Accolades for the Graduates and Juniors in 2000-2001

Karen Antozzeski, a combined liberal studies: marine ecological emphasis and education double major graduated summa cum laude with a 3.9 GPA and was inducted into the Honor Key Society. Karen also was inducted into Sigma Xi for her independent research on the Robert L. Martin Lake watershed in Hamilton, NJ. Finally, Karen received the Latini Memorial Award sponsored by Rider’s Sigma Xi chapter which is given annually to the outstanding education and science double major.

Brian Kennedy, a geosciences major, was placed third best undergraduate student poster for his senior thesis research at the annual American Waterworks Conference in Atlantic City. His poster presentation was on "Gasoline transport in a sandy aquifer near a coastal area." Julie Pasternak, a marine and geosciences double major, also was inducted into Sigma Xi for her senior thesis research on New Jersey beach sediments.

Among our juniors, Russel Burke, an environmental and marine sciences double major, received a $3000 scholarship and a $2000 scholarship from Automated Processing and Datatel Inc., respectively. Russ was inducted in the Honor Key Society. Jill Browne, a marine sciences and biology double major, also was inducted into the Honor Key Society. Fourteen marine sciences, environmental sciences and geosciences majors achieved the Deans list for the Fall 2000 and/or Spring 2001 semesters. Congratulations to our graduates who have maintained the high standards of excellence set by recent alumni. And to our returning majors, keep up the good work!

Jennifer O’Reilly Scores Another First

Jennifer O’Reilly, a 2001 graduate with a major in marine sciences and a minor in geosciences, was awarded a NCAA Postgraduate Scholarship worth $5,000 for her graduate studies. She is the first recipient of a NCAA Postgraduate Scholarship in Rider’s history and is now studying for her Master’s degree in marine sciences at the University of North Carolina-Wilmington.

Jen is one of only 116 scholarship winners across the country this year, with 58 going to men and 58 going to women. Jen received a long list of academic awards and honors during her four years at Rider. These included being named Rider’s first Goldwater Scholar, being selected as an Andrew J. Rider Scholar for three straight years, and graduating with a perfect 4.0 GPA!
Athletically, Jen also recorded a number of Rider firsts. These included winning a total of 24 Metro Atlantic Athletic Conference gold medals, a MAAC and Rider record, and being named Rider's Female Athlete of the Year two years in a row. She also led the Rider Women's Swimming and Diving Team as a captain this past year to its first-ever MAAC Championship by winning five gold medals. In three of those races, Jen recorded MAAC record times. Jen is now the holder of nine Rider team records, five Rider pool records, and eight MAAC records.

We offer Jen our warmest congratulations. She is just one more example of the quality and excellence to be found in our department's students. We wish her and all our graduates continued success in the future.

Environmental Science Major Already a Success

The Department of Geological and Marine Sciences initiated the environmental sciences major in the fall of 1999. Already the program has nine declared majors and that number is continuing to grow with each semester. As of this semester all of the courses proposed for the new major, except one (Selected Topics), have been offered at least once. This past spring, the program graduated its first major, Mark Manning '01. Mark is now an analytical chemist for Envirogen, Inc. here in Lawrenceville.

Three Attend Geology Field Camp

Three geosciences majors, Chris Motkowski, Suzanne Rose, and Matt Wojtko, attended geology field camps this past summer. Chris and Matt attended the Yellowstone-Big Horn Research Association (YBRA) field camp, run by the University of Pennsylvania, in Red Lodge, Montana. Suzanne attended the Southern Oregon University Field Camp.

All three students reported having a great time at their respective field camps. They said they saw a lot of new geology and particularly enjoyed meeting students from many other schools from around the nation and learning that they were able to compete successfully with them, even with those students from some of the top schools in the country! They also mentioned how blown away they were with the scenery and beauty of the western United States and how apparent the geology was ("I guess we're not in New Jersey anymore!").

Matt also spent part of the summer as an intern for the New Jersey Geological Survey. He assisted in some well-drilling projects and also got a chance to work off shore!

Department Faculty Update

The members of the department faculty have been very busy over the past year. On top of their normal roles as classroom instructors, academic advisors, and researchers, all of the faculty are involved in other professional activities. Here are just a few of the highlights.

Dr. Richard Alexander is on sabbatical leave this fall at the University of North Carolina-Wilmington. He'll be working on his clam shell research along with a very prestigious group of colleagues. While in North Carolina you can still contact Alex at his Rider e-mail address at alexander@rider.edu.

Dr. Kathy Browne was promoted to Associate Professor with tenure. She also was recognized this fall for her extensive and varied service to the Rider University community by being awarded the Dr. Frank
N. Elliott Award for Distinguished Service. Finally, Kathy received a sabbatical leave, which she will take during the spring 2002 semester. You can still contact Kathy via her Rider e-mail address at browne@rider.edu. All of Kathy's success and accolades have been richly deserved. Congratulations!

**Dr. Mary Jo Hall** retired from the faculty at the end of the spring 2001 semester after 21 years at Rider. Over that time, Mary Jo has taught a wide range of courses, including Clastic Sedimentary Environments, Stratigraphy, Coastal Processes and Environments, Chemical Oceanography, Earth Materials and Processes Lab, and Oceanography. She also supervised innumerable Senior Thesis and Independent Research and Study projects, many of which resulted in student presentations and publications. Currently, she is enjoying her first semester of retirement catching up on the rest of her life and also doing research along the New Jersey shore. This spring she will be teaching Chemical Oceanography for the department as a Professor Emeritus. Congratulations to Mary Jo on her retirement and we salute her for her 21 years of excellent and dedicated teaching and service to the department and university.

**Dr. Jonathan M. Husch** is taking over as Acting Chair of the Department of Geological and Marine Sciences (with an emphasis on acting!) while Alex is on leave. Last January, Jon had the opportunity to spend ten days in Cuba as a member of a People to People Delegation on Women in Sports in Cuba (Jon also is Rider's NCAA Faculty Athletic Representative). In addition to spending many days meeting and interacting with various officials and participants in the Cuban athletic community, the delegation got a chance to see much of Havana and even some of the rural areas of western Cuba. Jon says his most lasting impression of Cuba was the dignity and pride of the Cuban people despite the economic and political hardships they face on a daily basis.

**Dr. Reed Schwimmer '84** was appointed as a full-time assistant professor in our department for the 2001-2002 academic year. This past summer Reed taught our oceanography course and helped Dr. Kathy Browne develop a new oceanography lab course that we are offering for the first time this fall. Reed also worked with the Houghton-Mifflin publishing company to revise selected figures in their physical geology textbook, *Geology*, by Chernicoff and Whitney. He has turned this work into an abstract and a talk that he'll be giving at the annual GSA meeting in Boston this fall. Reed also had a paper from his dissertation published this year in the *Journal of Coastal Research*. The paper, *Rates and processes of marsh shoreline erosion: Rehoboth Bay, Delaware*, documents how fast the marsh shoreline is eroding (10 cm/yr to 50 cm/yr) and how the process of erosion actually works on the marsh edge. Reed also is working on Centennial Lake with **Randy Kertes '84** to characterize the amount, composition, and source of the sediment on the lake bottom.

**Dr Hongbing Sun**, together with Dr. Allison Browne (Research Associate), received a $10,000 grant from the Edwin B. Forsythe National Wildlife Refuge in Brigantine, NJ. Their project, entitled *Evaluation of different treatment combinations in controlling the growth of Phragmites in the impounded marshes at the Forsythe Wildlife Refuge*, looks at ways of trying to control or even eradicate the invasive marsh plant, *Phragmites*. The grant is the first installment of a planned five-year cooperative agreement between Rider University and the Forsythe Wildlife Refuge. **Frank Petrino**, a senior geosciences major, is working as a research assistant on the project during the fall semester.
Two New Lab Courses Offered This Fall

A new Hydrology and Water Resource Lab (GEO407) and a new Introductory Oceanography Lab (MAR121) are being offered this fall by our department. The hydrology lab teaches the skills of data analysis, graphical presentation, including digitizing with Autocad and mapping with GIS, and computer modeling of flow and contaminant transport. The Introductory Oceanography Lab covers the fundamental aspects of geological, chemical, physical and biological oceanography through practical experiences using real data, demonstrations, and field exercises. The majority of the laboratory exercises are inquiry-based.

Students in the fall '01 Intro Oceanography lab analyze "deep-sea" core.

Centennial Lake Update

Two years ago, we reported in detail on the beginnings of the Centennial Lake Watershed project funded by a NJDEP 419(h) grant as well as in-kind funding from Rider University and external project partners. Last spring, we started adding public access areas on each shoreline as well as an additional aquatic shelf in front of one of the drainage outlets into the lake.

This year we will address an invasive plant problem (purple loosestrife) and hope to have a plan of action for the spring when new growth begins. We also will add appropriate plant life to the aquatic shelves to help clean drainage water as it enters the lake. This fall, student groups (Wildlife Conservation Club, NJ Community Water Watch Club and Phi Kappa Tau) have volunteered to help cut back the old loosestrife growth, maintain access areas and organize regular lake edge clean-ups. The Lawrence Middle School science classes, taught by Mr. Dave O'Neal and Mrs. Betsy Conboy, continue to visit the lake periodically to collect data and address watershed issues in their classrooms. Rider students working on independent projects and in introductory biology labs and the environmental science course also explore freshwater ecosystems topics using the lake as a laboratory.

View of the eastern shore of the restored Centennial Lake.

Overall, we are pleased with the new plant growth along the lake edges and with the incorporation of the lake into several curricula both on and off the campus. We thank all those individuals who have helped along the way! Please visit the lake when you are on campus next time!
Alumni Update

A number of department alumni have stopped by or contacted us over the past year. Everyone had new and exciting developments to tell us about. Congratulations to all for your many successes and achievements.

You can find more alumni news and specific contact information on our alumni web page located at http://enigma.rider.edu/~wwwgeo/alumni.html. If you are not already listed on the alumni web page or your listing needs to be updated, please contact us.

Wayne Froelich '84 stopped by campus recently to say hello and to let us know that he is trying to change careers. After working for General Motors in production, quality control, and research and development, he has decided to get back into the geology or environmental consulting fields. In addition to his Bachelor's Degree in geology from Rider, Wayne also has an Associate's Degree in biology.

Reed Schwimmer '84 and his wife, Sarah, are the parents of two young daughters, Kelsey and Madelyn, and are now living in Ewing, NJ where they recently bought a home. Sarah is a teacher for the Princeton School District, while Reed has finished his Ph.D. in coastal geology at the University of Delaware and is now a Visiting Assistant Professor for our department.

Cheryl Coffee-Gomez '93 and her husband, Jorge, are the parents of two girls, Laura and Sarah. Cheryl works as a Project Hydrogeologist for the Whitman Companies, Inc. in East Brunswick, NJ. Jorge has just started his own environmental consulting firm, C&G Environmental Services, LLC.

Jacki Frizano '93 completed her Ph.D. in Environmental Geology from the University of Pennsylvania. Jackie is now living in Montclair, NJ and working as a geologist for URS Inc. in Wayne, NJ.

Cindy Benkert '94 is now working for the Suncoast Earth Force as the Director of Projects in Tampa, Florida. Earth Force is a non-profit organization that involves students in environmental education, civic action, and service learning.

Kim Akers '96 is working on her Master's degree in Marine Biology/Marine Environmental Sciences at Nova Southeastern University in Fort Lauderdale, FL. Her thesis topic deals with factors affecting the population growth of Ospreys in Port Everglades, FL. In addition, Kim has worked recently for the Department of Business and Administrative Studies at NSU and as a Marine Turtle Specialist for the Broward County Department of Natural Resource Protection.

Stacy Aron '97 completed her secondary education teacher's certification in earth science and biology and is teaching these subjects, along with oceanography, at Delaware Valley Regional High School, Frenchtown, NJ. Recently, she was interviewed by the Delaware Valley News about the oceanography course, the only one of its kind taught in a Hunterdon County high school. Stacy also was honored this past summer by the Hunterdon/Somerset Business Education Partnership and the Somerset Patriots baseball club as part of their Salute to a Teacher Program.

Joey Rabin '97 is now working for Groundwater & Environmental Services (GES). Yes, this is the same company that Jen Fager Rauth '00 and Jaime Wuelfing '98 work for, but Joey has been in a different office. As of the middle of September, Joey will be working in GES's Crofton, Maryland office.
**Joanne Stott** '97 is an Associate Hydrogeologist with Brown and Caldwell in Mahwah, NJ.

**Gretchen Mattes** '98 is now working at ENSR, an environmental consulting firm, in Piscataway, NJ.

**Kelly McAloon** '98 recently finished her Master's work in coastal estuary studies at the University of Maryland. Kelly is now working for the non-profit organization, Restore America's Estuaries, in Arlington, Virginia.

**Tracy Nestor Schilling** '98 married Matt Schilling on November 4, 2000. Matt is in the Navy, currently stationed at Patuxent River, Maryland. Tracy is working as a research assistant at the University of Maryland Center for Environmental Science's Chesapeake Biological Lab, working on the effects of nutrient enrichment on submerged aquatic vegetation communities and other estuarine habitats.

**Kim Kessler** '99 is an Assistant Geologist for the NJDEP, Bureau of Inland Regulation in Trenton. She reviews all kinds of construction permits that may impact wetlands, open waters, floodplains, and waterfront areas. She also works on identifying and delineating freshwater wetlands.

**Alanna Sanders** '99 is a lab technician at the Southeast Environmental Research Center in Miami, Florida.

**Jennifer Fager Rauth** '00 is now working for Groundwater and Environmental Services in Wall Township, NJ. She's part of their ExxonMobil Group working on service station monitoring and remediation. She and her husband, Scott, live in Bensalem, PA. Jen says she is probably going to be transferred to the Mount Laurel office of GES and that she is also looking into going back to school for a Master's degree.

**Jenn Sliko** '00 is now working as a geologist with the NJDEP, Office of Dredging and Sediment Technology, Site Remediation Program.

**Mark Manning** '01 is an Analytical Chemist for Envirogen, Inc. here in Lawrenceville. He's also planning on completing an MBA degree at Rider.

**GEOSCIENCES HAT AND MARINE SCIENCES T-SHIRT FOR SALE**

The Rider Geosciences hat and the brand new "Marine Sciences at Rider University" T-shirt are available for purchase. The unique burgandy hats include the Rider tree logo on the front and the expression "WE ALL HAVE OUR FAULTS" on the back. The front of the T-shirt has a silk-screened manta ray with "Marine Sciences at Rider University" and the back has our exclusive student-designed logo. All proceeds from the sale of the hats and T-shirts go to the department's student research fund. Show your support for our present majors and be stylish at the same time. See our department web site at [http://genius.rider.edu/~wwwgeo/](http://genius.rider.edu/~wwwgeo/) for ordering information. These hats and T-shirts are sure to become collector's items some day.