

# No Escaping BayScape

By *Monica Allard Cox*

If you sailed, swam, fished, kayaked, or jetskied in upper Narragansett Bay or Greenwich Bay this summer, you may be a blip in Robert Thompson and Tracey Dalton's database.

Thompson and Dalton, both URI marine affairs assistant professors, spent the summer surveying Bay activities along three transects from Wickford to Greenwich Bay and into the Seekonk River for their Rhode Island Sea Grant-funded BayScape project.

To determine when, where, and how people use the Bay and shoreline, researchers aboard URI's *Hope Hudner* armed themselves with binoculars equipped with a laser distance meter and electronic compass. The binoculars fed data into a computer with a global positioning system that autorecorded a selected point in a georeferenced database. To each point—which represents a person, boat, or other entity—researchers attached specific information about the activity, such as whether the person was walking the shoreline or wading in the water, or whether the boat was anything from a yacht to a skiff. While the summer was spent collecting data, the fall found Coastal Fellows—a URI program that gives students firsthand experience in research and outreach on coastal issues—processing it. The undertaking was a challenge. "We have thousands of observations," says Thompson.

With the data, researchers will be able to say which activities take place in different parts of the Bay and when they are occurring. They are already beginning to see patterns emerge, such as the line of sailboats that frequently stretches from Greenwich Bay to the East Passage or the clustering of recreational anglers in certain parts of the Bay. Dalton says, "understanding these patterns will help to inform decisions about how the Bay is used."

"The idea is to address a whole array of management issues," Thompson adds, for instance, determining how much traffic marinas are generating may help indicate what will happen if developers are allowed to wharf out to the navigation channel in the Providence River. The data could also be used to understand how users might be impacted by restrictions on access due to beach closures, resource protection, or additional security measures.

A density analysis will show the probability of activity in certain areas. This will be represented by a map with graphics that Thompson described as resembling "ice cream scoops melting," with areas of probable dense activity in the center, and less probability of activity at the melting edges.

Researchers are working with Rhode Island Sea Grant Extension staff to use the data to inform Bay decision making. "There are intensifying and more diverse uses in the Bay. We need to be looking at implementing creative tools to make room for everyone," says Jennifer McCann, Rhode Is-



URI students Tiffany Smythe and Sara Schroeder record Bay activity. Photo courtesy Robert Thompson, URI. Top: Photo by Adam Zitello. Below: Photo by Puffin Enterprises.

land Sea Grant Sustainable Coastal Communities and Ecosystems (SUCCESS) Extension leader.

Pamela Rubinoff, SUCCESS Extension specialist, says that the data will aid the SAMP staff directly. "It gives us a better idea of who our stakeholders are," she says. "We might discover we never knew there were clambers in a particular area, we never talked to them." She adds that the information may help to identify areas where more public access is needed.

Thompson's early observation regarding potential areas for improved access is that the use of shoreline "seems inversely proportional to the wealth of the neighborhood," with lots of activity, especially shoreline fishing, in urban areas—some of it on privately owned, commercial property, perhaps without the owner's knowledge—and a "Barrington dead zone" of little activity.

As for how people felt about being watched by researchers, Thompson says that while "we're definitely a curiosity," some people may have recognized the URI/College of the Environment and Life Sciences stickers on the *Hope Hudner*, or known its captain, Tom Puckett. For those working on the water, like lobstermen, "I think when they're working, they're working. They don't really notice us."

Being noticed, though, has had its benefits. The research boat was contacted by a Coast Guard buoy tender in August. After learning about the project, Lt. Al Danzey of the U.S. Coast Guard Sector Southeastern New England out of East Providence has been discussing with Thompson how the data can answer questions for the Coast Guard.

—Monica Allard Cox is a Communicator for Rhode Island Sea Grant.

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