



THE PINNIPED PRESS

A newsletter by and for Noyo Center for Marine Science Volunteers
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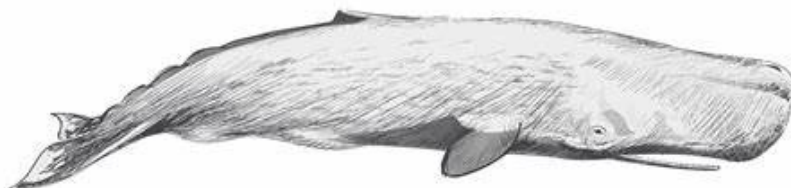
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Volunteer Opportunities

- Trained Red Tide Plankton collectors are needed for February, please contact sarah@noyocenter.org.
- The Slack Tide Café has volunteer opportunities assisting with bussing tables, washing dishes, and just generally helping as needed. Your help is needed between 11 am and 1 pm Thursdays through Mondays. You must get a food handler's certificate before you can start, which is easily done online. Volunteers will also be needed on Friday and Saturday evenings beginning in February, when we extend the café hours until 7 PM those days.
- The fundraising and events group can always use more help with your fresh ideas and energy.
- For more information about volunteering with the Noyo Center please contact: wendi@noyocenter.org.

Pinniped Press Logo Contest

We are looking for a logo for our newsletter that incorporates a pinniped of some sort, so if you would like to show off your marine themed artistry we would like to hear from you. The contest will run for the month of February. The winner will be picked by the PP team at the March meeting. Please submit your ideas to wendi@noyocenter.org. The winner will get a gift certificate for Slack Tide Café. Good luck, everyone.



Rare Sperm Whale Washes into Mendocino Bay: Part 1

by Jeff Jacobsen

There is SO MUCH to this story, and many mysteries that we are still figuring out. Part 1 of the story is a brief summary and some photos taken during that weekend. We are currently planning to create a short documentary video of the story of this unusual event, so stay tuned.

Day 1, 29 July 2022: Divers from Sonoma State working in the area on kelp research are believed to be the first to observe the whale, which had drifted onto the rocks. Sarah Grimes, Noyo Center's Stranding Coordinator, arrives on the scene and finds the whale, a young male, had drifted into a narrow arroyo, headfirst.



Photo by Abbey Dias

Day 2, 30 July:

As we continue to observe the whale from the bluff above, it is apparent that the whale is severely damaged, with injuries consistent with trauma to his abdomen and spine.

Day 3, 31 July: The cove where the whale was now located was virtually inaccessible to safely study the specimen, so it became apparent that moving it out into Mendocino Bay would be our only hope. Our team, along with members of the Mendocino Volunteer Fire Department, discussed how we can get a rope around the fluke and pull it into the bay using R/V Scarlette, which is still docked in Noyo Harbor. Everyone agrees this should work and I head back to Fort Bragg to get the boat. In the meantime, members of MVFD and State Parks dive into the water, tie a rope around the tail, and tow it out into the bay with a skidoo!

With the fog rolling in, the team then tied the whale to a navigation buoy and returned to shore. Meanwhile, the team on the R/V Scarlette, Sarah Grimes, Sara Sundberg, Sheila Semans, Noyo Harbormaster Anna Neumann and me (JJ), arrive and tow the whale a little closer to shore and anchor him in Smuggler's Cove for the night. The whole scene began to attract quite an audience from the cliffs above the cove, and quite a few white sharks feeding on the carcass.

Day 4, 1 Aug: As Sheila Semans networks to find a beach to tow the whale so we can collect the skull (we cannot bring it ashore at Big River), local fisherman Sean Thornton volunteers his boat, the Telstar, to tow the whale northward. We are there with F/V Scarlette to assist and manage to get around Mendocino Headlands where we anchor the whale again, as the weight and mass is just too much for the Telstar to continue. We anchor the whale in Jack Peters cove, right where Donna Worster, Noyo Center super volunteer, could see it from her home!



Telstar prepares to tow the whale.



Whale deep in the narrow arroyo.



White shark feeding on upper lip of whale (JJ drone photo). The whale is laying on his right side, lower jaw hanging open, his left eye above jaw hinge. Most of the bulk of his head is tissue, spermaceti organs, which has highly evolved acoustic sonar capability, producing the loudest sounds of any mammal



Richard Millis hauls in anchors at Smuggler's Cove, as Trey Petrey records us from shore via drone. R/V Scarlette is 19' long and 8' wide. What are the dimensions of the whale? (We estimated just over two boat lengths, 40-42 feet.)

Day 5, 2 Aug: Sheila found a beach! Preparations to receive the whale ashore commence! The Coast Guard agrees to tow the whale to the beach! But... first they had to respond to a call to rescue a sport fishing boat, then fix and test an oil leak. Meanwhile, we (Sarah G., Sara S., Marjorie Cox from The Marine Mammal Center and JJ) hang out at the whale, take samples, measurements, and photos.

The Coast Guard arrived around 4pm, crew members jumped aboard to pull the anchors, and we get the CG tow line attached...with not much time left to go 8 nautical miles, how about 4 knots, guys? There was a slick of whale oil on the water behind the whale, as his buoyancy leaked away. He slowly settled deeper in the water, taking longer to resurface after a wave washed over, and about 2 nautical miles from the beach, he does not come up again. The CG manages to get him just past the mile buoy, and no further, almost in sight of the beach! Whale oil continues to rise to the surface, and he is clearly visible on the depth sounder. The CG crew cut their tow rope, and we attached our tow rope with a buoy to mark the location, then returned to port wondering what it will be like to study a whale fall.



Sarah Grimes with blubber profile sample she carved out of the sperm whale as Sara S. helped stabilize boat/whale movements in gentle swell.



Anna Neumann inspects a cut in the back of whale with the spinal cord exposed.

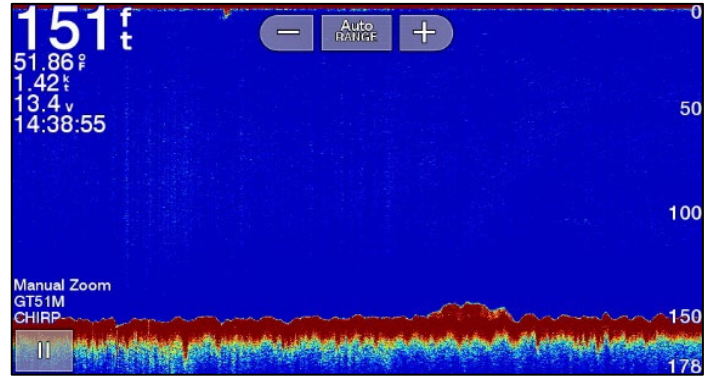
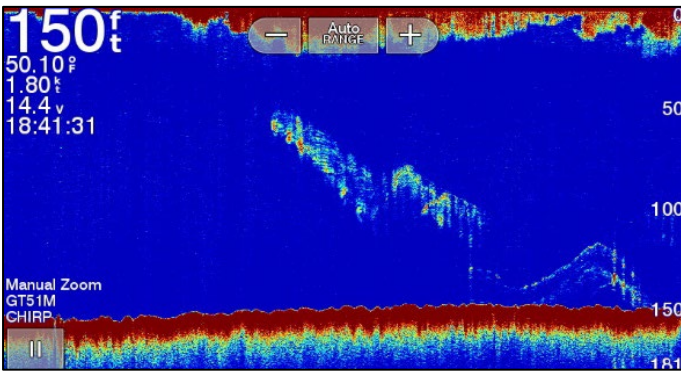


USCG crew members prepare to join tow rope from USCG vessel "Noyo River" to rope around whale.



USCG crew members observe gull riding on the whale as Coast Guard vessel "Noyo River" tows sperm whale north. (JJ photo)

Day 6, 3 Aug: To reduce the risk of a whale or other animals getting entangled in our rope, Richard M., Sarah G. and Laura Vague go back to the site and retrieve the buoy and as much rope as we can, sinking the remaining rope with sections of pipe. We can now find the whale easily via depth sounder. Interested readers stay tuned.....the story of the sperm whale will continue in upcoming issues of the Pinniped Press.



Sonar screen of whale sinking to bottom, whale on bottom 3 Aug.

The bottom is flat but appears bumpy due to waves lifting the boat up and down – the bumps measure wave height.

All marine mammal stranding activities are conducted under authorization by the National Marine Fisheries Service through a Stranding Agreement issued to the California Academy of Sciences/Noyo Center for Marine Science and MMPA/ESA Permit No.18786-06, and the Marine Mammal Health and Stranding Response Program.

Volunteer Highlight: Sara Sundberg

by Linda Francis

When Sara and I met at Slack Tide Cafe, I felt I already knew her from the multitude of emails we had exchanged in our effort to find a time to meet. The nine atmospheric rivers of rain that befell us repeatedly undermined our efforts. It was lovely to sit on the deck in the sun and finally have a visit. Sara's childhood uniquely prepared her for volunteering at the Noyo Center. Her early years were spent living on a 56-foot sailboat with her parents and two brothers with the boat moored in various locations around the San Francisco Bay. Her dad taught anatomy and physiology at Skyline College. While waiting for him to finish teaching his classes, he would often give her cow eyeballs, or sheep brains or something to dissect and study thus keeping her occupied until it was time to go home.

When Sara was about ten, the family moved ashore to South San Francisco, and in 1994 Sara and her mom moved to Little River. Sara was nervous about attending Mendocino High School. These fears were quickly overcome when the basketball coach walked by the office as she was getting enrolled. He looked in, then backed up; then asked if the six-foot-tall Sara played basketball. Upon her affirmation he immediately put her on the team thus giving her a whole team-load of new friends.



After graduation, Sara moved to San Francisco and married. For ten years, she and her husband traveled the western states as employees of Trader Joes. After their divorce she continued to travel the U.S. until 2019 when she returned to Little River to make it her home.

Volunteer Highlight(cont.)

Sara started volunteering at the Noyo Center by doing beach surveys. This is where she met Stranding Coordinator Sarah Grimes. Given that, to quote Sara, she “kind of grew up with cadavers”, she was thrilled when Sarah G. called her for help with a necropsy of the beached beaked whale. This included looking for the cause of death and collecting measurements and tissue samples for future research. Now when she gets a dead animal call, she immediately drops whatever else she is doing to go help Sarah G. in any way she can: by watching, by assisting, and by showing respect for the lost life.

To quote Sara, “I have to manage the hurt of the moment, then move into the wonder of the science. To appreciate its life and then understand why it died.” She has also participated in getting footage of the whale fall process with the sunken sperm whale, working with the ROV/submersible camera, and with the collection of the humpback whales’ songs.

Her love for this work and the Noyo Center shines through. She is excited to see how her involvement may expand and grow in the future, finding her work here magical and exciting. She loves how happy it makes her feel, it’s “like coming home” to her childhood dream of being a marine biologist. Her biggest wish? To work in the future marine biology laboratory of the yet to be built La-BONE-atory. Given her passion and energy, I’d lay good odds of seeing Sara immersed in the lab as the latest beach find gives up its secrets.

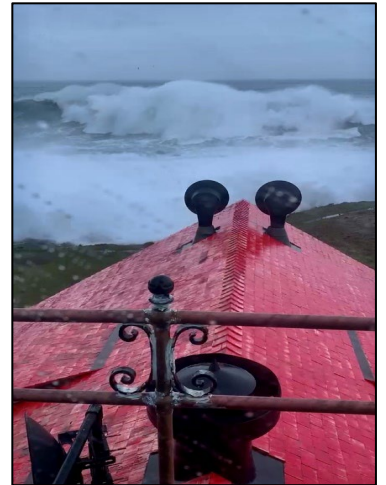
What Washed In

by Nancy Lloyd

January storms delivered torrential rain and high surf, hindering opportunities for marine mammal sightings and rescue. Still, two sea lions were found dead. One was found a mile up the Albion River, and another near Pine Beach in Fort Bragg.

Bird specimens found on beaches, one even as large as a turkey vulture, have been submitted for avian flu tests. At least one raven and two geese have tested positive locally for avian flu in January. As always, avoid handling dead wildlife without appropriate gloves for your own protection.

Dramatic wave action was photographed by lighthouse keeper Jen Lewis from the top of Point Cabrillo Lighthouse. The lighthouse safety beacon still operates, but high waves splintered the wooden entry doors and wiped out the first-floor museum under the beacon’s lighthouse tower. The Lighthouse is closed for at least several weeks pending repairs.



Did You Know?

By Donna Worster

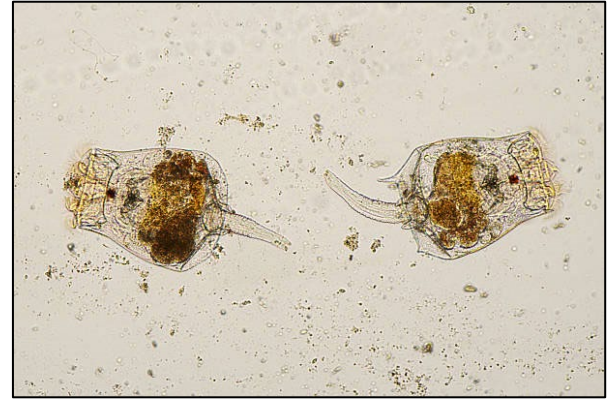
There is a new exhibit at the Discovery Center called Seeing Scientifically. The exhibit is the result of a partnership between the Noyo Center and the Exploratorium in San Francisco. As I approached the exhibit, I saw what appeared to be small creatures moving around on the monitor, consuming little bubbles, and pooping out green puffs. These are rotifers, which are plankton, living in the ocean right at our front door. They are the base of the ocean food chain. All ocean life depends on these tiny critters.

What we are seeing is a microscopic slide containing rotifers and algae that is placed under a powerful microscope and projected on the screen. Floating around among the rotifers we also see small “o” shapes that the rotifer was not digesting. I later learned these are small microplastics added to the microscopic slide, which gives one some perspective as to how small plastic ocean debris is breaking down in our ecosystems.

Did You Know?(cont.)

As I stood there transfixed, Michael Brito, our newest scientist, came to explain what I was watching. I was mesmerized by the display of activity occurring under the microscope. I posed the statement, “where is its heart?” Michael said, “it doesn’t have one.” I said, “but it is breathing, I can see the mouth taking in the food and extracting it like I do. The chest cavity is going in and out.” It turns out that rotifers do not need a circulatory system because diffusion allows adequate exchange of water, nutrients, and waste.

Michael explained that the exhibit’s objective is to get our visitors at the Discovery Center to think like and ask questions like a scientist. The exhibit’s artificial intelligence software encourages users to follow a line of questioning and rewards careful observers with a better understanding of what they are seeing. In addition to getting close to the rotifers, guests can observe how plastics are present in the ocean, including at a microscopic level.



Rotifers

I followed him into the makerspace and there was a line of conical flasks filled with green liquid. The green liquid is millions of tiny single-celled algae. This is rotifer food, taken from the ocean and grown in labs. On the shelf above, in smaller glass jars, were the smallest, thinnest white dots I’ve ever seen. He said these are the rotifers that were initially collected from the ocean but are essentially domesticated since they have spent generations being raised in captivity.

I encourage you to visit the Discovery Center to learn more about these tiny creatures and participate in this project.

Become a Member!



Blue Whale
Membership
\$100 per month



Sunflower Sea Star
Membership
\$50 per month



Orca
Membership
\$25 per month



Bull Kelp
Membership
\$15 per month

As a volunteer you help make the Noyo Center for Marine Science a great destination for visitors interested in marine science education and research. Your contribution of time, energy and knowledge all are invaluable. As we are moving into a new year and continuing to grow our outreach and education programming, we hope that you will consider becoming a sustaining member with the Noyo Center. Sustaining members are especially important to the organization as it allows us the added stability of regular monthly income to help with year-round expenses.

There are several options to choose from to become a sustaining member and more information is available by [visiting our website](#). Volunteers who become a sustaining member in the month of February will receive a Slack Tide Café coffee mug as our gift of appreciation. And, if you are already a sustaining member, please accept our sincere thanks, and we would like for you to have a STC mug as well!

Calendar

Saturday, February 4, 10 am, New Volunteer Orientation at the Slack Tide Café.

Monday, February 6, 6 pm, Pinniped Press Zoom meeting: <https://us02web.zoom.us/j/89669688259>

Tuesday, February 7, 6:30 pm, Science Talk on Zoom: Bull Kelp Aquaculture. Register in advance for this presentation: <https://us02web.zoom.us/meeting/register/tZMpdO6pqj4pGNwkUD9ahKdjyssC29wdWBJ1>

Wednesday, February 8, 10 am, docent's meeting at the Crow's Nest.

Wednesday, February 8, 6:30 pm, Beach Survey Program: Zoom meeting: <https://us02web.zoom.us/j/81628595428>

Monday, February 20, 3 pm, Red Tide Program mussel collection. Meet at the Enchanted Trail (pull out just north of Montessori Del Mar school).

March, 2023. Whale Festival Month. Noyo Center will have a range of activities planned throughout the month. Visit noyocenter.org for more information and updates.

Non-Noyo Center volunteer requests:

Wildlift, an organization that transports wounded or sick wild birds to Santa Rosa, needs drivers. For more information, please contact sarah@noyocenter.org.

The Marine Mammal Center in Sausalito could use more volunteer rescuers in this area to help access, rescue and/or transport marine mammals. If you are interested in participating in one of their training programs or would like more information contact: <https://www.marinemammalcenter.org/>.

Pinniped Press team:

Carin Berzolheimer, Wendi Felson, Linda Francis, Mary Jackson, Jeff Jacobsen, Andrew Jordan, Nancy Lloyd, Peggy Martin, Alix Phillips, Toni Rizzo, Jim Rolfe, Ann Russell, Teresa Skarr, Donna Worster with Sarah Grimes, Michael Brito, and Trey Petrey. If you have photo or writing skills or have a particular idea for an article or just want to join in with a great group, let me know: wendi@noyocenter.org.

