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Internship advice...continued

Meet the challenge

This summer is no time to be ordinary. Last year's Fellows found that taking that extra step let them make their marks with their internship projects.

- Seek out responsibility in your position, regardless of how intimidating it may seem at first.
- Ask for more challenging work if you're ready for it.
- Go above and beyond your normal effort to learn.
- Always accept any extra projects or learning opportunities offered. Working with different people and being willing to try new things enhances the experience.
- Complete whatever preparation you're assigned, such as reading background information, so that you will be well-informed. Then you can ask insightful questions and make meaningful suggestions on daily processes.

Communicate

Fellows said that maintaining good communication among intern, Project Advisor, and Mentor was vital to having a successful summer.

- If you have specific interests in mind going into the internship, let your Project Advisor know, and he or she will do his or her best to guide you down that path.
- Be proactive and take initiative, but make sure to keep constant, clear lines of communication with your Project Advisor and Mentor.
- Ask questions early and often of your EPA hosts and of the internship program manager. Don't worry, no one will mind – it's better if they hear about something little that can be quickly addressed, rather than something big that's more complicated to resolve.

Enjoy yourself

Last but not least, GRO summer internships are not "all work and no play." The Fellows had a little advice to help an intern enjoy the experience of spending the summer in a new place.

- Always take a camera with you, because you never know when it might come in handy!
- Take part in the culture of your internship location; attend festivals, concerts, and other events in the community.
- Don't forget to explore the area and travel a little if you have the free time.

the
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where are they now? Catching up with GRO Alumni

Megan Skrip

Megan Skrip's 2006 summer internship at EPA's Region 2 laboratory in Edison, NJ took her – and her chest waders – from coastal plain streams to high-gradient streams, to headwaters in the Catskills and even to the mighty Delaware River. Megan studied water quality impairment in streams and lakes by assessing benthic macroinvertebrates and fish species assemblages. During her internship, she came to a new appreciation of the watershed perspective in land management. "I witnessed firsthand a gradient of stream degradation in New Jersey and New York," she said, "and I couldn't help but be fundamentally changed by the alterations I saw, finally seeing clearly the connection between a waterway and the landscape it drains."

Megan's summer was memorable for many reasons, including her adventures in field work. One event, which Megan calls "The Day of the Ticks," occurred when she and her GRO Mentor, aquatic biologist Jim Kurtenbach, were sampling tributaries of the Toms River in southern New Jersey. It wasn't just the interesting streams they visited that stuck with Megan about that particular day. As she put it, "I learned a valuable logistical lesson: if you're going to change from sneakers to waders at roadside in south Jersey, do it without putting your feet on the ground!" Megan found that even the briefest step on the grass in stocking feet was one step too many. "I later found dozens of ticks in my waders and on my ankles," she said. "There were so many in fact that we had to put my waders in one of the lab's freezers to get them all!"

Despite that particular adventure, Megan didn't lose any of her passion for field work, and, more broadly, ecology and the environment. "I spent a lot of time outdoors growing up, observing and interacting with nature, and learning how we can all protect it and use resources wisely," she said. "I had always wanted to work in the environmental field, so working at the EPA for a summer was actually a bit of a dream come true." Megan said that being a GRO Fellow gave her the opportunity to explore areas of environmental work with which she had limited experience or knowledge. As a result, she said, "I came to appreciate the challenges and demands of environmental regulation and more fully comprehend the role of bioassessment in environmental protection. In addition, while I had considered myself 'environmentally conscious' prior to my internship, personally working in degraded habitats heightened my consciousness to a greater degree."

Megan graduated from The College of New Rochelle (CNR) in May 2007 with a B.S. in biology and environmental studies, and a minor in chemistry. CNR was founded in 1904 as the first Catholic college for women in New York State; its main campus is located in New Rochelle, NY, 16 miles north of New York City. At CNR, Megan was a member of the Honors Program and received the President's Award upon graduation, the highest honor for a CNR School of Arts and Sciences graduate.

Megan is currently in the final year of a Master's program in ecology at the State University of New York College of Environmental Science and Forestry (SUNY-ESF) in Syracuse, NY.

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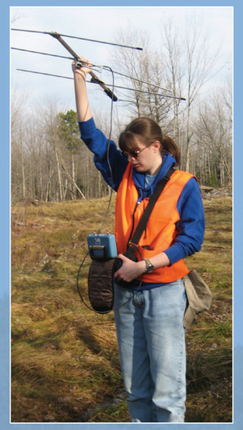
Megan Skrip...continued

"I entered grad school interested in avian responses to landscape variability, with ideas solidified by my work at the EPA," Megan explained. "My grad work encompasses landscape and population ecology, focusing on the dynamics of ruffed grouse and wild turkey in NY in response to habitat features."

Megan's choice of SUNY-ESF came about due to a chance encounter during her GRO internship. One day, she accompanied a USGS scientist to get some nets out of storage, and they struck up a conversation that eventually led to a discussion of graduate schools. Following up on the scientist's recommendation of SUNY-ESF with some online research, Megan found that not only did SUNY-ESF have an excellent academic reputation, but it directly appealed to her own interests. She said that it has been a "marvelous" fit for her as a grad school.

After earning her Master's, Megan will begin work on a Ph.D. in ecology at SUNY-ESF. By pursuing these advanced degrees in ecology, Megan said, she hopes "to broaden my empirical thinking and further develop my research skills and analytical abilities." Her professional goal is to have a career that combines ecological research and scientific writing. Megan said, "By conducting research in the field of ecology and writing on current findings for both scientific and public audiences, I hope to contribute to increasing both scientific and public understanding of environmental conflicts and complex ecological interactions."



Megan locates individual birds within the habitats she is studying via radiotelemetry. Here, she uses a receiver with antenna to pick up a radio signal from a small transmitter placed on a bird.

While she doesn't yet know if she will choose academia, government, or the private sector for her career, Megan credits her GRO Fellowship experience with providing valuable insight into career choices, and knows it will help her make informed decisions. "I talked and worked with many EPA employees in Edison during the course of my internship, learning about their jobs and views on environmental issues," Megan said. "I also worked closely with my mentor, gaining insight into his work in the field and its implications. I left my internship with an expanded skill set and broader perspective on my own goals, as well as valuable real world experience in the field."

Megan urges GRO Fellows to interact with EPA staff and other interns and to take advantage of the many learning opportunities they will find during their summers at EPA, including volunteering on other projects if their schedules allow. "Even brief encounters or small contributions to another's work can make lasting impressions," she said. Megan suggests asking coworkers and supervisors about graduate schools, what they like (and don't like) about their jobs, and their take on current environmental issues. You'll find that getting others' perspectives can fundamentally influence how you view your own goals," she noted. But most of all, Megan said, "The GRO summer internship is an incredible opportunity—make the most of it and enjoy it!"

Updates from 2007-2008 GRO Fellows

Joseph Ifokwe
Finishing his senior year at the University of North Texas, Joseph has decided to go to medical school following his graduation. It seemed to offer the best opportunities to combine biomedical research with hands on patient contact, he said. Joseph has been admitted to several medical schools, and is deciding between the University of Texas Houston Medical School and the University of Louisville School of Medicine. Looking even further ahead, he plans to pursue an MPH in Environmental and Occupational Health, to satisfy his ongoing interest in environmental topics.

Valerie Horstman
Val s senior design project is a huge part of her senior year at Calvin College. She and three other students are designing a pretreatment process to improve the cost effectiveness and resource efficiency of desalination processes for brackish water, which is found in coastal estuaries and in areas of high evaporation. A lot of these types of areas don t have any other sources of clean water, Val said, so it s really cool to be part of the much larger project of bringing clean water to people around the world. Her team is entering the project in the Environmental Design Contest at New Mexico State University, sponsored by WERC, A Consortium for Environmental Education and Technology Development. Val is also considering graduate school options, namely Master s programs in environmental engineering or urban planning (focusing on urban mass transit).

Jay Feitshans
Jay is seeking another internship this summer, and has applied for one in environmental health with the Centers for Disease Control, and for one with the World Health Organization in Geneva, Switzerland. He has found that being in an environmental science degree program opens up many opportunities, and is looking forward to getting deeper into public health policy. Jay s senior seminar project team at Albright College is evaluating the ecological, geological, and social success of a 1 year old environmental park and wetlands system in Reading, PA. Jay also volunteered during spring break to rebuild homes in Texas damaged by Hurricane Ike in 2008.

During his 2008 internship with EPA Region 4, Atlanta, GA, GRO Fellow Jay Feitshans discusses his project, the Hitchcock Woods Volunteer Water Quality Monitoring Project, with Doug Rabold, the Executive Director of Hitchcock Woods, in the bed of the Sand River near Aiken, SC.

GRO Internship Projects
Summer 2009

Charisse Carter
Analysis of BMP Implementation in the Coosawattee River Watershed
Atlanta, GA

Brandi Clark
Impact of Water Chemistry on the Corrosion of Drinking Water Distribution System Materials
Cincinnati, OH

Naveed Davoodian
South Florida Wetland Mitigation Banks: Are They Meeting Design Goals?
West Palm Beach, FL

Nadine Dodge
Impacts of Climate Change on Water Infrastructure
Boston, MA

Betsy Huyser
Sustainable Reuse and Alternative Energy at Superfund Sites in the Pacific Northwest and Alaska
Seattle, WA

Nathan Jones
Watershed Plan Assessment
Denver, CO

Todd Massari
Measuring Benefits of Shellfish Restoration
Narragansett, RI

Jonathan McKinney
Ecological Effects of Biofuel Plant or Microbial Species
Corvallis, OR

Tyler O'Dell
Process Intensified Synthesis of Organic Compounds
Cincinnati, OH

Adam Olszewski
Helicopter Monitoring Program
Edison, NJ

Joshua Pierce
Responses of Marine Crustacean Populations to Human Stressors in Laboratory and Field Environments
Narragansett, RI

Annie Putman
New England Aquatic Habitat Survey Using Underwater Sonar Mapping
North Chelmsford, MA

William Shipman III
Adverse Health Effects of Particles in a Human Epithelial Cell Model
Chapel Hill, NC

Lan Tran
The Evaluation of Aquatic Communities to Assess Biological Conditions in Rivers, Streams and Lakes
Edison, NJ

Making the most of a GRO internship

At the end of their internships last year, the 2007-2008 GRO Fellows shared some advice to help future interns get the most out of a summer internship at EPA. Here are some of their suggestions.

Broaden your horizons
Past interns found that approaching the summer with a willingness to have new experiences was very enlightening.

- Always keep an open mind. Many things can happen during your internship – especially when doing field work – that are unexpected and unplanned.
- Always be open to learning new things and meeting new people, because you can gain a great deal from both.
- Get as much field experience as possible, to pursue goals outside of your comfort zone, and to really engage with people of different backgrounds.
- Take every opportunity offered, especially for trips out of the office or lab, because you may learn the most during those trips, such as seeing the practical meaning of the work you do in the office or lab.

Experience EPA
GRO interns have the chance to be "on the inside" at EPA at a time when environmental issues are at the forefront. Last year's Fellows found that the Agency and its personnel had a lot to offer.

- Try to experience every aspect that EPA has to offer, from office work to lab work to field work. These areas vary greatly and exposure to all will help you in making future career choices.
- Get to know EPA employees – someone you meet this summer could prove to be a very beneficial connection in your future.
- Ask people about their jobs and their research; the more you learn about their experiences, the more it will help you improve your understanding of possible future directions for yourself.
- Take advantage of all the resources at your disposal while you are at EPA.
- Everybody at EPA is willing to help you in any way possible; you just have to ask.

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