



Word on the Waves

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

Observer Spotlight: Lauren Shiosaka

Observing since 2012
Currently with the At-Sea Hake Program

What do you do when you love the ocean, enjoy fish taxonomy, and have a penchant for travel? You become an observer.

Lauren Shiosaka is a native of Norwalk, CA and a California State University Long Beach graduate, she's been clear about her career path since she was a kid. She says:

"I remember always wanting to "be a scientist" as a kid, but I was pretty naïve about what it entailed. As I got older, I realized how laughably vague "being a scientist" was so I



narrowed my career goals to a field I truly loved."

Lucky for us, that field is marine biology.

After teaching surfing and marine biology in summer camp programs, Lauren followed her college friends into fisheries observing. She did her at-sea hake observer training in December 2011 and took her first deployment in 2012. Since then, she's worked two to three contracts per year. As a seasoned observer (2017 makes her fifth year!), she has this advice for newcomers:

"Accept that it will take a few contracts to dial in what you do and do not need to pack; seize every opportunity to get off your boat and explore; and enjoy making new friends. Travel and have as many adventures as you can afford."

She also recommends being flexible as *"nothing is set in stone, and it's best to plan and expect the worst in terms of travel plans, boat assignments, weather, etc."*

Lauren is pragmatic about observing. It pays the bills and gives her the freedom and flexibility to choose when she works. Like most experienced observers, she admits the time off is addicting, especially as she is a self-professed travel buff. However, she loves being at sea and on the boats. Her favorite part is seeing new fish. She enjoys fish taxonomy and working in different fisheries allows her to see a large vari-



From the Program

Jon McVeigh,
Program Manager

Hello Observers and friends,

I'm writing this from the NOAA research vessel, *Bell M. Shimada*. I'm participating in our division's winter research survey which uses acoustic technologies and good ol' fashioned trawl fishing to study Pacific hake's winter distribution and its winter ecology and biology in the California Current Ecosystem. You can read more about this survey (and other cool research at NWFSC) on [The Main Deck](#) blog.

I'm not the only former observer to work on the *Shimada*. Many who have worked on this survey have observing backgrounds. This highlights what I've always known: many observers go on to great careers as fishery scientists and managers. Lately I've been struck by how many top NOAA scientists got their start as observers. For instance, at last summer's International Fisheries Observer and Monitoring Conference (you can view the proceedings [here](#)), Dr. William Karp, then Science Director of the Northeast Fisheries Science Center, former director of the North Pacific Groundfish Observer Program, and former observer, gave a great keynote speech. Then last week, I read a farewell message from Dr. Richard Merrick, NOAA Fisheries Chief Scientist, who mentioned he got his start as a fisheries observer.

This got me thinking: How many former observers are still doing great fisheries science? I didn't have to look far. Approximately 90% of our WCGOP and A-SHOP staff, myself included, are former observers. The same goes for other U.S. observer programs. When I considered our division, I realized there are a number of our survey scientists who are former observers. Taking it one-step further, there are former observers in key positions at the Northwest Fisheries Science

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Doings On Land: Observing Helps Rebuild Langtang Valley, Nepal

We love learning how observers connect their at-sea life to their doings on-land. Former at-sea hake observer, Candice Young, recently shared an inspiring connection between the two. We were blown away by its scope and compassion and want to pass it on.

Candice started observing in 2013 in the Bering Sea. She joined the At-Sea Hake Observer Program (A-SHOP) in 2014. Like most observers, she's passionate about the ocean and its fisheries. She's also passionate about traveling.

Observers traveling in their off time isn't new. For Candice, this perk led to Nepal and the Langtang Valley.

Candice fell in love with Nepal while trekking there in 2013 and 2014 between her observing contracts. Touched by the landscape and the people, she returned in 2015 as an earthquake relief-effort volunteer.

Langtang Valley was the epicenter of the 2015 earthquake. Witnessing the devastation in this remote area, Candice realized volunteering for a season wasn't enough. Drawing on her newfound relief aid acumen and her cache of down time, she created Trek Relief, a nonprofit organization specifically for the Langtang Valley earthquake relief.

Candice funds the organization through crowdsourcing and her observing career. She balances her time at sea with the organization's needs. To date, Trek Relief has helped rebuild many of Langtang's local businesses and is currently helping 116 of its families rebuild their homes.

Candice isn't ready to hang up her rain gear and store her fish scale. She says: *"Trek Relief gives (my) observing more purpose. On top of saving the oceans, observing gives me the ability to help others in a meaningful way."*

Candice's is impressive, broad in scope - much like protecting commercial fisheries. We're very proud to have her in our ranks. Bravo!

Is your work as an observer inspiring your life on land? We'd like to know! If you'd like to share your work, please contact Rebecca Hoch at Rebecca.hoch@noaa.gov. If you're interested in learning more about Candice's story, please contact her at: candiceold@gmail.com



Featured Observer - continued

ety of fish outside of the run-of-the-mill bycatch species.



Lauren is clear about her passions: the ocean and travel. They guide her wish list. For instance, she'd like to watch top predators feed on a bait ball while scuba diving. She'd like to backpack through Japan, ride horses through New Zealand and visit every major city in Europe. Then there are the way-out-there dreams: traveling to Antarctica as part of a research expedition, and being a photojournalist for National Geographic. Dream big or go home, right?

Lauren, thank you for your consistent hard work. Your efforts contribute greatly to our fisheries management work. We're proud to have you in our ranks.

From The Program - continued

Center and at NOAA headquarters. Observers are everywhere!

It makes me proud to see so many observers continuing their passion for fisheries and ocean ecosystems after their observer careers. This is great news for current observers looking to further their careers in NOAA or elsewhere in fisheries. Your current work is valuable and is a strong component to your resume. These experiences stick with you and will help you in the future. As I spend my time on the *Shimada* working up fish and collecting samples, I'm certainly thankful for my past observer days.

As always, stay safe,



From the Galley

John LaFargue, CA Coordinator



While the grocery store “wasabi” is tasty and adds zing to your food, it’s not real wasabi. The real deal is hard to come by. In fact, many upscale sushi restaurants reserve it for special customers. You might get lucky and snag a taste if you ask for it, but don’t count on it.



As with most things, you can get real wasabi online from a few retailers.

There’s a reputable one in

Oregon. You can grow it yourself, but it needs a steady supply of fresh water, good drainage and a shady location.

True wasabi tends to have slightly less punch than the fake stuff. That’s not to say it’s mild. It comes on and leaves the pallet faster as well. That’s a nice quality when you’re trying to enjoy the flavor of an expensive piece of fish or invertebrate.

Like fresh ginger, it requires fine grating and should be used within 10-15

minutes. It loses potency quickly. The rhizomes will last for several months if wrapped in a damp towel, placed in a plastic bag, and refrigerated.

The stems and leaves are edible as well. They are milder than the rhizomes. A traditional approach to using them is quick pickling.

Aside from the sushi bar, how else can you use wasabi? Try adding it to mashed potatoes or making your own wasabi peas. The internet is chock full of recipes for this. My favorite use is a simple sauce of wasabi and rice wine vinegar or Myer lemon juice. Combine them until you have a thick creamy sauce. The acid really accentuates the wasabi heat.

I drizzle this on everything from grilled, teriyaki albacore to steaks to asparagus. It’s great even when made with the standard tube “wasabi”.

Experiment! Let me know what you come up with.

Wasabi, it’s not just for sushi.

In this edition of From the Galley, I’m presenting an ingredient rather than a recipe. I’ve struggled for years to use it beyond the sushi condiment bar. That’s right, I’m talking about wasabi.

Who doesn’t have a partial tube or can of the commercial grade wasabi sitting around? There’s no need to let it languish in the refrigerator door or in a dark cupboard. Use it!

First, let’s be clear: What we buy in grocery stores is not wasabi. It’s horseradish and/or mustard colored with green dye. It’s not wasabi. Don’t believe me? Check the label.



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.



The Shelf Rockfish Hook & Line Survey a.k.a. Where did my Debrief/Coordinator go?

James Benante • Pacific States Marine Fisheries Commission

It happens every fall. Various members of the Fisheries Observation Science (FOS) staff mysteriously disappear for weeks at a time. They don't answer their email, you can't reach them on the phone, and text messages go into a black hole.

Where are they? At sea. More specifically, they're on the Shelf Rockfish Hook and Line Survey.

Conducted annually since 2004, the Shelf Rockfish Hook and Line Survey (H&L) is a fishery-independent survey monitoring groundfish within the Southern California Bight (SCB). The survey works with local sport fishing boats and their crews to target rocky, high-relief habitats that are generally not well-sampled using other survey techniques, such as bottom trawls and acoustic backscatter. Its primary objective is to collect catch-per-unit-effort (CPUE) data and biological information to generate annual abundance indices for several species of shelf rockfish within the SCB.

Developed in 2003 the survey is a collaborative effort between the Pacific States Marine Fisheries Commission (PSMFC), the Northwest Fisheries Science Center (NWFSC), and southern California's sport fishing industry. Three vessels participate: Aggressor, Mirage and Toronado. They carry three biologists per vessel. Some of these spots are filled by FOS team members, which is why some team members disappear temporarily.

The survey area is extensive (see Figure 1). Red dots indi-

cate the original 121 fixed sites sampled since 2004, yellow dots indicate the sites within the Cowcod Conservation Area (CCA). These areas were established in 2001 to protect shelf habitat where cowcod are most abundant and to prohibit bottom-fishing deeper than 20 fathoms. There are two boundary areas: CCA West (4,200 mi²) and CCA East (100 mi²). At the Pacific Fisheries Management Council's request, the H&L survey established 42 fixed sites within CCAs in 2014 and added 34 more site in 2015.

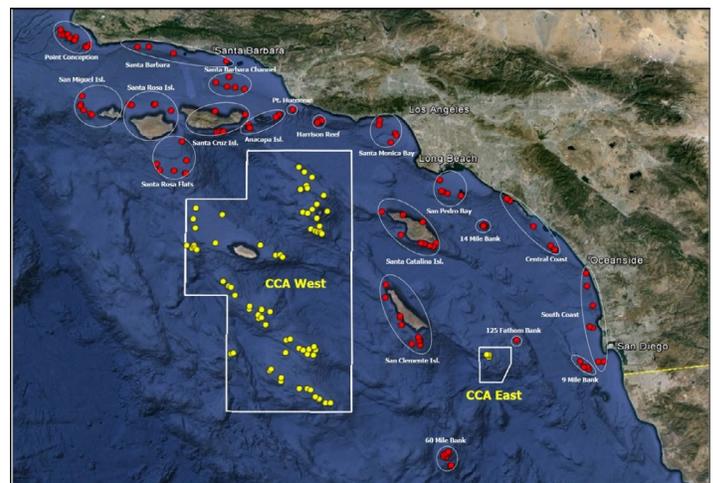


Figure 1. Survey area.

So what's the big deal? Why collect data from these areas? Isn't observer-collected data enough?

The short answer is no.

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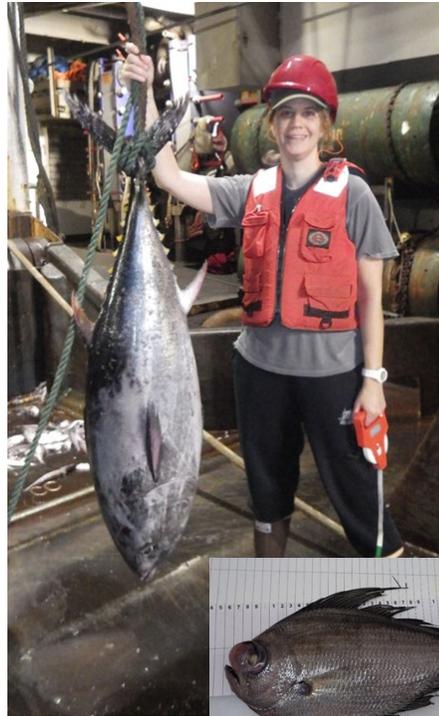


A View from the Stern: The At-Sea Hake Observer Program's Top 10 List for 2016

Vanessa Tuttle, At-Sea Hake Program Lead

An eventful year deserves a top 10 list. In no particular order, here are the At-Sea Hake Observer Program's (A-SHOP) 2016 highlights.

1. The Warm Blob is still coming and going and having environmental effects. For more information read [here](#).
2. Six Bluefin tuna (*Thunnus orientalis*) were caught in hake trawls last fall. They were sampled, both below deck and in the galley. In 42 years of observer sampling, they've never been recorded as hake fishery bycatch. We created a new species code to commemorate the event.
3. Sharp-eyed observers collected a Bluefin driftfish (*Psenes pellucidus*), a new species to the observer program, and also an unusual Pomfret. The Pomfret appears to be a Prickly fanfish (*Pterycombus petersii*). Species confirmation is pending. Prickly fanfish are usually found between the western and central Pacific to Hawaii, putting this one several thousands of miles out of its range.
4. Out of 3,763 delivered hake hauls, only one haul was not sampled by A-SHOP observers. That's an amazing effort! Great job, observers.
5. A-SHOP observers logged 2,180 observer sea days. The most ever.



6. Unusually high levels of sea lion takes in the fishery last fall has scientists baffled.

7. An entangled Humpback whale was spotted and a rescue effort launched from a mothership, which resulted in a gear-free whale swimming back into the wild blue yonder. Remember to report such sightings to the [Whale Entanglement Hotline](#).

8. Fires seem to still be the biggest safety risk to the at-sea hake fleet. Two on-board fires occurred this year. One initiated from welding in an elevator shaft. It ignited material in the freezer hold. The other was in a laundry room. Both were quickly contained, but resulted in the vessels returning to port.

A third, minor fire occurred when a light bulb in the factory exploded. A fire extinguisher was used to put it out.

9. The International Fisheries Observer Conference, held in August, was a great success. The A-SHOP sponsored observer David Chandler's attendance. Current A-SHOP observer Lindsey Nelson, and former A-SHOP observer Dennis Jaszka were teammates in the immersion suit donning races. They've got mad skills! They came in a close second (we're talking tenths of seconds) to the winners. Anywhere and always, brush up on your safety skills.

10. The first season of seabird observations in support of research into the numbers of bird strikes on trawl cables was successful. Data analysis is underway. The next steps in this research are being identified for the up-coming season. Stay tuned for a summary of the 2016 data this spring.

Fisheries News

Interested in how the Fisheries Observation Science program's bycatch reduction efforts fit into the national effort? Take a look at [NOAA's official Bycatch Reduction Strategy](#).

We can't start a new year without a "best of" list. Here's the link to [NOAA Fisheries' top six articles of 2016](#). They span everything from electronic monitoring to a Cuban vacation. Their top Instagram photos follow.

The Northwest Fisheries Science Center and NOAA Fisheries recently published [this article](#) on how ocean acidification will potentially impacts the West Coast fisheries and marine mammals. Their findings are not what you might expect. Take a look.

West Coast commercial sablefish landings will have electronic fish tickets starting in 2017. Here's [the official announcement](#).

The United States continues to provide a leadership role combatting worldwide illegal, unreported, and unregulated fishing. It reported its findings in the [2017 Biennial Report to Congress](#). The NOAA Fisheries summary can be found [here](#).

The Winter Hake Survey began January 11th. Jon McVeigh worked on the survey in January. You can read [the survey's blog](#) to get a firsthand report of happenings, insights, and findings.

The Shelf Rockfish Hook & Line Survey - continued



John LaFargue and John Bieraugel



Jim Benante



John Bieraugel and John LaFargue



Jason Eibner

Surveys like the H&L allow fishery-independent data collection. This is scarce and highly valued data that greatly improves the data sets used by stock assessment authors. The surveys are designed by PSMFC and NWFSC staff, which gives their data reliable controls and tightly structured parameters. These controls aren't possible in observer-collected data.

The data gathered on the H&L complements the groundfish trawl survey and observer-gathered data supplying a more robust, relevant, and useful data set to researchers, stock assessors, and upper management.

Going on survey is a great reason for FOS team members to get out of the office and back out at sea, but it's also another way we support observers. This work greatly increases the value of observer-collected data. We also draw on survey

experiences to develop and improve our data gathering techniques, like the electronic back deck system.

Beyond data collecting and research, the H&L is also an opportunity to strengthen ties with commercial fishermen. The survey employs three commercial sport fishing vessels out of southern California. Biologists work side-by-side with the captains and crews to sample the catch and collect and log environmental data. It's a team effort focused on a common goal: collecting data to be used to properly manage the fisheries.

For more information, go to: <https://www.nwfsc.noaa.gov/research/divisions/frame/groundfish/hook.cfm>