

# BETWEEN *the* TIDES

F r i e n d s   o f   F i t z g e r a l d   M a r i n e   R e s e r v e

D e c e m b e r   2 0 2 5

## From the Desk of the Planktoneers

by Sarah Carter, FFMR Volunteer Naturalist

Greeting Saturday morning via the sprawling, pastoral hills spanning from San Mateo to Highway 1, I make my way to the Pillar Point Harbor docks to meet a handful of fellow Fitzgerald Marine Reserve volunteers. This group of naturalists, aka “the planktoneers,” staffs our Plankton Pop-Ups at the Visitor’s Center.

The program got started when Board Members Gregg Langlois and Karen Kalumuck teamed up. Karen worked previously at the Exploratorium where she developed hands on activities with dock schmutz from the San Francisco Bay. Gregg worked previously with the California Department of Public Health’s Marine Biotoxin Monitoring Program for early detection of toxin-producing species.

Gregg noted: “Karen and I began kicking around ways to incorporate dock schmutz and plankton at the Visitor’s Center as a way to enrich the experience of visitors, connecting the plankton to our marine food web and to global issues. The dock critters provide a hands-on connection to life on the FMR reef.”

Plankton is a diverse group of organisms that drift with the ocean currents. Plankton includes bacteria, algae, animals and protists (single cell organisms that have characteristics of both animals and plants). Ocean currents move plankton across the globe and through the California current.

Phytoplankton (“plant drifters”) are the foundations of the food chain. They are primary producers that capture energy from the sun. This

group produces up to 50% of the world’s oxygen through photosynthesis. Zooplankton (“animal drifters”) in turn eat phytoplankton. Zooplankton may go on to be eaten by small fish or invertebrates or they may survive to mature into adult forms of marine life such as barnacles and mussels. Here in San Mateo County diatoms (single celled algae) and dinoflagellates (protists) are especially abundant in the plankton.

When we meet before our monthly FMR Plankton pop-ups we are looking to obtain two things:

- 1) a sample of harbor water for plankton
- 2) a collection of organisms from the dock schmutz to show our visitors

We sample the harbor water by dragging a plankton net across the surface and down into the water. The net lets water pass through while concentrating the plankton. A collector bottle at the end keeps the water that we later use for analysis. The sample in the collector bottle is decanted before creating the final sample.

Anyone who’s helped pull the sample can attest that this process is always extremely zen. We hang the net over the pier or between the docks and draw it up hand over hand, releasing it down, starting over again about 20 times, or hauls, over.



Cynthia Giovannetti, Sarah Carter, and Mike Martin gather dock schmutz.



Barbara Williams-Sheng and Kevin Hall gathering more schmutz!

*Schmutz is a real word! Dock schmutz refers to the accumulation of organic and inorganic materials on dock surfaces. It typically includes algae, bacteria, and debris from the water.*

*continued on page 2*

## Friends of Fitzgerald Marine Reserve

P.O. Box 669  
Moss Beach, CA 94038  
<https://fitzgeraldreserve.org>

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### Our Mission:

The protection and preservation of the Fitzgerald Marine Reserve as a unique intertidal and coastal environment through the promotion of educational and experiential activities for students, visitors, and researchers.

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## Planktoneers *continued from page 1*

It's easy to get lost in the serenity of focusing on something so tactile and repetitive.

In another universe about 200 feet down the dock, a few naturalists collect organisms from the dock schmutz to show the FMR visitors. Common finds include barnacles, strawberry anemone, polychaetes, feather duster worms and mussels. As we put the contents into bins, sometimes rogue skeleton shrimp or

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*It's humbling to see exactly how  
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water; it's a lot!*

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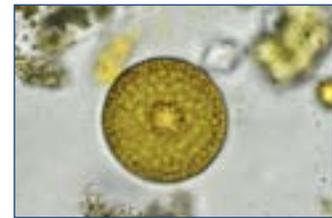
tiny rock crabs make themselves known. We quickly get in the zone, mesmerized by the ornate worlds we are able to pull up and observe firsthand.

The water sample and organisms are brought to FMR where we eagerly set up our microscopes and viewing tables. We make sure to account for salinity and oxygen so as much as possible of what we take makes it through the afternoon and back to the harbor.

A series of jars containing the creatures we collect are displayed outside. This way visitors can handle the jars without harming the organisms and also get a much closer look at a limpet foot, urchin tube feet, a filter feeding barnacle or see that a small kelp crab really looks like a spider!

Once set up inside, looking through the microscope at 100x magnification is like traveling to another world. We prepare microscope slides using only a few drops of the harbor water sample. It's humbling to see exactly how much life exists in a single drop of water; it's a lot! Cruising the slides is always thrilling—you never know what you'll see.

Some diatom species are usually abundant. These include Chaetoceros, which grows in chains of cells, Coscinodiscus, a diatom with radial symmetry and Licmophora, a triangular shaped cell we normally find attached to macro algae.



Other organisms are seen only under certain conditions. These include rotifers, a microscopic wheel animal that looks like a budding flower as it moves, and the otherworldly looking early stage barnacle with feathery appendages that allow them to swim. ➡



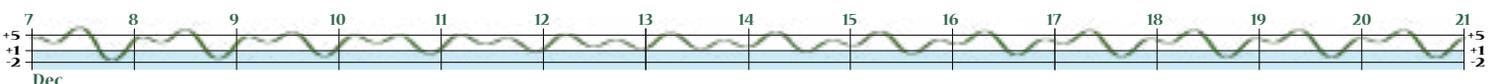
The graph displayed across the page bottoms shows tides for 12/7/25 to 4/26/26 at Pillar Point Harbor. Where the date appears is midnight. Reefs are accessible for exploring at low tides during hours when FMR is posted as "Open." Low tides at least +1 or below are best for tidepooling. See: <https://fitzgeraldreserve.org/lowtides>

*The winter afternoon low tides change to morning low tides in March. There are almost equally low tides several days before and several days after the noted low tide dates.*

### The lowest tides this period at Pillar Point Harbor:

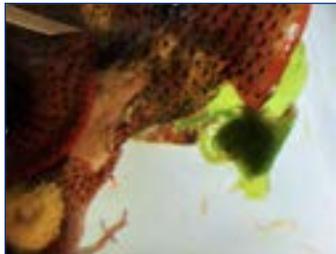
-1.79	1/2	4:10pm	-0.71	3/1	3:34pm
-.70	1/18	4:57pm	-.39	3/22	7:59am
-1.36	1/31	3:57pm	-.3	3/27	1:44pm
-.45	2/15	3:53pm	-1.38	4/19	6:56am
-.78	2/28	2:54pm			

**King Tides: Dec 4-5 and Jan 2-3, 2026**



➡ One afternoon we put a bryozoan under the microscope and much to our surprise a single lophophore (a specialized tentacle used for filter feeding) joined our Pop-Up. There's a certain comical aspect to a group of adults waiting with bated breath to watch a single lophophore leave its pencil tip sized "apartment" —but we're a passionate and patient group.

Our most ambitious volunteers have been known to pull fish, notably striped kelp fish, out of the water by hand.



Additionally, I'd be remiss if I didn't mention our group has been lucky enough to encounter two nudibranchs, a Worthy Shag Rug and a Hermissenda. While it's always a great day with the volunteers, this is a holy grail find. We love showing visitors these beautiful creatures.



Based on what we see in our samples over the afternoon we can surmise what the San Mateo County winds and currents are doing. We are able to tell, for instance, if there is an upwelling, a downwelling or a red tide.

Upwelling is the movement of cold, deep, often nutrient rich water to the surface layer and downwelling is the movement of surface water to deeper depths. These movements are essential in stirring the ocean, delivering oxygen to depth, distributing heat and bring-

ing nutrients to the surface. Red tides are dinoflagellate blooms that can have harmful effects like oxygen depletion and production of neurotoxins that concentrate in the coastal food web.

While the sample is normally transparent, in April's Pop-Up the sample was muddy, almost opaque. This goes to show how prolific cell reproduction can be at certain times of the

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*Plankton feel like a beautiful reminder that in the grand scheme of things we are all micro-beings drifting through the vast ocean.*

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year. In San Mateo we see mostly diatoms in the spring and parts of summer and usually very few dinoflagellates. In the fall, with warmer ocean temperatures, we observe a decline in diatoms and an increase in several dinoflagellate species.

After the Pop-Up events, it's fun to reflect back on the day and the information shared by volunteers and visitors alike.

During my upbringing in the Midwest, I never envisioned any role in citizen science. It's been life-changing for me to engage with the Pacific in such intimate ways at Fitzgerald.

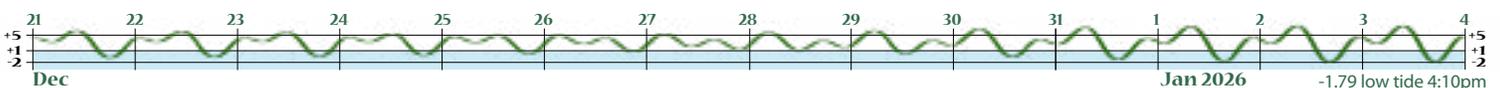
Plankton feel like a beautiful reminder that in the grand scheme of things we are all micro-beings drifting through the vast ocean. Thankfully, our life span is much longer!

The planktoneers always add our findings on iNaturalist. Keep an eye out for those photos. We'll keep you posted on our future finds.

Plankton Pop-Ups occur monthly at the Fitzgerald Visitors Center from 11am to 1pm. The next one will be on December 13. You can find more information on specific dates for each month via the San Mateo County website, Friends of Fitzgerald Marine Reserve website or the Friends of Fitzgerald Marine Reserve Facebook page. Please join us next time! ♦

*Note:* After the pop-up, we return all the creatures to the harbor where they came from. See more photos on page 9.

**About the author:** Sarah Carter was born and raised in Chicago and has lived in San Mateo since 2014. She earned her B.A. in Philosophy from Dominican University and practiced Clinical Massage Therapy before pivoting into Cybersecurity Customer Success. Sarah began volunteering as a naturalist with Friends of Fitzgerald Marine Reserve in 2022. She enjoys supporting Fitzgerald's invertebrate surveys, plankton pop-ups, and has recently joined the *Between the Tides* Editorial Board. When she's on the reef she loves spotting nudibranch.



## ~ On the Reefs ~ November 7, 2025

### from the Friends of Fitzgerald Marine Reserve Facebook page

From Amelia, Air Quality Coordinator: "On behalf of the Rise South City team, I want to extend our sincere gratitude to (the) Friends of Fitzgerald for facilitating and leading yesterday's tour at the Fitzgerald Reserve. Your thoughtful coordination and leadership made the experience truly special for our community.

"The families who attended had such wonderful things to say, they were deeply appreciative of the opportunity to explore the Reserve alongside knowledgeable naturalists. Your efforts ensured the field trip was welcoming and accessible to all, and that made a lasting impact.

"We're already looking forward to the possibility of returning next year for another enriching visit. Wishing you a lovely rest of your week!"



*Pointing at a huge chiton!*



*Capturing videos of hermit crabs*



*Starburst anemone in the shallow pools*

November 7, 2025

We had a beautiful, blustery day out at the reef on Wednesday. A fun and engaging group from Skyline College Environmental Science class came out to learn about the reef and some of the associated environmental issues. As well as more practical lessons involving stepping carefully and avoiding the wet algae.





## Registration for 2026 FFMR Volunteer Naturalist Training Class

The 2026 FFMR Volunteer Naturalist Training Class will consist of 10 Saturday classes, plus 6 additional hours spent at the Reserve with a mentor. The classes will be held on the coastside near the Reserve and at the Reserve. The proposed schedule for 2026 is: Feb. 14, 21, 28; March 7, 14, 21, 28; April 4, 11, 18. The times of the classes have yet to be determined. Volunteer naturalists must be physically capable of navigating rocks, the reef and must be 18 years of age.

Volunteer naturalists are required to volunteer a minimum of 6 hours per month. Space is limited. Your Registration Form must be received prior to the deadline to hold a space. Registration deadline is Feb. 9, 2026. No refunds available after Feb. 9

Mail the completed Registration Form with an \$80 check made payable to FFMR to:

Susan Evans  
FFMR Training Class  
P.O. Box 263  
Half Moon Bay, CA. 94019

For more information please e-mail Susan Evans at [susanmtnvw@aol.com](mailto:susanmtnvw@aol.com) or visit our web site: <https://fitzgeraldreserve.org/>

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

Address: \_\_\_\_\_ City \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone (cell and/or landline): \_\_\_\_\_

Email: \_\_\_\_\_

How did you hear about the training class? \_\_\_\_\_

Please tell us a little about yourself (any prior volunteer experience; any education, travel, or experiences relating to marine science).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Land Acknowledgment Statement

The Friends of Fitzgerald Marine Reserve acknowledges that the Reserve is located on the unceded ancestral homeland of the Ramaytush Ohlone Peoples. As guests, we recognize that we benefit from the beauty and diversity of this land and seashore. We wish to pay our respects by acknowledging the ancestors and relatives of the Ramaytush community and by affirming their sovereign rights as First Peoples to govern their communities and preserve their cultures. Finally, we seek to honor the Ramaytush community's sacred relationship with ocean and marine ecosystems by educating the Reserve's visitors and protecting the Reserve for future generations.

#### We want to hear from you.

What do you like about the newsletter? What type of articles would you like to see in *Between the Tides*? What article could you write for us? Please contact the Editorial Board at: [betweenthetides.editorialboard@gmail.com](mailto:betweenthetides.editorialboard@gmail.com) and we will be in touch. See you out on the reef!



# The Women Airforce Service Pilots (WASPs) at the Half Moon Bay Flight Strip

By Tom Ciotti, FFMR Volunteer Naturalist

*The inclusion of women in the Program had been promoted by two politically influential, highly experienced female pilots, Jacqueline (Jackie) Cochran and Nancy Love, with the help of Eleanor Roosevelt.*

If you walk along the Bluff Trail at the Fitzgerald Marine Reserve you'll see a concrete pylon offshore at Distillery Point. It was constructed during World War II and used as a flagpole to fly a red flag to warn the public that anti-aircraft artillery trainees at the Point Montara Anti-Aircraft Training Center would be firing live ammunition at targets flown by pilots from the Half Moon Bay Flight Strip (HMBFS), now the Half Moon Bay Airport. During 1944 those pilots were women! Here's the story of those women and how they came to be at Moss Beach.

## Formation of the WASPs

As the clouds of war gathered in the late 1930s and the likely need for military pilots became apparent, President Roosevelt authorized the Civilian Pilot Training Program. That Program trained 400,000 men to fly. Between 1939 and 1940 it also admitted women in a 1 to 10 ratio to men to learn to fly even though flying was commonly considered unwomanly by the public. Many graduates of that Program would fly military planes during World War II.

The inclusion of women in the Program had been promoted by two politically influential, highly experienced female pilots, Jacqueline (Jackie) Cochran and Nancy Love, with the help of Eleanor Roosevelt. When America entered World War II these two women pilots independently convinced the government to recruit, train and establish volunteer groups of women pilots whose purpose was to help fly domestic military missions such as ferrying military planes so that male pilots, who were in shortage, could focus on combat missions. In 1943 those groups merged and were formally named the Women Airforce Service Pilots and acronymically the WASPs.

The notion that women might be capable of flying military aircraft was a radical

concept to nearly all of the male-dominated misogynistic U.S. military. From its inception the WASPs was considered to be a likely unsuccessful frivolous experiment by the military. And throughout its existence it would be hamstrung by skepticism, suspicion and gender discrimination. A major result of this was that the WASPs were formed as a volunteer civilian entity that was never given military status, military benefits or veteran recognition by the government during the war. None of this adversity deterred American women.

Over 25,000 women applied to join the WASPs! An amazing number given that among the requirements for applicants were that they possessed a pilot's license and a substantial number of flying hours. Only a little over 1800 of those applicants were chosen for training and only about 1100 would complete training and graduate. Three of those graduates, all members of the third basic training class of 1943 (class 43-W-3), would go on to fly military planes at the HMBFS. They were Shirley Thackara (né Ingalls), Mary Leatherbee (né Logan) and Mildred Chapin (né Toner).

## Shirley Thackara

Shirley Thackara was born in 1918 and raised in New York. She was working for Pan American Airways when a friend told her about the women's pilot group Jackie Cochran was forming. She took flying lessons on her own before applying to join the WASPs.



L-R: WASPs Mildred Toner, Mary Lee Leatherbee, Shirley Thackara—with Army Air Force Lt. Nash. Photo courtesy of Shirley Thackara



Shirley Thackara in the PQ14 at the Moss Beach military airstrip. Photo courtesy of Shirley Thackara



## Mary Leatherbee



Mary Leatherbee was born in Louisiana in 1910. Her father died when she was an infant and her mother remarried to a prominent Airforce officer. Although I could not determine how she learned to fly prior to joining the WASPs or her incentive to join the WASPs, it was likely through her stepfather.

## Mildred Chapin

Mildred Chapin was born in 1920 and raised in rural eastern Colorado. I could not determine how she learned to fly prior to joining the WASPs or her incentive to join the WASPs.



## Training

WASP Class 43-W-3 basic training classes started at a base in Houston, TX but moved to Avenger Field in Sweetwater, TX because of poor flying weather and inadequate facilities at Houston. Once male pilots/trainees from adjacent Airforce fields realized there were female pilot trainees at Avenger they began making frequent flyovers and landings at Avenger in hopes of seeing and meeting the ladies. The military command was admirably determined to protect the reputations of the WASP trainees. To achieve this and avoid the trainees being distracted, a ban was issued on flyovers and landings except in cases of dire emergency. In the first week after the ban issued there were over 130 emergency landings at Avenger Field! In another effort to protect the trainees' reputations, only married men were



WASP aircrew aboard a Douglas RA-24 Banshee reeling in a well-shredded anti-aircraft gun target sleeve following a training mission during WWII. Most WWII-era Tow Target Squadrons, including the 17th TTS on Oahu, had a few RA-24s on hand for target towing or observation duties. (US Army Air Forces image)



Training on the 20mm "Oerlikon" Anti-Aircraft Gun at Point Montara, 1943. Photo courtesy JQ Oswein and the HMB History Association.

used as instructors. The military felt that would reduce fraternization and, naively, that married men "knew how to handle women."

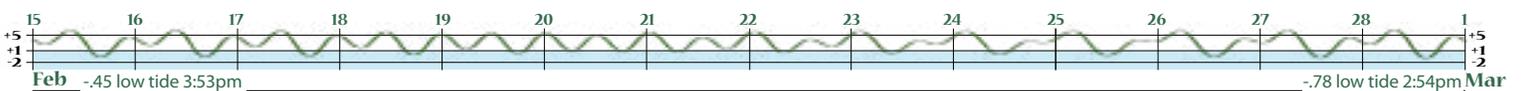
Shortly after their July 1943 basic training graduation, 23 of the 43-W-3 graduates, including Shirley, Mary and Mildred, were summoned to Washington D.C. where they were told they were being assigned to a new top-secret training program named Tow Target. That program consisted of two distinct three-month segments. The first, conducted at Camp Davis, NC, consisted of learning to fly an A-24 Douglas dive bomber rigged with a cable attached to a target flag that could be reeled out and back while flying target patterns for ground artillery practice. The second, conducted at Liberty Field, GA, involved learning how to fly a target drone from a mothership using radio-control. The Cessna UC-78 "Bamboo Bomber" was used as the mothership and a Culver PQ-8 or PQ-14 was used as a drone. One WASP would fly the mothership while another WASP would radio-control the target drone from the mothership. The drones could also be flown manually and during training a third WASP could be present in the drone to fly it manually if needed.

*continued on page 8*

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*Shirley, Mary and Mildred, were summoned to Washington D.C. where they were told they were being assigned to a new top-secret training program named Tow Target.*

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Note that both segments of training were called Tow Target even though the second segment did not involve physically towing a target behind a plane.

After Tow Target training, Class 43-W-3 was split and one group, including Shirley, Mary and Mildred, was sent in January 1944 to Otis Army Air Base in Massachusetts to gain more experience with radio-controlled target drones.

### Assigned to HMB Flight Strip in Moss Beach

In April 1944 Shirley, Mary and Mildred were reassigned to the HMBFS to fly Tow Target missions for the anti-aircraft artillery training conducted at the Navy's top-secret Point Montara Anti-Aircraft Training Center which was located just to the north of the HMBFS. Based on numerous documents describing the WASP activities at HMBFS I obtained from the WASP Official Archives at the Texas Woman's University, at least some of those missions were done with a radio-controlled PQ-14 drone. None of those documents indicated the WASPs physically towed targets behind a plane at HMBFS. However, Shirley Thackara was interviewed decades later by local historian June Morrall and others and told them she "towed targets" at HMBFS that were shot at by the anti-aircraft artillery trainees. Because physically towing a target and radio-controlling a target drone were both referred to as Tow Target by the military it is unclear to which procedure she was referring. Ah, the fogs of war and history!

While at HMBFS the WASPs were quartered in an abandoned farmhouse located on Highway 1 about midway on the flight strip. Shirley described the farmhouse to historian June

Morrall as "It was so awful, it was funny...three rooms, kitchen with nothing but a sink and absolutely no furniture except three Army cots."

Shortly before the WASPs arrived at Moss Beach, Congress began debating a proposed bill to militarize the WASPs. By then the tides of war had turned in our favor and we had more military male pilots than were needed for combat missions. Excess pilots were threatened with being converted to ground troops and lobbied legislators that the WASPs were taking their jobs and were no longer needed. While the military and public had reluctantly supported using women pilots to free up male pilots for combat they overwhelmingly opposed replacing male pilots with women pilots. The bill failed in June 1944. With that defeat and the war winding down in Europe the military soon announced the WASP program was to be deactivated by December 20, 1944. In August 1944 Shirley, Mary and Mildred were assigned from HMBFS to Hamilton Airforce Base in Novato, CA where they remained until they were deactivated.

### Shirley, Mary and Mildred after the war

Shirley returned to New York and worked for Steuben Glass. She married in 1955 and had two children. She and her husband moved to San Francisco and in 1990 retired in Carmel, CA. She died in 2015 at age 96.

Mary went to New York and worked as senior theater editor and later as senior travel editor at Life Magazine. In 1933 Mary married her older brother's theatrical producing business partner, Charles Leatherbee, and moved to London. Her husband died in 1935 and she returned home to Louisiana and never remarried. In 1972 she drowned in the Campbell River in British Columbia while white-water rafting. She was 61.

Shortly after the war ended Mildred married Edward Chapin, an Airforce pilot from Lookout Mountain, TN. She had two sons and lived in Tennessee until her death in 1971 at age 51.

After the war the WASP records were sealed and classified and remained so until 1977 when the WASPs were finally given military veteran status by legislation signed by President Carter. The sealing caused the WASPs to be largely forgotten and the lack of military veteran status denied the WASPs military benefits and recognition for their service until 35 years after their inception. ♦

### Fifinella — The WASP mascot



WASP Dorothy Olsen wears an A-2 jacket with a Fifinella patch.



*Fifinella was a female gremlin designed by Walt Disney for a proposed film from Roald Dahl's book The Gremlins. During World War II the Women Airforce Service Pilots (WASP) asked permission to use the image as their official mascot and the Disney Company granted them the rights.*





## Message from President Ron Olson

It's hard to believe that this year is coming to an end. We really need to look back to January to appreciate all the changes and contributions to the park. Our naturalist training class was remarkable. As usual, our class included rangers who quickly used their newly acquired skills in classrooms and at our Visitor Center. Other graduates quickly jumped on board to participate in naturalist-led tours, as well as presenting in classrooms and events. Our tour calendar for this fall started off early, and I'm pleased to see the response by our volunteer naturalists in sharing their skills on the tours. This tour season will be challenging with over 3,000 guests signed up to date.

Through the efforts of our county interpretive staff and our dedicated group of volunteer naturalists, our Visitor Center has been more active this year. Plant and animal specimens (aka dock schmutz), collected from HMB Harbor, have been on display on a regular basis. It is a unique experience for our visitors to enjoy (see article starting on page 1 and photos below). Check out our FFMR website and the County Parks website to see when our microscopes and magnifying lenses will be set up. Also don't miss our beautiful collection of pressed algae specimens on display. A special thanks goes out to all volunteers and county staff who have worked so hard to make improve-

ments to our Visitor Center. More changes are on the way to make better use of our limited space.

I hope that all of you have had the opportunity to take note of the physical changes at FMR. Landscaping at the main area is complete, with large picnic tables in place and fresh plants just waiting for Mother Nature to give a helping hand. Our gray whale display is more accessible with new signage to better tell the tragic story of this wonderful animal.

Our county park staff has been extremely busy keeping up with maintaining our park. Besides the normal trimming and removal of fallen branches from the aging cypress trees, a great deal of effort has been made to keep us safe by repairing and replacing fencing around the park. Another safety concern is the ramp access to the beach, which has remained closed. Much of the concrete at the end of the ramp has collapsed, compromising the stairway leading to the beach. This year's King Tides will be some of the largest on record. If we experience significant storms this winter, we should expect a major impact to the area. Hopefully, Mother Nature will give us a "Goldilocks" year; "not too wet and not too dry."

I do see a bright future for our park. I see it in the faces of those new to the park and those who come back for more. Each visit provides a new experience that we can share with loved ones or enjoy, peacefully alone. It is truly a wonderful place. ♦

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*This tour season will be challenging with over 3,000 guests signed up to date.*

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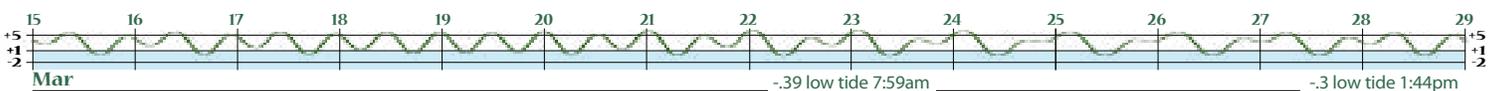
*I do see a bright future for our park. I see it in the faces of those new to the park and those who come back for more.*

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### Dock schmutz at the harbor—a rainbow of creatures.



*The docks at Pillar Point Harbor are floating and therefore a portion of them is always underwater making a perfect home for sessile marine organisms. A buoy is easily lifted from the water to reveal a colorful display of algae and colonial animals such as encrusting bryozoans. Photos by Kathryn Barton.*



# Volunteer Naturalists Convene at FMR for “Open House”

Karen Kalumuck, Ph.D.

FFMR Volunteer Naturalist and  
Vice President of the FFMR Board of Directors

“Squeeeeeee....!!!” was the word on a Saturday in August, as a young boy delighted in discovering nature’s squirt gun, the solitary tunicate also known as the sea squirt (*Ciona* species). The treasure chest of dock-fouling organisms had been collected from Pillar Point Harbor by Volunteer Naturalist Cynthia Giovannetti and crew for hands-on exploration at FMR. While the young visitor aimed the animal’s siphons toward his father and squeezed, other Volunteer Naturalists were engaged in checking out the specimens and exhibits in the newly reorganized FMR Visitor Center and learning about volunteer opportunities available in the many programs that FFMR conducts. While doing early-bird holiday shopping from the FFMR merchandise, Volunteers enjoyed swapping stories of tidepool adventures and memorable field trips.

Presentations about all of the volunteer activities conducted by FMR, and a lunch time Discussion Circle to solicit insights and feedback from Volunteers on issues of concern. Thus began the planning of the first ever FFMR Volunteer Naturalist Open House at FMR, on August 23, 2025.

## Planning, Hoping, and Doing

As with any new endeavor, the Open House was a bit of a guessing game...would anyone show up? Where will we find enough tables for displays and chairs for the Discussion Circle? Live presentations or info on tables? Will we have enough Volunteers who are willing to help sell merchandise? With some creative thinking—having everyone bring their own lunch and a chair to the Discussion Circle—generous loaning of tables by Volunteers, and enthusiastic hawkers of merch, the day was a great success. Not only did over 35 Volunteers attend but also the Discussion Circle brought to the forefront things that FFMR can improve in the short term and long term.

## The Open House Events

### The Visitor Center

Showing off the newly reorganized VC was a delight! Volunteers (and visitors) could see that the specimens have been cleaned, and identified with labels. The invertebrate artifacts are housed in Riker boxes, and organized by Phyla (Photo 1). The skulls are now cleaned and housed in plexiglass boxes for protection. These better-organized displays will provide a variety of launching points for Volunteers to engage the public with discussion of individual animals, algae, and ecosystems. Geological specimens and fossils are also identified while the seal and otter pelts have been cleaned and stored in protective bags. Boxes of “hands-on” items are available to use with visitors and more are forthcoming.

### Programs and Opportunities

Throughout the day, informal presentations highlighted other volunteer opportunities within FFMR. Ron Olson led a group to the



Photo 1: Interpretive Ranger Intern Kaitie Soto displays an abalone shell in front of the skull, invertebrate, and pelt collection in the Visitor Center.

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*...volunteers enjoyed swapping stories of tidepool adventures and memorable field trips.*

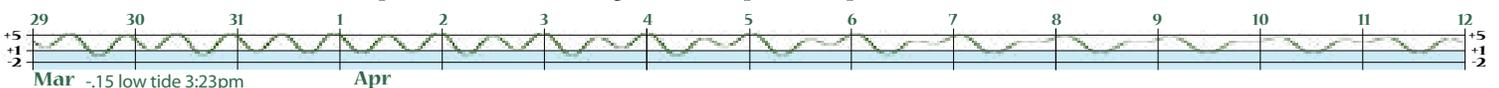
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*Should you be interested in becoming an FFMR volunteer, please contact us at: [Info@fitzgeraldreserve.org](mailto:Info@fitzgeraldreserve.org)*

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What began as an idea to recruit Volunteers to staff the Visitor Center, and to highlight and stimulate FFMR merchandise sales, expanded into a celebration of all that FFMR does. Word had been spreading that many Volunteers did not know much about the FFMR structure or all of the volunteer opportunities. Who is on the FFMR Board of Directors and what do they do? Besides leading tours and roving the reef, what other volunteer opportunities are available? How do we learn more about these opportunities and sign up to participate? Obviously, the Board had not been communicating with the Volunteer Naturalists in an effective manner.

In addition to the original plans, we thought that this gathering would be an opportunity to probe more into the experiences of Volunteer Naturalists, discuss ideas to rectify our communication deficiencies, and listen to suggestions for improvements to the volunteer experience. Before long, we had planned pre-



seal overlook to illustrate the role of our newly renamed Seal Ambassadors (formerly seal sitters). Plankton collections and displays and microscope displays in the VC (Plankton Paloozas) was led by Gregg Langlois. Cynthia was very busy with the critters from the dock (Photo 2); this popular event was enjoyed by all of the visitors to FMR that day. Deborah Pierce headed up the presentation of Classroom Outreach; and *Between the Tides* (this quarterly newsletter), and Research Surveys both had table displays.

### BYO Lunch and Chair

At noon a brown bag lunch Discussion Circle was conducted, including FFMR Board members, seasoned Volunteers and recent training class graduates (Photo 3). After introductions, all manner of topics were discussed. This lively exchange sparked much conversation, and we now have a number of points which can be improved to enhance the Volunteer Naturalist experience.

### Some of the major issues discussed included:

#### ● Internal Communication.

During the last 5 years a number of new activities have been undertaken by FFMR, and each of them are opportunities for Volunteer Naturalist engagement. These include:

- the Quarterly Research Surveys of the reef;
- Land Tours—offering both Vegetation and History components;
- Plankton drags and Interactive presentations;
- Dock organism collections and explorations;
- Algae collection and prep for display;
- Staffing the revitalized Visitor Center;
- Creating our quarterly newsletter BTT, and more.

While some of these activities are ongoing, on a regular basis, others are more sporadic. We realized that we need to better communicate to all Volunteer Naturalists when these events occur and how to get involved.

One effort at improved communication has been undertaken by FFMR President Ron Olson. He has begun to send out a short, monthly email to all Volunteers that highlights upcoming events and contact information. While other

ideas are being explored, we hope that this first step will be helpful.

#### ● Recruit More Volunteers for Subcommittees.

The business of FFMR and the Board of Directors runs the gamut from managing financials and fund raising to interfacing with San Mateo County Parks department and rangers, volunteer recruitment, and much more. We are looking at breaking out some responsibilities to have more individuals involved in the “business” of running FFMR without needing to be a board member. A few examples of these sorts of jobs or committees are a photo committee i.e., developing a photo bank of members’ work; social committee; and volunteer enrichment. Stay tuned for more information.



Photo 2: Cynthia engages visitors with invertebrates collected from the docks at Pillar Point Harbor.



Photo 3: Half of the discussion circle at the Open House.

#### ● Social Media

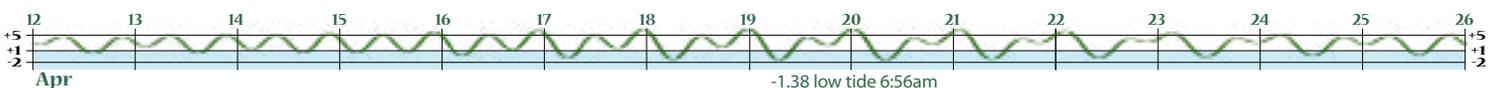
Social media provides a challenge as it is used for both Volunteer Naturalists and separately for the general public. While we have the FFMR webpage, we also have a Facebook page and a Discord Channel. A subcommittee of Volunteers is currently exploring the possibilities of creating volunteer-specific interactive spaces, and improving our communications with the general public.

#### ● FMR Tours and Training Class

There was much discussion about Volunteers’ experiences giving tours and the challenge of retaining Volunteers who are willing to lead tours. Volunteers indicated an interest in receiving more training in interpretation as well as leading tours in pairs of two. These and other

*continued on page 12*

*As tour season is upon us this fall, it is critical for FFMR to have a robust cadre of volunteers who are willing to lead tours.*



# More FFMR Naturalist Training

from our FMR Facebook page

*You help people discover!*

FFMR Naturalists got together in November with SMC Ranger Katherine to learn the best methods for sharing our tidepool love with visitors of all ages.

The training highlighted great techniques for clear communication, and how to guide people so that they can experience the 'thrill of discovery' during their time on the reef.

One reader replied:

Great! It's wonderful that you do more than just share what you know. You help people discover!



## Open House

*continued from page 11*



ideas bubbled up on managing a (sometimes challenging) tour group, and to ensure that the experience is fun and educational for everyone. As tour season is upon us this fall, it is critical for FFMR to have a robust cadre of Volunteers who are willing to lead tours. That said, Cynthia Giovannetti (assisted by Gregg Langlois), developed a survey about the FFMR Volunteering experience with many questions aimed at the experiences of leading tours. The responses are currently being analyzed and the results should provide us some valuable information on how we can address concerns and ensure that the FFMR Volunteer Naturalist experience is meaningful and personally satisfying.

*Volunteers mug with our very own land seal, Sealia.*

By the way, the FFMR merchandise sales, led by Carol Ferguson and Ann Mangold, saw an all-time high, one-day sales amount of \$1054!

Thanks to everyone one involved in making this first Open House a success!

Should you be interested in becoming an FFMR volunteer, please contact us at: [Info@fitzgeraldreserve.org](mailto:Info@fitzgeraldreserve.org) Note that not all volunteer positions require your attendance at the annual training class. Seal Ambassadors and Visitor Center Volunteers can receive individualized, "on-the-job" training with a seasoned Volunteer Naturalist. ♦

## Friends of Fitzgerald Marine Reserve

Donation Chair, P.O. Box 669, Moss Beach, CA 94038, or through our website: <https://fitzgeraldreserve.org/donations>

### Contribution Levels:

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  \$1000  
 \$50   
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  Other \_\_\_\_\_

I want to double the value of my gift through my employer's matching gift program (please enclose the matching gift forms).

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