study aeronautic engineering only to find his favorite classes were marine biology. Tony changed his major to biology, which led to his career as a Clinical Laboratory Scientist.

While living in Southern California, he often went to the Sierras to fish and pan for gold. Intrigued by the possibility of living in the area, when he visited, he would drop into the local hospitals to check out their labs and see if they had any openings for a Clinical Laboratory Scientist. He continued to live in So. Cal, but in 1978, with Pomona's orange groves long gone and too many people moving to Newport Beach, Tony and his first wife decided it was time to move on. They quit their jobs, sold their house, and drove to Alaska to visit a life-long friend who lived in Fairbanks. They then wandered their way home down the coast and ended up one day in Fort Bragg. They liked it right off. As was his habit, Tony stopped in the local hospital to see if they needed a Clinical Laboratory Scientist, and they did. Two months later Tony was working in Fort Bragg and did so for the next 40 years until he retired.



Tony's hobby of building and flying remote-controlled airplanes started in high school and continues to this day. He is also a Cessna pilot who learned to fly at the Little River Airport.

Tony has been volunteering with Noyo Center since 2016. He visited the Crow's Nest Interpretive Center on one occasion and met Donna Worster, who recruited him as a docent. He now volunteers there every Monday and has a real passion for the aquarium, feeding the various aquarium residents and keeping the aquarium clean. In the process Tony has developed real feelings for the critters, one of his favorites being the clingfish. At five to six inches long, the clingfish looks like a squashed minnow, and lives attached to the undersides of rocks or aquarium glass. Though nocturnal feeders, Tony occasionally feeds them fish pellets by hand. He knows firsthand they have sharp teeth as one bit him and broke the skin! He also enjoys feeding the stars, anemones, and watching the aggregating anemones split into two.

Tony also does the beach survey at Noyo beach, which includes picking up loads of trash and cigarette butts. He enjoys the Discovery Center and looks forward to learning more about the "La-Bone-atory". Stop by the Crow's Nest on Mondays to see Tony and stay awhile for the critters in the aquarium.

From the Poop Deck News for April 13, 2023

By Donna Worster

Earlier this week, I opened my home and garage to a few volunteers, docents, and friends to view the bones of Noyo Center's Betty Blue Whale and talk about her future home. One of my guests recollected the occasion in 2009 when the blue whale washed ashore.

As she recalls, "I was there when she washed ashore. As news of what happened on our shore went worldwide, conservationists came from afar to observe and assist, from neighboring Humboldt and as far away as Canada. I saw the whole community come together to save her. Workers were being housed in private homes, the motels were packed, the town was jumping."

"The smell from was unbearable, but for the whale to be collected for research and future display, she would have to be moved from the cove forty feet below the cliff above, rather than sent back to sea as food for other ocean creatures. Local loggers responded with their heavy equipment, and other needed supplies came from the surrounding businesses. The composting company in Redwood Valley took the blubber, turning it into valuable fertilizer for the local school gardens, and the bones were buried so that nature's elements could clean them up. It was an amazing effort."



From the Poop Deck News for April 13, 2023

As my visitor spoke about her history and memory of this event, the atmosphere changed from casual curiosity to intense interest in learning more about how “the community came together” to preserve the whale for the world to see.

Where are we now and where do we go from here? Here are a few things that have happened since 2009:

- Blue whale bones have been partially cleaned, with many of them on display at Noyo Center locations and brought out for special events, such as whale festivals and educational tours.
- The Crow’s Nest, the first of our three locations, opened on the Noyo Headlands Trail.
- The Discovery Center Science Museum and store opened on Main Street, with marine science exhibits, and the fully articulated Orca skeleton (*washed ashore in 2015*) on display.
- Slack Tide Café opened in 2022 overlooking the Noyo River, with food, coffee, and dock space, giving us greater access to the harbor and ocean for research and education.
- Plans are underway to build a structure on the Noyo Headlands called the La-bone-atory, specifically designed for processing valuable marine skeleton specimens.
- AND MOST IMPORTANT: We are continuing to develop the conceptual plans for the future Ocean Science Center on the Noyo Headlands, a permanent home for Betty Blue, with the support of the community, and dedicated Noyo Center board members, volunteers and staff.

Poop Deck is the Crow’s Nest weekly newsletter.

What Washed In

By Nancy Lloyd

Harbor seal pupping season has arrived with Spring!

When you walk along a trail overlooking the numerous pocket beaches of our coast, you may catch a glimpse of shy harbor seals. Harbor seals are the only pinniped to pup locally and give birth between March and June on tidal sandbars, rocky reefs, and pocket beaches. They can give birth in areas that are inundated at high tide because, unlike most pinniped species, harbor seals can swim at birth! During the pupping season, mother seals will spend more time onshore nursing pups, or resting, for an average of around 10–12 hours per day. The mother harbor seal stays with the pup almost continuously and rarely leaves the pup alone onshore. Mothers can take their pups with them when they go swimming and feeding because pups are adept swimmers.



Harbor Seal Mother and Pup

March through July, during pupping and molting, are especially vulnerable months for harbor seals. While hiking along the shores of the Pacific during these months, you may come across a seal pup alone on the beach. It is most likely not abandoned. The mother is probably in the water nearby feeding. However, if a mother is repeatedly disturbed on a site with her pup, she may decide to abandon her pup for the safety of the water, so please be sure to stay well away. If you see a lone pup, do not touch, move, or otherwise disturb it. It is extremely difficult to reunite a mother and her pup after the pup has been moved, and very difficult to raise a pup in captivity.

Maintain a minimum distance of 90 m (300 feet) from any marine mammal in the water or on the shore to prevent a disturbance. If your presence causes them to change their behavior, you are too close!

For several years Noyo Center Stranding Coordinator, Sarah Grimes, has been collecting data on the harbor seals at MacKerricher State Park, including the pups that sadly don’t make it. We have hypothesized that some of the losses are due to coyotes that take advantage of the access to this location.

What Washed In (continued)

This year, Frankie Garraty, a University of California, Santa Cruz grad student, traveled to Fort Bragg and set up a trail camera near the site as part of a research project he is working on. So far, we have captured a coyote dragging a harbor seal pup across the ice plants, and in another video, we captured footage of a coyote with a broken leg. Nature keeping things in balance can sometimes be cruel, but this research helps us better understand the health and interactions of wildlife in our area, both in the ocean and on land.

Announcement: Book Club has morphed to a Journal Club

Due to time constraints and being realistic about our ability to read a whole science book each month, we decided to simply read journal articles on a particular topic rather than an entire book. We will post the links to the articles in the Pinniped Press each month for the next meeting. Our meetings will be at 11 am on the 3rd Monday of the month at the Slack Tide Café. Everyone is welcome whether you have had a chance to read the articles or not. The topic for May will be pharmaceuticals in the ocean. Below are a few journal article links. For more information contact wendi@noyocenter.org.



Frankie Garraty

Ancient submarine forest: <https://oceanexplorer.noaa.gov/explorations/20ancient-forest/welcome.html>

Deep sea vents:

<https://oceanexplorer.noaa.gov/explorations/12fire/background/pharmacology/pharmacology.html>

Hope for New Drugs Arises from the Sea <https://www.scientificamerican.com/article/hope-for-new-drugs-arises-from-the-sea/>

Finding New Drugs from the Sea via eDNA

<https://www.wsj.com/articles/finding-new-drugs-from-the-deep-sea-via-edna-11662216510>

Seaweeds s a functional Ingredient for a Healthy Diet

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7345263/>

Calendar

Monday, May 1st at 9 am: Red Tide's Plankton Collection at the Slack Tide Café dock.

Monday, May 1st at 6 pm: Pinniped Press meeting on zoom: <https://us02web.zoom.us/j/85045100225>

Saturday, May 6th at 10 am: New Volunteer Orientation at the Slack Tide Café.

Tuesday, May 9th at 6 pm: Science Talk: Leptospira in the Marine Ecosystem Register here:

<https://www.noyocenter.org/calendar/6bsdysokdzhg31g7npefei4ekbhra-g96pt-tdptz-sykdp>

Wednesday, May 10th at 10 am: Docent's meeting at the Crow's Nest.

Wednesday, May 10th at 6:30 pm: Beach Survey Program by zoom: <https://us02web.zoom.us/j/81628595428>

Saturday, May 13th: International Empty the Tanks Day. <https://emptythetanks.org/worldwideevent/>

Monday, May 15th at 11 am: Journal Club at Slack Tide Cafe

Tuesday, May 23rd at 9:30 am: Red Tide's mussel collection. We meet at Enchanted Trail head parking lot (just north of Montessori Del Mar Community School, MacKerricher State Park).

The Pinniped Press team:

Carin Berolzheimer, Sharon Bowers, Dobie Dolphin, Wendi Felson, Linda Francis, Jeff Jacobsen, Nancy Lloyd, Peggy Martin, Toni Rizzo, Jim Rolfe, Teresa Skarr, Donna Worster, Sarah Grimes, and Trey Petrey. If you have photo or writing skills or have a particular idea for an article, want to join a great group, or send a letter to the editor, write to:

wendi@noyocenter.org