Carla Guenther looks to sustainability and fisheries management

by Jessica Brophy

When Carla Guenther was in second grade, Sally Ride became the first American woman in space. Guenther cried.

“I was in tears in second grade because that’s what I had wanted to do,” said Guenther. “I was obsessed with women first in science—Marie Curie was my hero. I was a total nerd.”

From early on, Guenther knew she wanted to be a scientist. “I’m a problem solver and an information gatherer,” she said. Her interests evolved into genetics and biochemistry, and she attended engineering school with an ambitious plan to solve the major problems plaguing mankind—the hole in the ozone, overpopulation and energy sources.

During college, she was exposed to kayaking here in Maine. “I became a guide right here off Hagen Dock,” she said. The experience opened her eyes to the parts of the world that were still beautiful and unspoiled.

“I realized there were parts of the world that weren’t going to hell, and there were areas to protect,” she said. In order to do that, she shifted her focus to human-environment relations.

After graduating, she went to Baja, Mexico, where she worked with local kayak guides and local fishermen, which inspired her to apply to graduate school in an interdisciplinary program. “I knew the science,” she said. “I needed more of the social science, the people aspect.”

Her master’s and doctoral degrees were a combination of oceanography, human geography, economics and anthropology, studying marine protected areas in California. There, she helped develop a fisheries management plan—one that integrated bringing together the fishermen, the management, and research.

The success of that project led Guenther to “pursue relevance,” as she puts it. Sometimes academic work fails to be relevant to fishermen and management, she says, which is how she ended up at Penobscot East Resource Center. “You don’t have to give up academic rigor to do this,” she said. She might publish fewer academic articles, but she feels the work that she does in Maine’s fisheries is more accessible to industry stakeholders.

At Penobscot East, Guenther consistently strives for the organization and Maine’s commercial fisheries management to be more data and information driven.

“Maine does a really good job of the emotional argument,” says Guenther. “But things are changing so
fast—our value of intergenerational knowledge is our strength and our weakness. Longitudinal knowledge—what your grandpa knew—doesn’t always reflect the here and now.”

Tearing apart that knowledge, fully understanding the community values, helps managers to make good day-to-day decisions.

Penobscot East acts as a boundary organization, says Guenther, facilitating communication between industry, university researchers, managers and the community.

There’s a changing of the guard among fishery scientists, says Guenther. While established faculty at institutions tend to be male, in graduate school programs the enrollment is 50/50, if not 60/40—more women than ever are becoming involved in commercial fisheries research and marine sciences.

Maine is an interesting example of women’s changing roles in fisheries science and regulation, says Guenther. “Maine’s fisheries management is dominated by women in power positions,” she said, “with a female chief deputy [at the Department of Marine Resources], and most of Augusta is female.”

Guenther says leadership development is key to the future of the industries. “I’m always asking myself: How do we get more information to help us make decisions?” she said. “I strongly feel we need to get away from making decisions based on our guts. We’re under such pressure [from the state and federal government] to use the best available data, so how can we collect info and combine it with what the gut says and turn it into something science-driven—instead of just which five people decided to drive to Augusta and share their opinion.”

When asked what she’d like to see in the future, Guenther says she wants “a sustainable fishing future—but not just fishing.”

There are many ways the ocean is valuable, and could be valuable, says Guenther. Island marine transport could be useful, she says. “We’re still connected to places by boat, we are still a service highway,” she continued.

The ocean can also serve as a buffer for climate change, keeping the area cool, and could become more important as a food source moving forward.

“The ocean is not just a money tree,” says Guenther. “You can’t just keep throwing garbage in and she keeps producing.”