



Word on the Waves

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

Observer Spotlight:

Mike Lindley

Observing since 2002
Currently stationed in Morro Bay

What do you do when you like to eat seafood and don't want to work in an office? If you're Mike Lindley, you become an observer.

Mike became a West Coast Groundfish Observer (WCGOP) in 2002. In fact, he was in the program's second observer training class. "It was a lot less formal back then," he says. A lot has changed in 15 years, but Mike's enthusiasm for his work remains steadfast.

Mike hails from Goose Creek, South Carolina, just outside of Charleston.

He's a graduate of the College of Charleston with a degree in Marine



Biology, a calling he found early in life. He recalls: "When I was 10 or so, I rode my bike as far as I could down the dirt road in our neighborhood. At the end, you could walk out to the marsh and catch blue crabs and small sharks even though we were miles and miles inland. I realized at that moment how much salt water there was around us and how all the food I really liked came from salt water. I told my family then that I wanted to be a marine biologist and I never considered anything else."

Like most observers, he came to the profession circuitously. He worked as a lab technician at a state-run aquaculture research facility, was a chemist for Charleston's drinking water plant, and moon-lighted as a sea kayak guide on Hilton Head. These positions helped Mike learn he wanted to work outdoors, preferably on the water. Luckily, a friend pointed him to the newly founded West Coast groundfish Observer Program. The rest is history.

Mike's favorite part of observing is working outdoors, seeing "all the cool critters," and the irregular schedule. The non-traditional work hours allow him time to hike (he goes daily), sea kayak, and volunteer for organizations such as the National Estuary Program.

His least favorite part of observing? Seasickness. Even after 15 years, he still has "epic seasickness episodes." Happily, he finally has prescription medication to ease it and anticipates a more enjoyable fishing season this year.



From the Program

Jon McVeigh,
Program Manager

Hello Observers and friends,

2017 is fully underway and we're rolling into our busy season. Training staff and observers have been putting a lot of effort into trainings and annual briefings. I want to thank everyone for their hard work getting prepared for another year. Just as coordinators and observers are embarking on a new season, debriefers and analysts are putting the final touches on our 2016 data set. Things are rolling along.

I attended Pacific Fisheries Management Council (PFMC) meetings in March and April. You can find the Decision Summary Documents (as well as the Briefing Books) for both meetings [here](#). Below are some items of note for our program from the April meeting;

- Observer data was used in a number of different management decisions, most notably in a number of protected species bycatch reports. Fisheries Observation Science (FOS) staff authored or co-authored many of these reports. Links to the reports are [here](#).
- Salmon bycatch discussion continued regarding groundfish trawl fisheries. NOAA presented a range of bycatch scenarios that were largely generated using observer data. That presentation can be found [here](#).
- Electronic Monitoring (EM) discussions continue. The Council reviewed recommendations from their EM subcommittee. You can read their recommendation [here](#) (click on Agenda Items F.5.a Reports 1-6).
- NOAA's West Coast Region (WCR) presented [this slideshow](#) (click on Agenda Item F.2.a). It gives an annual overview of EM in 2016.

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American Lobster in the Trawl Alley: What?!

Kevin Stockman, AOI observer stationed in San Francisco

My love for saltwater fishing developed on the New England waters of Long Island Sound, catching bluefish and tending the few lobster pots my father purchased for our family.

The American lobster (*Homarus americanus*) is the largest marine decapod. It's native to the Atlantic Coast from Canada to New Jersey. Its first pair of legs are modified into a massive set of un-



matched claws – one for crushing and one for tearing. If you ever go to Maine, be sure to try a lobster roll.

The California spiny lobster (*Panulirus interruptus*) occurs regularly in the Pacific Ocean from the Southern California Bight south into Mexico, ranging as far north as Santa Cruz in warm water conditions. These nocturnal lobsters' distinguishing feature is their lack of claws.

Stationed for the WCGOP in San Francisco, I never expected to encounter a lobster, definitely not an American lobster. But, there it was flopping violently in the trawl alley of a California Halibut vessel, bright red and unmistakable – a four pounder!



The first verified American lobster in the Gulf of the Farallones was caught in a Dungeness crab pot in 2013. There is also a record from near Vancouver Island in 2014. My encounter happened in March.

How did these Easterner lobsters get so far from home? Most likely, they were purchased for consumption but then intentionally released. We'll never know for sure.

Above: American lobster
Left: California Spiny lobster

Featured Observer - continued

What else lies behind Mike's quiet demeanor? A great sense of humor, a wealth of fisheries knowledge, and a penchant for Clemson University memorabilia. He considers internet shopping for kayak "stuff" a hobby and has a soft spot for *Forrest Gump* (it was filmed in his hometown). He thinks owning a trout hatchery post-observing would be good because they "make a lot of people happy who wouldn't otherwise have a fish to catch."



At the WCGOP, Mike's become a valuable asset: an observer who remains passionate and engaged as we expand, improve, and develop the program. Mike may refer to himself as a "fish counter," but we consider him a marine biologist.

Thank you for your service, Mike. It's greatly appreciated.

From The Program - continued

- Another report working through the council process is the draft of the five-year catch share program review. This is another instance of observer data usage; our data is incorporated in the report. The review evaluates the program's performance against previously established objectives and goals. There is scheduled to be a draft report at the June council meeting.

Best of all, we received public recognition and thanks from multiple council members for the great work we do and the quality data we provide. This is another example of how observers' hard work, dedication, and integrity are making a difference in fisheries management on the west coast. This is a huge benefit for our ecosystems and the communities dependent on healthy fisheries and fish stocks. Thanks again for all you do.

As always, stay safe,



From the Galley

John LaFargue, CA Coordinator

Years ago, when I was between Alaska and Swordfish contracts, I volunteered for a NOAA survey on the *David Starr Jordan*. Little did I know I would be introduced to a Philippine national treasure: chicken adobo.

I was working the night shift. Dinner was my breakfast, which was fine by me. (I tend towards the savory.) One day, as I was ambling through the “breakfast” line, an amazing aroma captured my attention. It was briny like the ocean, but heavily acidic. It was exotic, but I couldn’t place it. I asked the cook what it was and he told me it was his specialty, chicken adobo.

I’ve never forgotten the powerful, assertive flavor of that simple looking dish. I think I ate all the leftovers from the fridge during that shift between tows and sorting larval rockfish. Now, every time I eat adobo, it takes me back to

that time between observer contracts when life was simpler.

Fast-forward 20 years. I’m on a beautiful vessel somewhere off Mexico on my annual long-range fishing trip. I make a new friend, Carlos Jimenez, who is Filipino. We discover we’re both foodies. We spend the long travel days watching the troll lines and discussing the finer points of cooking SPAM and, of course, adobo.

I was fortunate enough to pry his family recipe out of him. No easy task, I assure you. There are a million adobo variations, but this is as authentic as it gets. Give it a try and let me know what you think.



Carlos Jimenez’s Filipino Chicken Adobo

Ingredients

1/4 cup soy sauce
10 large garlic cloves, coarse chopped
1 tablespoon fresh-ground black pepper (I like to use whole peppercorns)
1-1/4 cups Filipino palm vinegar or white vinegar
2 bay leaves, broken
1 whole chicken, chopped into bite sizes
Vegetable oil (olive oil works)
2 medium onions, thinly sliced
2 whole scallions, thinly sliced (optional)
White rice (mandatory)

Instructions

The day before. Combine soy sauce, garlic, black pepper, vinegar, and bay leaves in a large glass or stainless steel bowl. Add the chicken. Make sure it’s almost completely submerged in the marinade. Cover and refrigerate for 18 to 24 hours.

The day of. When ready to cook the chicken, transfer the mixture into a heavy 4-quart pot. Bring it to a gentle boil, cover and cook 25 minutes or until the chicken is cooked all the way through.

Remove the chicken to a plate. Skim the fat from the cooking liquid. Increase the heat and briskly boil it down by half.

While the liquid reduces, coat a straight-sided 12-inch sauté pan with oil. Over medium high heat, arrange the chicken pieces skin down to brown. Adjust heat so chicken doesn’t burn.

When the chicken pieces are a deep, rich brown, turn. Add the onion and continue browning the other side. Stir the onions to prevent burning.

Transfer the chicken and onions to a serving bowl. Pour the boiled-down pan juices over them and serve. Garnish with thin-sliced scallions.

Adobo-Making Secrets

- Marinate the chicken the day before, no cheating.
- Use Filipino palm vinegar. It’s cloudy in appearance and has a different taste profile. White vinegar can be used as a substitute, but it’s not as tasty.
- Brown the chicken **after** it’s cooked, not before. This gives the chicken skin a crispier texture.

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.



A Message From Michelle

This is a message from Michelle McClure, the director of the Fishery Resource Analysis and Monitoring Division at the Northwest Fisheries Science Center. The Fisheries Observation Science programs (West Coast Groundfish Observer Program and At-Sea Hake Observer Program) are in this division.

Michelle recently sent this message to our entire team. We want to share it with you in case you missed her email. You can see [this year's annual report here](#).

Hello everyone,

I was just reading the annual report from the National Seabird Program, and I have to say I'm really impressed: impressed with the amount of work that's been done in the last year, impressed with the quality of work that's been done, impressed with your work with industry and academia, impressed with your efforts in making the results of your work more widely known. What a great contribution you are making as observers and as members of the Fisheries Observation Science program, to our regional and national goals of minimizing fishery impacts on other species, as well as making the fishery and its target species more sustainable.

Thank you for this, and for all of your work. It matters a lot.

Best,
Michelle

Ask an Analyst

Do you wonder what happens to your data once it goes in the database? Curious about what type of reports are made, who sees them, and how they affect fisheries management? Interested in learning about upcoming studies and potential projects? Or do you want a better understanding of fisheries management's big picture?

This is your chance!

Our Analyst Team wants to help you expand your knowledge, answer questions, and dispel any myths, rumors, or confusion about how your data is used.

Send your questions to Rebecca Hoch at rebecca.hoch@noaa.gov. We'll publish the answers in the next newsletter.

Our Analyst Team: Kayleigh Sommers and Jason Jannot



Year-to-Date Progress

Wondering how 2017's fishing effort is going? Below are numbers for the West Coast Groundfish Observer Program from January 1st through April 28th.

	Number of WCGOP Trips	
	1/1/17 to 4/28/17	All 2016
Catch Share	264	1002
Non-Catch Share	129	997
EFP	23	63
Total	416	2062

	Number of WCGOP Sea Days	
	1/1/17 to 4/28/17	All 2016
Catch Share	896	3572
Non-Catch Share	160	2388
Total	1056	5960

Observer with most sea days:

- Catch Share: Kitt Lee (49)
- Non-Catch Share: Corrina Palomares (33)

Observers with highest vessel count:

- Catch Share: Isaac Davidson and Sean Rogers (6)
- Non-Catch Share: Steven Samana (9)



California Ridgeback Prawn Fishery Observer Coverage Resumes

Rachel Mahler and Ryan Shanaghan, AOI observers stationed in Santa Barbara



As of April 2017, the West Coast Groundfish Observer Program is covering the California Ridgeback Prawn fishery again. We covered this fishery from 2001 to 2005. We stopped in 2005 to focus on other fisheries.

Recently, the WCGOP received a letter from the California Department of Fish and Wildlife (CDFW), requesting coverage in the Ridgeback Prawn and Sea Cucumber trawl fisheries. They want to determine their impacts on groundfish and protected species. They plan to use our data to inform future coverage plans. This has been a very positive collaboration providing benefits for both CDFW and NOAA. We're looking forward to seeing the results.

Located in the Ventura and Santa Barbara, California area, the Ridgeback Prawn fishery usually involves vessels between 35 to 55 feet. They typically make one-day trips and use single-rigged shrimp nets. The average tow lasts one to two hours and weighs between 400 to 700 pounds. A standard tow yields approximately 250

to 300 pounds of retained Ridgeback Prawns. If the vessel has the necessary permit(s), other commonly retained species include California Lizardfish, Butterfish, Sea Cucumbers, Pacific Sanddabs, and various species of sharks and skates.

Fishing at depths of approximately 70 fathoms, the vessels may deploy nets as few as two times per trip or as many as eight, depending on the size distribution of retained Ridgebacks and the amount of bycatch contained in the tow. In terms of standard bycatch, observers have seen a stark difference in species diversity between the bycatch "floated" out of the hopper versus the discards scooped onto sorting tables and discarded by hand.

Floating bycatch out of the hopper is a common shrimping practice. The hopper is flooded with water, causing a vertical stratification among the caught species. The stratification causes prawns, invertebrates such as cucumbers and urchins, flatfish, and various roundfish to stay submerged, while

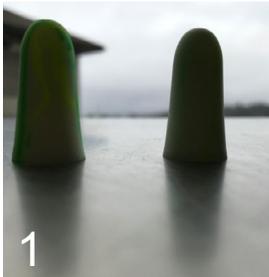
rockfish, hake, and crab species float to the surface where they are easily discarded. Within this fishery's floated discard, observers are seeing high numbers of juvenile rockfish, predominantly Stripetail, Halfbanded, Chili-pepper, and Cowcod. Larger rockfish are seen occasionally, but nowhere near as numerous as juveniles.

In order to decrease the volume and numbers of bycatch species, a bycatch reduction device (BRD), is required in the California Ridgeback Prawn fishery. Bycatch making it through the BRD is hand-sorted by the crew. These discards are predominantly flatfish, with high numbers of Pacific Sanddab, English Sole, Dover Sole, Big Mouth Sole, Petrale Sole, and Hornyheaded Turbot. In addition to flatfish, large numbers of California Lizardfish and Midshipman make up the majority of bycatch species, with some sculpins, Long and Shortspine Combfish, Butterfish, and various invertebrates.

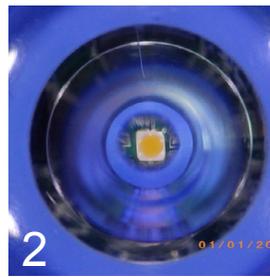
Name the Mystery Gear

How well do you know your gear? Our gear technician, Eric Brasseur, challenges you to correctly identify each piece of gear from these photos. Can you do it? Give it a go!

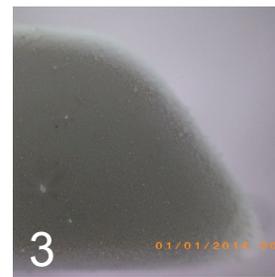
Many thanks to Eric for crafting the images for this challenge.



1



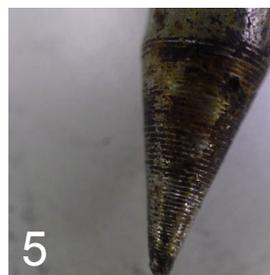
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9

Answers: 1-Earplugs; 2-PLB Transmitter; 3-Eraser; 4-Hydrostatic trigger switch; 9-PLB on PFD; 5-Fishpick tip; 6-Tally counter; 7-Dexter knife; 8-Scanner twain off

Is your gear in good shape?

Please remember to check it regularly. Not only will this make your job easier, it can save your life.

Fisheries News

Whale entanglement is always news. In 2016, there were 71 cases reported off the West Coast and neighboring countries. This is the highest annual total since record-keeping began in 1982. To see an overview of these cases, check out the [2016 West Coast Entanglement Summary](#).

Canary Rockfish in Puget Sound have been removed from the list of threatened and endangered species after a study found it's not genetically dis-

tinct from other West Coast Canary rockfish. Get the details in this recent [NOAA Fisheries report](#).

The [28th Annual Pink Shrimp Review](#) was issued in February. The newsletter is a collaborative effort between the Oregon Department of Fish and Wildlife (ODFW) and the Marine Sources Program. It summarizes 2016's efforts/landings and makes predictions for the 2017 season. This issue also features information on LED light BRD

use and ODFW's plans to push for a regulation change, requiring their use.

Interested in improving your seabird bycatch knowledge? Check out [The Washington Sea Grant library](#) of seabird bycatch publications. There's a lot of good information there.