



# Word on the Waves

a publication of the Fisheries Observation Science Program at the Northwest Fisheries Science Center

## Observer Spotlight: Rachel Mahler

Observer since 2015  
Currently stationed in Santa Barbara

Rachel Mahler is on observing's cutting edge. From testing OPTECS to observing new fisheries, she thrives on being out there.

If you're looking for Rachel Mahler, look outside. She sees "the world as (her) gym." Observing, hiking, kayaking (with a fishing pole), skating, camping... outdoors is where she's happiest.

Rachel hails from Trabuco Canyon, California, which is in the heart of Orange County. An Oregon State University alum, she holds a bachelor's degree in Biology (concentration in Marine Biology). She began



observing in 2012 in Dutch Harbor. After a hiatus for travel, she accepted a contract working on the west coast in 2017 where she's been ever since.

Rachel's favorite part of observing is being on the ocean. She says,

*"There are moments when everything is perfect. It's a sense of peace and beauty you can't find on land. I stick with observing for those moments."*

Being stationed in Santa Barbara, CA allows Rachel to observe two new fisheries: California ridgeback prawn and California sea cucumber. This the second year that we've collected data from these sectors and Rachel's been on the front line. She enjoys observing these fisheries "because there's only a handful of these vessels left in the state."

She describes their fishing process:

*"The fishers keep the prawn alive in the holds to sell for top dollar. Hauls are 200-500lbs. The fishers touch each prawn to ensure it's suitable for survival. If the prawn are too small or have a soft shell, they're discarded."*

*"Cucumbers come in different shapes, thickness, and firmness. The fishers process them on the vessel, slitting them from one end, pulling out the digestive tract, and leaving only the skins, which are dried and shipped to Asia where they are a delicacy."*



## From the Program

Jon McVeigh,  
Program Manager

Hello Observers and Friends,

I hope everyone had a pleasant spring and is looking forward to a fun and productive summer as much as I am. Here are a few items of note I want to mention.

I sent an email on May 14th letting you know the national Observer Program Safety Review (OSPR) report has been released. You can find a copy of it [here](#). As NOAA leadership put it, the reviewers found our domestic observer safety program to be robust, mature and effective. There are a number of recommendations for improvement. We're already working to implement those that we can, as quickly as possible. The expectation is that this effort will generate positive changes and enhance observer safety. Personally, I found this to be a worthwhile effort and am looking forward to continuing our strong dedication to safety.

Be on the lookout for emails detailing upcoming mortality reports from our Analyst team. We have reports updating seabird, salmon and marine mammal bycatch. The proceedings from the seabird bycatch mitigation workshop are in a recently published NOAA Technical Memorandum. See page 6 for more info.

I'm sure you've noticed our newsletter includes the *Fisheries News* section. It features links to interesting articles published by NOAA and other news sources. The stories come from all regions of the country, include marine updates and research, and features great photography. NOAA's *Fish News* is a primary source. If you want to get the NOAA news first hand, you can sign up for *Fish News* yourself. Use this [link](#) to reach the site. The sign up options is at the bottom of the page.

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## There's a New Girl in Town: Welcome Dr. Kate Richerson

We're pleased to welcome Dr. Kate Richerson to our Analyst Team.

Kate is originally from California's central valley. She earned her PhD in Ecology and Evolutionary Biology at UC Santa Cruz. (Plot twist: she studied Antarctic euphausiids (krill) for her PhD project. Brrr.) She moved to Seattle two years ago to do her post-doc work at the University of Washington and the Northwest Fisheries Science Center on West Coast salmon and crab fisheries.

Why the Fisheries Observation Science (FOS) team? She says:

*"I wanted to do management-relevant science, and I think that observers and*

*observer data make really important contributions to fisheries management and conservation."*

As for being an analyst, she says, "I enjoy coding and data wrangling, and I like the idea of supporting our well-managed fisheries."

So far, Kate has been working on the bycatch summary and mortality data. She'll be taking on other projects as she syncs up with the team. Who knows! You may meet her during trainings/briefings next year.

On a personal note, Kate has a life-long interest in animal behavior and social justice. Her childhood aspirations fluctuated between wanting to be



the next Jane Goodall and becoming a human-rights lawyer. These dovetail with her favorite ninja skill: finishing the New York Times Saturday crossword puzzle without using Google. Oh, and she bakes a killer pie. We're looking forward to learning more about that last one.

Welcome to the team Kate!

### Featured Observer - continued

**Rachel's advice to new observers:**

Don't sample more than you can handle, especially if you're not familiar with the species. Take your time.

Rachel's also active in our OPTECS development. She's been testing the system and loves it. She reports,

*"I save so much time. For anyone starting off, be patient with it. It does take getting used to, but after a few hauls, it's worth it."*

Rachel's bucket list is a work-in-progress. Currently, she's outfitting a van for off-grid living, which she plans to drive to Baja for an extended camping expedition.

Rachel, your contributions to the program are greatly appreciated. Thank you. Happy adventuring.

### From the Program - continued

I also want to remind you about NOAA's Sexual Assault/Sexual Harassment (SASH) Helpline. It's available to observers and provides crisis intervention, referrals, and emotional support to sexual assault/harassment victims and/or survivors. The helpline is operated by the Rape, Abuse and Incest National Network (RAINN), the nation's largest anti-sexual violence organization. The service is anonymous, secure, and available worldwide 24/7. Support is available even if the incident is non-work-related. Access the service via phone (1-866-288-6558), website (NOAASASHHelpline.org) mobile app (NOAA SASH Helpline) or text (202-335-0265).

As we head into the busy summer season, please take a moment to double check all of your safety gear. As always, reach out to us if you have any questions or suggestions on how to increase observer safety. We love getting feedback from you all out on the water.

Stay safe,



## From the Galley

John LaFargue, CA Coordinator

Spring is here and summer's on its way! The asparagus is in full production and the halibut are biting.

This time of year, I always try to combine seafood and asparagus. The combination just works. Also, I find rice and seafood dishes very comforting. So many cultures have them: Spanish paella, Chinese shrimp fried rice, and Italian risotto.

All these dishes have their time and place, but I make risotto more often than the rest. There is something about the luscious texture of a well made risotto that really hits the spot. Mmmm!

One trick to a good risotto is a great broth. I've used store bought stock in a pinch, but it's always better with home-made stock. If you choose to use store bought stock, use low sodium varieties or your dish may come out overly salty.

Risotto's arborio rice can absorb more stock than standard short grain rice. It also releases a lot of its starch as you stir in the broth making the resulting dish creamy. Some folks cheat and add a splash of cream at the end. Who am I to judge? Do whatever you need to do. This is also one of those dishes like fish tacos, where I think seafood and cheese go together Very controversial I know!

### Crab & Halibut Risotto with Asparagus and Peas

- 4 c plus a little, chicken, crab or fish stock
- 15-20 threads saffron (optional)
- 2-3 tsp extra-virgin olive oil
- 1 c arborio rice
- 1 small onion, finely diced
- 2 cloves garlic, minced
- ¼ c white wine or a splash of Vermouth (optional)
- 1 tsp sea salt
- 4 Tbsp butter
- 8 asparagus spears, broiled
- 4 oz peas, fresh or frozen
- 4 oz cooked fresh crab meat or substitute prawns if crab is out of season
- 4 oz cooked halibut or other firm white fish, cut in bite size pieces
- Zest and juice of ½ to a whole lemon

- Extra sea salt, to taste
- Freshly ground black pepper
- Fresh herbs to garnish

Pour the stock into a saucepan and bring to a boil. Reduce heat and simmer. Crush the saffron and add to stock.

Rub asparagus with olive oil, season with salt and pepper, broil on a cookie sheet until a little color shows but the stalks are still firm.

Place a heavy saucepan over medium heat. Add the oil, onion, salt and half the butter. Stir until the onion is translucent but not brown.

Add the rice. Stir for 1-2 minutes, until the rice is well coated. Reduce the heat to medium-low. Add the garlic and wine or Vermouth, if using. Once the wine cooks off, add stock a cup at a time. Stir constantly. Let each addition of stock be absorbed before adding more.



The Crew: Andrew Hampton and Heather Brown

Continue adding stock for 15-20 minutes, stirring constantly. Increase heat to medium. Continue adding remaining stock until the rice is al dente and creamy.

Stir in the remaining butter, the crab meat, halibut, asparagus and peas.

Remove from heat. Add lemon zest and juice. Season to taste. It should be loose and slightly runny. If it is too tight, add a little more hot broth.

Plate on warm plates or shallow bowls. Finish with finely grated Parmesan cheese and chopped fresh herbs like parsley, cilantro or chervil.

## Welcome Observers of 2018

Each year, our Training Team briefs or trains close to 100 observers. It's a big undertaking. We're extremely proud of each group who "graduates." Here's this year's roster.

### Annual Briefings



**January**  
**Back L to R:** Richard Childers (Catch Monitor program), Mark Winscher, Isaac Davidson, Andrea Jolley, Adam Lewis, Cameron Trout, Emily Bornhop, Salvador Ramirez, Sean Rogers. **Front L to R:** Vanessa Fleming, Steven Behmke, David Daly, Kitt Lee.

**February**  
**Back row L to R:** Casey Gosnell, Matthew Weinrich, Greg Masessa, Jeffrey Mathers, Benjamin Briggs, Allison Shields. **Center L to R:** Morgan Golding, Daniel Schwab, Kylee Mroz, Amanda Zygutis. **Front L to R:** Michael Findley, Alycia Aryea, Dylan Tauzer.

**March**  
Left to Right: Conner Emenhiser, Tom Holland, Cody Carouthers, Joshua Doehling, Brian Matson, Ryan Shanaghan, Bob Bettin, Phil Lockton, Gabriella Kurz, Woody Venard, Colton Zondervan.

#### December (no photo)

In attendance: Rob Adams, Russell Adams, Jesse Boord, Tyler Dettmann, Kristen Duncan, Joseph Dunigan, Garrett Edwards, Ken Grimes, James Grunden, Brad Laird, Mike Lindley, Rachel Mahler, Steve Samana, Toby Shewan, Kevin Stockmann, Steve Todd.

### Training Classes



**February**  
Left to Right: Matt Amberg, Ashley Kay, Jesse Vargas, Joel Kraski, Tori Liles.

**March**  
**Standing L to R:** Melissa Wagner, Allison Cutting, Jason Westmoreland, Cynthia Martinson, Sheila Van Hofwegen, Chris Stonum, Margaret Mouser, Rob Duffy, Nirupam Nigam. **Center L to R:** Colleen Marcus, Claire Rosental, Natalie Rowell, Rebecca Troske, Makayla McKinney. **Front L to R:** Alyssa Mische, Suzanne, Tenison, Olivia Gibbons.

**May**  
From left to the right: Antonia Barela, Monica Falcon, Kelly Nichols, Mat Ruwaldt, Toni Chandler (not pictured Edina Meiners).



## Where Are They Now: Linda Junge, Junior Officer, NOAA Corps

*Observing is a niche career. Although it has its perks (ocean, boats, fish, science), it's not always easy to see where it leads on the career path. We've developed **Where Are They Now** to help you see where observing can take you.*

Linda Junge was an observer from fall 2013 to winter 2016. She primarily covered SW Alaska's crab fishery and a seven month contract with the West Coast Groundfish Observer Program as a non-catch share observer in Westport, WA. All told, she had roughly 550 sea days.

As with many observers, Linda reached a point where observing wasn't meeting her needs. She says, "staying with observing was no longer the right path for me: the lifestyle couldn't provide the stability I needed to build towards more long-term goals, and didn't have the benefits of a land job, such as professional development, wider social interaction, and career advancement." However, she knew that "after years of living the life of a seafarer" she didn't want a full-time desk job either.

For Linda, the answer to "what next?" was the NOAA Corps. The NOAA Corps is a federal uniformed service overseen by the Department of Commerce. It's comprised of approximately 300 commissioned officers, who are professionally trained engineers, earth scientists, oceanographers, meteorologists, fisheries scientists, and others in related fields. They operate NOAA's ships and aircraft, manage research projects, conduct diving operations, and staff various positions throughout NOAA and other U.S. organizations. This met Linda's needs. She says, "I chose NOAA Corps because it provided a good combination of adventure and stability. She says, "For a nomad looking for a regular paycheck and a career with more challenge, it was perfect."

Linda is a Junior Officer (J/O) on the NOAA ship *Fairweather*, a hydrographic survey vessel working in Alaska and occasionally along the West Coast. Her position is a mix of ship-driving, administrative duties, and participating in the science of the ship. They survey areas to update nauti-

cal charts and collect bathymetric habitat data in the Gulf of Alaska and Bering Sea fishing grounds.

What's it like? Linda says:

*"This job can be very demanding, but is very satisfying. While underway, J/Os work upwards of 12 hour days for two to three weeks at a time, with a few days off during weekend port calls. Between standing watch on the bridge, completing collateral duties and processing survey data, there doesn't seem to be enough hours in the day. However, there are periods when you can sneak away in a kayak or go fishing off the fantail on a sunny evening."*

They work a regular 9-to-5 work week when the ship is undergoing repairs, tied up to the pier or in dry dock. This is usually happens in winter when the ship readies for field season (March – October).

Here's the critical question: How does observing prepare one for the NOAA Corps? According to Linda, perfectly. NOAA Corps looks for people who are dependable, have a sense of service and adventure, and are self-motivated. This makes observers a good fit. Observers are also trusted and capable of doing their job in tough situations. "What better breeding grounds for devoted, flexible NOAA Corps officers?" she asks.

Whether you choose to investigate NOAA Corps or some other career option, changing jobs is hard. It's not always easy to see how your skill set applies elsewhere. Linda gives this reminder:

*"Who doesn't want an employee who can do their job in 15-foot seas while seasick and surrounded by unfriendliness? Leverage your daily observer skills - meticulous data management, self-sufficiency and emotional maturity - and doors will open. Observing tested my mettle and taught me lessons I use in my current career every day."*

Want to know more about NOAA Corps? Interested in applying? Contact Linda at [linda.junge@noaa.gov](mailto:linda.junge@noaa.gov). or visit the [NOAA Corps website](#).



## Marine Science Day in Newport, OR: A Recap

Ryan Shama, Lead Debriefing officer

When planning begins for the annual Marine Science Day at the Hatfield Marine Science Center (HMSC) in Newport, OR, the West Coast Groundfish Observer Program (WCGOP) answers the call. This fun, informative event brings faculty and students from Oregon State University, as well as staff from various state and federal agencies (e.g., NOAA, Oregon Department of Fish & Wildlife) together to showcase the HMSC’s science.

This year, the event was on Saturday, April 14th. As always, the WCGOP was well represented. Our booth included posters and handouts, highlighting the program’s important work. A full OPTECS set-up was on display, complete with scale, stand, and a tablet streaming hundreds of photos taken by observers. Outside, participants could don immersion suits and hang out in a life raft.

The mini- fish lab is always the most popular attraction at the our booth. Everyone loves interacting with interesting creatures from the deep and flipping through our species ID guides. This year’s fish stars were the *Mola mola* and the juvenile wolf eel. A surprising number of visitors recognized the ocean sunfish. An even more surprising number asked, “Is it alive?” We’ll give the kiddos a pass on that one.

## Fisheries News

NOAA released its Northwest Fisheries Science Center technical memorandum, *U.S. West Coast and Alaska Trawl Fisheries Seabird Cable Strike Mitigation Workshop*, in May. Many staff and observers in our program had a hand in its development. [See the full report here.](#)

NOAA Fisheries recently released [Status of the Stocks 2017](#). The report summarizes the nation’s progress in ending overfishing, rebuilding historically overfished stocks, and helping our fishing communities succeed. The news is good this year: the number of

stocks on the overfished list is at an all-time low, and stocks on the overfishing list remain near all-time lows.

NOAA Fisheries recently conducted a two-year review of all observer programs’ safety programs, including an independent audit of policies and protocols. [See the full report here.](#)

Observer data is a key component to stock assessment, which in turn is crucial to fisheries management. It’s a complicated analyses. NOAA researchers and international collaborators have developed a [new stock assessment](#)

Several current and past observers attended the event and stopped by to say hi, including Olivia Gibbons, Melissa Wagner, and Emily Bornhop. We also reconnected with Linda Jung, now a NOAA Corps officer (see page 5).

Virginia Taggart, one of our very first Newport Catch Share observers, was spotted working at an outreach booth for OSU’s Marine Studies Initiative (MSI). She is heavily involved in the MSI, which will include the addition of a new state-of-the-art facility at the HMSC, bringing many more staff and students to Newport. It will also be “tsunami proof!”

If you’re in the area, we hope to see you at next year’s Marine Science Day. It’s truly amazing to see the breadth, diversity, and quality of science taking place here in Newport. It is also an excellent networking opportunity.

*Special thanks to Jason Eibner and his son, Jahan, for their help staffing the WCGOP booth. Also, thanks to Toby Mitchell for selecting the fish for display.*



[tool](#) that allows anyone in the world to make an accurate assessment.

Have you ever seen a deep-sea Anglerfish in love? Here’s your chance. [This video](#) is the first a deep-sea Anglerfish and her mate have been ever sighted.

Dutch Harbor , AK is collaborating with Denmark to recycle thousand of pounds of old fishing nets. The person leading the program is a former observer. [Read more here.](#)