



# Word on the Waves

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

## Observer Spotlight: Vanessa Fleming

Observer since 2015  
Currently stationed in Astoria

On her way to Australia, West Coast Groundfish Observer Vanessa Fleming discovered the Oregon coast and observing. Australia's still on hold.

Vanessa Fleming is a woman of the world. Born in France, educated in Ireland, and now living in the United States, she isn't one to shy away from an adventure.

Vanessa earned her Zoology degree in Ireland, with an emphasis on marine-based subjects. "I grew up by the ocean in Ireland, but it wasn't until university that I knew I wanted to spend my life learning and working with-in the marine community,"

she says. Her degree included working in the Mediterranean on the European Marine Reserve and studying the distribution of gelatinous zooplankton in the Celtic Sea. She also spent summers tagging female loggerheads in Greece and tagging Lions Mane jellyfish in the Dublin Bay.

Her plans were to move to Australia after university. Lucky for us, Vanessa took a detour to Oregon to live with her mom. She landed in Salem, OR first where she planned to work and earn money for her trip to Australia. She eventually moved to Seaside, OR, where she met her husband. By happenstance, she learned about observing a few months after their wedding and decided to put Australia on hold again. Vanessa took the observer training in 2015 and "three years later I'm still observing and feel lucky to have found this job."

Vanessa says, "I love to travel and, in its own way, [observing] is a little adventure every time I head out to sea. I love it even though, after three years, I still get seasick." Like all observers, she has a favorite fishery, in this case it's mid-water trips because they're "short and sweet."

At home, Vanessa has a supportive husband and two high-spirited Chihuahuas waiting for her. She's an avid surfer and hiker. She knits, sews, cooks, and helps her husband with his landscape work, occasionally. She and



## From the Program

Jon McVeigh,  
Program Manager

Hello Observers and Friends,

2018 is well underway and I'm excited for another productive year.

I started the year by attending our annual briefings and trainings in Newport in person and via Webex. It was great to meet and interact with all of our observers. I always come away impressed by the people and proud of their work. I look forward to meeting our new observers throughout the spring at the upcoming three-week trainings.

To all our observers: I have an open door policy (both real and virtual). If you ever want to reach out, please don't hesitate to pick up the phone or drop me an email. Let's keep the conversation going.

In other news, I recently attended the Western Groundfish Conference. I was happy to see a lot of great groundfish science happening on our coast. Many scientists are already using observer data and I connected with other researchers who I thought could use observer data to strengthen their work. My goal is to have increased exposure at the 2020 conference in Alaska.

As a program, we'll be hitting our seasonal stride as fishing activity ramps up and the 2018 council season gets underway. This means the Training Team is busy getting everyone prepared for the new year and the Analysts are compiling new annual reports. Our electronic back deck project is progressing well. It's currently being tested on catch share trips. Various staff members and observers are beginning to assemble their presentations and posters for



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## At-Sea Hake Observer Seabird Cable Strike Research Update

Vanessa Tuttle, Program Lead, At-Sea Hake Observer Program

During the last two at-sea hake seasons, we've been encouraging our At-Sea Hake Observer Program (A-SHOP) observers to help our research efforts by monitoring for seabird cable strikes. This involves observing and recording strikes, conducting sea bird counts, recording environmental conditions (where's the offal plume today?), and estimating cable heights and distances.

I'm happy to report this data collection work is paying off. In November 2017, the A-SHOP, in conjunction with the Alaska Fisheries Science Center and the Alaska Region, hosted a two-day seabird bycatch mitigation workshop. The event brought fishers, managers and scientists together to brainstorm potential mitigation measures to reduce seabird strikes on trawl cables.

Working collaboratively with these groups, we're developing feasible, practical, testable, and effective mitigation measures. The goal is to use these measures and a list of best practices to create a positive impact on reducing seabird bycatch. Vulnerable populations, like black-footed albatross, are of particular concern.

The workshop resulted in five agreed-upon strategies we hope to field test. They are:

1. Lowering the third wire so it enters the water closer to the stern.
2. Water deterrents, such as cannons or sprayers.
3. Increase the third wire's visibility.
4. Combo streamer line and warp booms.
5. Third wire float device.



We're currently working on a cooperative research grant proposal, which would allow for dedicated seabird observers to do round-the-clock observations as well as begin the mitigation work.

If you're interested in learning more about A-SHOP's seabird cable strike research, we'll be releasing a summary of our data this summer. Stay tuned!

Seabird bycatch reduction is truly rewarding work. Thanks to all our A-SHOP observers for your participation and hard work.

### Featured Observer - continued



her posse (the dogs) like to be out and about as much as possible.

Vanessa's love for travel underpins all her plans. She's teaching her native-born U.S. husband to explore the world. They've traveled to Iceland, Mexico, France, Holland, and Bali since they married. They plan to go to Ireland next.

Vanessa would like to get her PhD, which would require her to return to Ireland. She says she'd like to live in Southeast Asia.

And then there's Australia. It's still on her list.

### From the Program - continued

June's [International Fisheries Observer and Monitoring Conference](#) in Vigo, Spain. We estimate a delegation of 10 west coasters will be attending. Exciting time to be on the west coast!

As always, thanks for your hard work and stay safe!



## From the Galley

John LaFargue, CA Coordinator

Don't you hate it when you return to a restaurant that once offered amazing, fresh seafood, but has succumbed to bad cooking and old fish all in the name of expansion and cutting costs? Me too.

This happened to me on a recent trip to SoCal. One of my go-to restaurants has evolved into a culinary disaster. It was a true insult to the once beautiful yellowtail hidden under gobs of some mayo sauce spiked with Siracha, micro herbs and several more garish garnishes. I'd already decided to leave, but felt compelled to try the dish.

I was right. It tasted like it looked. Old fish under spicy mayo with haggard herbs. Disgusting.

On the upside, there was an unassuming garnish that escaped my initial inspection. Small, insanely crunchy, tasty tidbits sprinkled here and there. It took me a minute to realize it was fried quinoa. My mind started racing with ideas.

I like quinoa. It's a staple in our house. Fish, greens, and quinoa is a fast, easy, and healthy go-to meal. It never occurred to me to fry it. This was a game changer.

I decided to try using it to bread fish. I quickly discovered this is not an original idea. Recipes are out there. My first attempts following some of them were decent at best. I struck gold when I added Parmesan, herbs, and panko with the quinoa to form a flavorful crust. Yum!



If you want to take this to the next level, season the flour with salt and pepper and spice up the egg wash with your favorite hot sauce. If you want something lighter, try breading just one side of the fish. You still get the crunch and flavor but not all the breading. Below is a basic recipe to start you off. As always, I recommend experimenting with what you have on hand or especially like.

### Quinoa and Herb-Crusted Halibut

- ~1lb halibut, rockfish or other firm white fish
- ½ c cooked Quinoa
- ½ c panko or bread crumbs
- 2T grated parmesan cheese
- 2-3T chopped cilantro
- 1 egg beaten
- Flour for dredging fish
- Oil for pan frying
- salt and pepper
- Lemon wedges

- Cut fish into approximately ½ lb servings.
- Mix quinoa, panko, Parmesan and cilantro together in a shallow bowl.
- Dredge fish in flour, dip in egg and press into the quinoa mixture.
- Let rest on plate in fridge for 10-30min.
- Heat a few tablespoons of oil in a frying pan over medium high heat.
- Cook fish for 2-4 min per side until crispy and cooked through.
- Season with salt and cracked pepper. and serve with lemon wedges.

### NWFSC's 6th Biennial Science Symposium in Seattle March 27th and 28th

Scientists from Northwest Fisheries Science Center will be presenting, including observer staff. Can't make it to Seattle? Presentations will be shown via webex in Newport as well as streaming on the web. Watch your emails for the details.

## Contact Us

Word on the Waves is published quarterly by the Fisheries Observation Science Program at the Northwest Fisheries Science Center to maintain communications with current observers. We want to hear from you! Please send submissions, suggestions and questions to our newsletter editor, Rebecca Hoch, at rebecca.hoch@noaa.gov. You can also contact your debriefer.



## Ask an Analyst: The Importance of Sampling Retained Catch on Fixed Gear Trips

Kayleigh Somers, PhD, Analyst Team

This question comes from WCGOP observer Brad Laird in Coos Bay, CA. Brad posed his question during his annual briefing. We gave it to our analysts. Here's your answer Brad. Thanks for participating.

*My question is about retained sampling on fixed gear vessels. We seem to spend more time and effort on retained sampling than we do discard sampling. We weigh 15 discarded individuals and 30 retained fish.*

*With our new paperless back deck system, I'm wondering if we really need to invest effort on retained sampling when fish ticket data seems to be used the most for analysis and quota. If we didn't do as much retained sampling, we could focus on more detailed bio sampling and discard sampling.*

One of the WCGOP's primary goals is to sample at-sea discard, which provides data essential to mortality estimates used in management, but sampling retained fish provides important additional information that is often unavailable from any other source. You're right that landings data from fish tickets tells us how much of each species was retained and sold shoreside. However, while fish tickets do provide the total amount of most retained species from a trip, they don't provide the complete picture.

First, fish tickets don't include species that aren't sold, so sometimes portions of the retained catch are missing from shoreside estimates. Secondly, some species are recorded together in "market" category, which lacks species-specific information. This is where observer data are extremely useful.

Perhaps most importantly, observer estimates of retained catch allow us to calculate the proportion of weight by species at the haul level. Since fish tickets only quantify retained catch at the trip level, observer estimates allow us to accurately distribute the total retained catch from the entire trip to each haul. For example, if we have no observer-recorded retained estimates, we must assume that all of the catch occurred equally on each haul – but we know that's probably not correct. If we know from an observer's estimate that one haul had a lot of rockfish and another had very little, our haul-level distribution procedures take that into account, which greatly improves our estimates of both amount and composition of catch.

Without observer data, this haul-level distribution is impossible to do in fisheries that don't require logbooks; even in fisheries with retained catch logbooks, observer estimates provide an independent source that is used to fill in missing data and to compare to self-reported amounts. Accurate estimates of retained catch at the haul-level greatly improve our ability to calculate area-specific bycatch rates and to understand where individual species are being targeted and caught.

We've recently seen firsthand just how important accurate haul-level retained data are to management, as haul-level bycatch rates have informed models exploring how salmon bycatch and targeted species are related in the Salmon Biological Opinion for the groundfish fishery. It's also provided preliminary data for analyzing the impacts of opening parts of the Cowcod Conservation Areas to some types of fishing. Although the WCGOP continues to focus on discarded catch, sampling retained catch provides key data for managers and for science.

*Do you have a question for our analysts? Send it to Rebecca Hoch at [rebecca.hoch@noaa.gov](mailto:rebecca.hoch@noaa.gov) or share it with your debriefer. We'll feature your answer in an upcoming issue.*

### A note from Ryan Shama

Lead Debrief, West Coast Groundfish Observer Program

Thank you, Brad, for voicing your concerns. This program was built, in large part, through feedback from observers. If you find a particular protocol to be overly burdensome, unclear, etc., we want to hear about it. Kayleigh did an excellent job of articulating the value of retained data collection. Your question also has us thinking about our average number/weight sample size requirements. Staff will be taking a serious look at this protocol, as we consider sampling updates for 2019.



## Professional Development Series: Acing the Interview

Christa Colway, WCGOP Training Coordinator/Debriefers

Congratulations! You landed an interview! Are you ready? Preparation is key. It helps calm your nerves and ensures you make a good first impression. Here are some tips.

**Interview prep.** You know you'll be asked about your experience and accomplishments. Don't stumble on the spot. Think about your answers now. Here are a few prompts. Try to arrive at three answers for each.

- What do you consider your greatest achievement, what are you most proud of?
- What challenge or difficulty have you overcome?
- What makes you unique? What do you do best? What combination of skills, experience, and knowledge makes you different?

This exercise prepares you for a variety of potential interview questions. It also jogs your memory for forgotten situations and accomplishments.

**Nervous?** This is normal, especially if it's a position you really want. Unfortunately, anxiety makes us fidget, talk fast, ramble, and/or have poor body language. To exude confidence, keep these nonverbal tips in mind.

- Still the fidgeting. Be mindful of what your hands and feet are doing, even in a phone interview. Do the same for your body language. Sit up straight, but don't lean backward. Keep your hands open and use them naturally while talking.
- Don't speak faster than people can listen. Slowing your speech projects confidence.
- Be succinct. Rambling is a dead giveaway you're nervous. Prepping your answers prevents it. Impressive answers include the situation or problem, the steps you took, the accomplishment and why it matters, and the outcome. Give enough information to be complete and then stop.
- Use silence. It's okay to take a breath before answering a question. Better to take a few seconds to compose your answer than to dive in unprepared. If it's a tough question, acknowledge it, pause, then answer.
- Practice! Google common interview questions. Review the job announcement. Make a list of questions and practice with a friend. If you want a challenge, look up interview brain teaser questions. It'll teach you to think on your feet.
- Be honest, but don't diminish your skills, knowledge, and abilities. You have a lot to offer an employer. Help them see it.



Nonverbal communication is a key element to a successful interview. Remember to factor it into your interview prep.

Good luck!

*If you have interview tips, we'd like to hear them. Send your comments, tips, or suggestions to Rebecca Hoch at [rebecca.hoch@noaa.gov](mailto:rebecca.hoch@noaa.gov). We'll use them in future articles.*



## The Annual Pacific Marine Expo: What's new in marine safety equipment?

Eric Brasseur, Electronics Technician



The annual Pacific Marine Expo is a trade show for marine-related retailers, primarily focused on commercial fishing. I attend every year to check out the latest marine safety gear and interact with vendors and manufacturers.

This year, the newest automatic identification system (AIS)-linked man overboard (MOB) tech, which is smaller and finally more affordable, piqued my interest. Although fishing vessels primarily use vessel monitoring system (VMS) tracking, adopting AIS technology into our safety arsenal would allow our personal floatation devices and immersion suits to alert all AIS-linked vessels as well as enable nearby AIS plotters during an at-sea emergency. Its integrated GPS system broadcasts precise coordinates to responding vessels. Its current lower cost (\$300 each) makes it a viable option, despite the limited number of fishing vessels using the AIS system.

*Would you be willing to reprogram an AIS-linked MOB tech each time you worked on an AIS-enabled vessel? This is a big factor into whether or not we acquire them. Please contact Eric at [eric.brasseur@noaa.gov](mailto:eric.brasseur@noaa.gov) with your thoughts.*

## Fisheries News

Here's [a great article](#) on the NWFSC website highlighting Jason Jannot's sea bird conservation work. Please note that observer-collected data has directly contributed to this research and its success.

The National Observer Program released the [Observer Provider Insurance Technical Memo](#) last fall. The memo summarizes discussions from a November 2016 workshop, comments

from a follow-up webinar in May 2017, and preliminary recommendations from an Observer Safety Program Review.

NOAA Fisheries declared Pacific ocean perch (POP) rebuilt in December 2017, making it the third rebuilt species in 2017. Read the whole announcement [here](#).

NOAA published a draft recovery plan for Central California's green sturgeon

population. For more information, visit NOAA's [green sturgeon website](#).

Dan Kamikawa, a research fisheries biologist working in Newport's Fisheries Resource, Analysis, and Monitoring Division recently published [Survey Fishes](#). This is a comprehensive guide is west coast-specific. It's a fantastic resource. Check it out.

I also looked at the newest personal location beacon (PLB) on the market. They're getting smaller without any signal loss. As the batteries on our current PLB's expire, these may be a good replacement, depending on battery costs.

With our new OPTECS system going online this year, I'm looking for tablet-compatible gloves. There are a wide variety out there. I think the heavy duty orange gloves and the black-faced, coated mesh gloves will register on the tablet's glove-mode.

As most of our immersion suits will be retired by the end of 2019, I'm starting to look for new suits. There were a few new models at the expo. Kent Marine designs one with rotating hands for a more natural fit. However, the storage bag is zippered meaning it won't pop open easily.

If you have an opinion on equipment, please let me know. Your safety is my number one priority. I want to get the best I can for you.

