



A shell seeded
with very
young native
Olympia
oysters.

Julie Barber
Senior Shellfish Biologist
*Swinomish Indian Tribal
Community*

TYPE OF WORK

I study interactions between marine invertebrates and their environment but I also work with fishermen to collect data and responsibly manage their fisheries.



Senior Shellfish Biologist



TYPICAL DAY: I conduct surveys of wild clam populations within the Tribe's usual and accustomed fishing grounds to estimate biomass, suggest sustainable quotas, and co-manage the resulting clam fisheries. Our team also works on a native oyster restoration project, studies decadal change in clam populations, conducts SCUBA surveys of geoducks and sea cucumbers, and researches ways to help maintain access to shellfisheries while helping the Tribe adapt to climate change. I spend a lot of time working strange hours during the low tides or working directly with fishermen on their boats.

CAREER PATHWAY:

In college I discovered that, unlike cetaceans, many marine invertebrates are easy to find, fun to study, and excellent subjects for quantitative experiments in biology, ecology, behavior, physiology, etc. After discovering the huge world of invertebrates, I never looked back at vertebrates again! Another major turning point in my career development was a decision to take SCUBA courses at UNH. It didn't take me very long to figure out that I could make a career out of diving and marine science, as the two fields are inevitably compatible.



Julie on her safety stop in a kelp forest at the end of a sea cucumber survey dive.

IMPORTANT SKILLS

Knowing how to collect data underwater as a research diver has been a very important skill that helped me obtain job offers in this extremely competitive field.

EDUCATION

Master's Degree

SALARY RANGE

\$50,000-\$75,000

TOOLS OF THE TRADE

I dive a lot so I am familiar with SCUBA equipment, rescue equipment, and underwater research tools like transects, tow buoys, etc.

"I also value the chance I have to work across the board with scientists and fishermen on management issues." - Julie Barber