

Q & A WITH BONNIE BECKER

TWA members and others are talking to writer Sharon Babcock about enduring inspirations, life lessons, and perspectives from their experiences on the working waterfront.

This month's feature: Bonnie Becker from the University of Washington, Tacoma.



In her role since 2006 as professional larval shellfish tracker, teacher, and administrator at the University of Washington Tacoma, Bonnie Becker is dedicated to empowering the public to appreciate, conserve, and restore our shared natural resources and biodiversity. Her research focuses on marine conservation biology and monitoring, with an emphasis on population movements of commercially or ecologically important shellfish like geoduck clams and Olympia oysters. She teaches a range of courses and creates experiential learning activities focused on ecology, invertebrate zoology, and conservation biology. Whenever possible, she tries to take students out into the world, through field trips and community-based service learning projects. More recently, she has added an administrative role as the associate dean of Curriculum and Academic Initiatives in the School of Interdisciplinary Arts and Sciences.

Q: What is it that you do?

A: I study how commercial and ecologically important shellfish populations replenish themselves and bring that to students and to the public. I like to bring a passion for marine life to others so that they protect what they have learned about.

Q: When did you know you wanted to do this work?

A: I learned a love of the ocean from my father who enjoyed fishing. However, I grew up in an urban environment outside New York City—on Long Island—with the perception that the waters near us were too polluted for swimming. I decided I wanted to be a marine biologist at the Coney Island Aquarium when I was 13 and later wrote my college admissions essay about it.

Q: Who has most influenced your path?

A: My academic “godfather” was a staffer at the National Park Service. He played an important national role in ocean conservation. Another advisor was the first woman in this field at my college. She wouldn’t know it, but she gave me a work ethic by her example. Another was a marine ecologist and conservationist I worked with who also wrote a book about what ecology can teach us about national security.

Q: What have been significant milestones along the way?

A: When beginning a college semester in the Caribbean, we went scuba diving on a reef on the first day of class and were asked what we observed. On the last day of the semester of work and exams and classes, we repeated diving in that same place. It was just as beautiful the second time but in a very different way. We could tell that a fish school swimming up did not belong there. We had a completely different understanding after our studies, and that still influences how I teach. Understanding what you are looking at brings it to a new level. When I worked for the Cabrillo National Monument in San Diego as a park marine biologist, I realized I ought to be a teacher and that adult learners are a good match for me.

Q: What concerns you with what you are learning about our oceans?

A: I am a positive person, but we are seeing evidence of climate change much faster than we were expecting. The natural world responds to change in a value neutral way. Our future relationship to the ocean and its resources will have winners and losers. I do know that my children's ability to interact with the ocean is not going to be the same as mine. This is a human problem, not one caused by nature. Previous eras were dominated by phenomena like glaciers or asteroids. This era is dominated by the presence of people. We see animals reproducing earlier in the season. Acidification of the ocean is occurring. My job is to focus on the fish that are in these changing oceans. It is simply going to look different in the future. Storm water is the most difficult immediate challenge, but the broader issue is harder to tackle—not spending time on bigger climate change. As a scientist, I want us to be documenting the changes, to be looking at the sea level rise and making sure we are prepared for it.

Q: What is most satisfying to you?

A: Seeing students who come out of this program, many of whom are first-generation college students, move out into the world as professionals. Also realizing that the research we are doing has value—to the agencies that develop policy, the shellfish industry, and tribes.

Q: From your point of view, what is the state of Commencement Bay's health?

A: People have worked hard to clean it up, section by section, so it is much better than it was in the Superfund days where hazardous waste affected both local ecosystems and people. There is still work to be done in the industrial storm water arena. The cleanup of Asarco continues. Our former pulp mills left wood waste on the bottom of the bay; things do not like to grow there. The mouth of the Thea Foss Waterway is looking much better. Salmon can make it through and are returning now. Orcas feed here, and the invertebrates I study are increasing. Samples we take are comparable to cleaner areas.

Q: What are the opportunities for Commencement Bay now?

A: The bay is heart of Tacoma. I envision restoring sites to their natural state, with eelgrass for example, and ensuring that the bay is swimmable, fishable, dig-able (for shellfish). We know that there is some kelp in Commencement Bay—a good sign.

Q: What is your favorite shellfish to eat?

A: Clearly it's the oyster.

