



## Water World

The Tuckerton Field Station is NASA's mission control for the deep blue sea. *By Bill Glavin*

Visitors to Rutgers' Marine Field Station in Tuckerton park their cars at the end of a 12-mile road and walk a couple of hundred feet on a wooden causeway to the entrance. From the causeway—built over a marsh—the panoramic view includes the National Estuarine Research Reserve; the Atlantic City skyline; and the field station itself, constructed in 1937 as a Coast Guard station. Pretty as a postcard, the atmosphere is eerily serene.

Once inside, the serenity dissipates. Marine scientists and their graduate assistants, packed tightly into office and lab space, are either seated at computer stations or huddled around conference tables. Others are negotiating the narrow corridors and creaky staircases of the three-story building.

Overnight bags, empty coffee cups, and sleeping bags strewn about provide a lived-in feel. On a dock at the rear of the building, crews busily load supplies and equipment onto research vessels and a seaplane.

The activity is especially frenetic this summer, thanks to the invasion of some 200 scientists from across the country. The scientists, part of research teams from institutions such as the Office of Naval Research, Woods Hole Oceanographic Institution in Massachusetts, and the Scripps Institution of Oceanography in California, are working with Rutgers' Institute of Marine and Coastal Sciences (IMCS) to predict what they call "ocean weather." The excitement level is also elevated due to the installation of new equipment that will enhance scientists' ability to measure water temperature and wave size, as well as track sea life and lost boats.

"There are two reasons why this is happening here," says Scott Glenn, a professor at IMCS, who, along with Oscar Schofield, is coordinating the effort. "First, the field station is located in one of the most pristine, environmentally protected locations on the East Coast, between the Hudson and Delaware, two major watersheds. Second, this is where work on the pioneering LEO-15 [Long-Term Ecosystem Observatory] began in the early 1990s."

Submerged 15 meters below the surface of the ocean, LEO-15, the brainchild of IMCS director J. Frederick Grassle, transmits continual information on ocean conditions through fiber optic cable. "At first, LEO-15 explored a single spot on the map," explains Glenn. "Then the Slocum glider enabled us explore a 30 by 30 kilometer area of the ocean. This summer, with additional gliders and off-shore radar, we've expanded to a 300 by 300 kilometer area, which covers the entire New Jersey coastal shelf."

The torpedo-like glider, named for the first man on record to set sail across the ocean alone, records the salinity, temperature, and depth of the ocean. Each time it surfaces, it takes a global positioning satellite recording, which allows for the measurement of sea



currents. "We're expecting so much new data that it will take two years to compile and evaluate it all," explains Glenn. "We hope to cover even more territory when a new phase of the project begins here in 2004."

Most of the data are transmitted straight to the field station's COOL Room—a catchy acronym for Coastal Ocean Observation Laboratory. With so much new territory to track, new rooms will be built at Cook College and other East Coast locations. The data—already helping beachgoers find warm ocean water, surfers catch the biggest waves, and commercial and recreational fishermen locate fishing grounds—is available at [www.thecoolroom.com](http://www.thecoolroom.com). In May, WCAU-TV in Philadelphia began incorporating COOL Room data in its weather forecasts.

"For us, collaborating with scientists from so many disciplines is a once-in-a-lifetime opportunity," says Schofield, an assistant professor. He and Glenn, both physical oceanographers, are like Hawkeye and B.J., the *MASH* duo who thrived amid chaos and found fun in the most unlikely of circumstances. Adds Schofield, "The work can get tedious and the hours long, plus we're packed in like sardines and pretty isolated. Keeping things fast and loose helps us to not only get along, but learn something new from one another every day."

## The Following Problem

Bloustein professor asks, "Who is at risk of being stalked?"

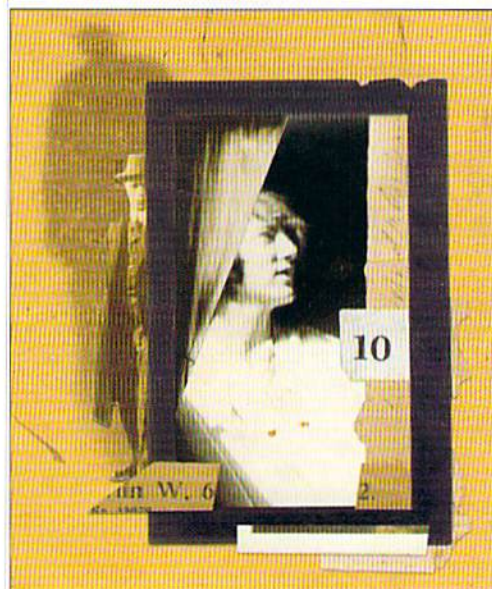
Before actress Rebecca Schaeffer was murdered by an obsessed fan in the doorway of her home in 1989, stalking wasn't considered a crime. Since that time, all 50 states and the District

of Columbia have passed explicit stalking laws. "From an academic viewpoint, we're only now beginning to learn about stalking and take measures to prevent and police this very dangerous behavior," says Shirley A. Smoyak. "An even newer but just as dangerous aspect is cyberstalking, an outgrowth of the Internet."

In May, Smoyak, a professor of urban studies and community health at Rutgers' Edward J. Bloustein School of Planning and Public Policy, organized the first national professional gathering to analyze the subject at the Hyatt Regency in New Brunswick. Part of the conference covered her team's recent study of stalking in college populations.

"Incidents of stalking on college campuses are higher than in the general population by almost four percentage points," she says. "The reasons are that people live, study, and go to class near each other, usually follow a schedule, are at a point in their lives where their hormones are raging, and haven't had to deal much with rejection."

The study, which surveyed 756 students at Rutgers and the University of Pennsylvania, found that 60 percent of stalking victims were female, more than 80 percent were stalked by someone they know, and less than 1 percent reported the stalking to the police. Says Smoyak, "At Rutgers, we have begun to share our information with units such as sexual assault services, public safety, and the Rutgers police so they are better equipped to handle problems." □



### Did you know?

It costs considerably more to chow down and fill up the gas tank at service areas on the state's three toll roads than those off highways, found a study by Jocelyn Crowley and Jon Spry, assistant professors of public policy in the Bloustein School.

Middle-class children eat better breakfasts at school than they do in their homes, says a study of the federally funded School Breakfast Program by Harriet and John Worobey, an instructor and an associate professor, respectively, in the Department of Nutritional Sciences at Cook College. Breakfasts in the program must provide students with 25 percent of the recommended daily allowances.

Contrary to popular opinion, SUVs and light trucks with stiff frames may be a boon, rather than a detriment, to highway safety. A study by Douglas Coate and James VanderHoff, professors of economics at FAS-Newark, points out a 50-percent decline in traffic fatalities from 1994 to 1997, a period when light-truck registrations doubled.