



...PRESENTS: **RACHEL ZUERCHER** WHS SCIENTIST IN RESIDENCE, 2014-2015



I do marine science right here in Monterey Bay studying fish. I spend my summers diving to count fish in their natural habitat, and fishing to collect information about different species of rockfish. I'm passionate about healthy and sustainable fisheries.

Some stuff about me:

- **Age:** 29
- **Where I grew up:** Pierre, South Dakota
- **High School:** T.F. Riggs High School
- **Favorite subjects in high school:** Biology, Choir
- **College (undergraduate):** Valparaiso University (in Indiana)
- **Some of my favorite things:** camping, SCUBA diving, being in the ocean
- **What I think or do when I get frustrated:** Spending time with my dog is great when I'm frustrated by work or life. We head to a trail away from people and hang out. Gardening also helps a lot! Just getting my hands dirty and focusing on nature usually does the trick.



SCUBA diving lets scientists observe fish in their natural habitat.



Photo: Partnership for the Interdisciplinary Studies of Coastal Oceans

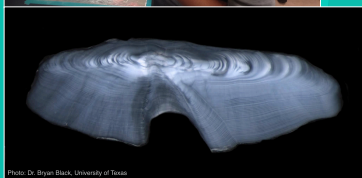
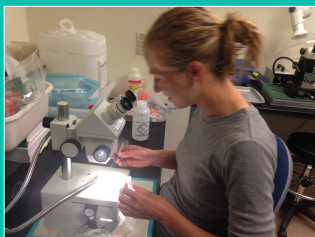


Photo: Dr. Bryan Black, University of Texas

I use fish earbones to determine how old a fish is and how much it grows each year.

To understand what fish eat, I pump their stomachs and identify prey items that I find.



What I study

I'm very interested in fish, the ways we catch fish, and how we can be sure to have enough fish in the ocean for people to continue eating. This means that I study two different things. First, I get to study fish in their natural habitat! I measure fish, find out how old they are, sample their stomachs to figure out what they're eating, and SCUBA dive to count them. One of my major research questions focuses on the factors that influence fish growth – what makes fish grow bigger, faster?

Second, I study fisheries. This includes not only the fish, their natural habitat and other animals in the ocean, but also includes people! I'm interested in how people influence fish populations in the wild, and how changes in wild fish populations influence people. The goal of all my work is to be sure we're leaving enough fish in the ocean for the next generation.

I love to talk to kids, adults and students about the ways they use the ocean, so am excited to talk with you all. I hope to get a chance to convince you that science is exciting, fun and a great career!



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