

# MOUNTAIN LAKE ECHOES

## MOUNTAIN LAKE BIOLOGICAL STATION

Spring 2010

# SEEDS Field Trip to MLBS a Huge Success Eric Nagy

The Station's effort to expand its outreach mission was highlighted in September with the hosting of a "SEEDS" field trip. SEEDS (Strategies for Ecology Education, Diversity and Sustainability) is an NSF-funded program run by the **Ecological Society of** America (ESA). It is also the "flagship" program nationally recognized for its success in engaging underrepresented undergraduates in field ecology. Over four days last fall SEEDS and MLBS cooperated in what ESA organizers later called the "best SEEDS field trip ever."

The over-enrolled field trip gathered twenty-two students from across the continental U.S. and Puerto Rico for a packed





program of training, workshops, field excursions, fun, and an introduction to hands-on field research. Five SEEDS faculty and staff accompanied the students, and regional experts were invited to participate in a career panel and art workshop. Among the SEEDS staff was our own Rita

Cáceres (REU 2007), now a graduate student at University of Puerto Rico.

The stars of the program, by all accounts, were the six MLBS researchers (Leleña Avila, Vince Formica, Tami Ransom, Becky Wilbur, Henry Wilbur, and Corlett Wood) who presented captivating field lectures and lead the students in exciting group miniprojects.

The SEEDS students left Mountain Lake floored by what they had seen and done, and eager to stay engaged in SEEDS and in the life they had just tasted. An additional outcome of the field trip is the formal partnership between ESA/SEEDS and the MLBS REU program. We look forward to continued cooperation and engagement with SEEDS in years to come.

# Upcoming Deadlines

- COURSE APPLICATIONS ACCEPTED UNTIL CLASS IS FILLED
- SUMMER COURSES
  BEGIN MAY 17
- REU PROGRAM STARTS MAY 24

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### Mountain Lake Echoes

### From the Director

**Butch Brodie** 



Winter on Salt Pond Mountain is decidedly not for wimps. While the population centers of the mid-Atlantic may have had their Snowpocalypse and Snowmageddon, MLBS has certainly been pounded by its fair share of snow - well over 5' cumulative at last tally. Tom and Mark have braved their way up the mountain whenever possible, and report drifts of snow above the tops of the doors in some places. The howling winds keep the snow moving horizontally and pack it against anything downwind. The scene is

strikingly beautiful if you can stand the negative wind chills to view it.

One upside of the challenging weather is the first serious snowpack

since I arrived in 2006. We're all anxious to watch how this impacts the level of nearby Mountain Lake as the snow melts into the groundwater. The recent drying of the Lake has presented some tough times for our neighbors at the Hotel, and a good year of winter precipitation promises to bring that jewel back to a more serious level. The Hotel is already planning to have boats in the water for the first time in three years, and locals are beginning to place bets on how high the lake will max out.

After the last season, we're

all excited to enjoy a summer with minimal construction disruption. The renovations to cottages and dorms are complete, and the new construction is at the finish line (if we ever get enough thaw to wrap up the last roofing bits!). The new storage barn is open for business and will allow us to better serve long-term researchers with proper bodegas for field gear. This facility has also allowed us to reorganize and repurpose some of the space in the Wilbur Lab, which had become a de facto storage unit at the cost of usable research and project space. Mark has begun the unenviable task of moving our "resource stores" into the Barn and setting up shop there, so when you arrive this summer looking for PVC, plastic boxes, and planting supplies, you might have to ask around.

The Director's Cottage is finally open for business, as well. We think the final product is spectacular and will provide much needed social space for entertaining classes. visiting groups, and speakers. The University architects refer to it as the "Pavilion" after the buildings of similar function on the Lawn on Grounds (we're still searching for a proper name). It is part family residence and part community gathering space – we expect that everyone will have a chance to enjoy it early and often during in their visits at the Station. Be sure to come for the first Walton Lecture reception to be held in the Director's Cottage when **Curt Lively and Lynda** Delph (Indiana University) visit as our 2010 Walton Lecturers in mid July.



### **MLBS Welcomes New Caretaker**

**Eric Nagy** 

Tom Mc Namara joined the Mountain Lake Biological Station team in May as the new Facility Caretaker. He hit the ground running, and has not slowed up since! Tom came to us as a skilled builder, carpenter, and cabinet maker. We have since discovered that he has many, many valuable

talents, including gourmet cooking! Even facing the crush of his first summer season, with no time to ease into things, he has already contributed greatly to the appearance and function of the station. We also welcome Tom's spouse, Dr. Marcella Kelly, Associate Professor of

Biology at Virginia
Tech, and long-time
Wildlife Biology
instructor at the
Station, whom we are
very excited to be
seeing much more of
now! Please welcome
Tom if you did not have
a chance last summer.
We are very lucky to
have him.



### **REU Program Renewed!**

The National Science Foundation has funded the station's *Research Experiences for Undergraduates* (REU) program for another five

years! Since 1993
Mountain Lake has received six REU awards, supporting the program for seventeen years. The program trains undergraduate students in all aspects of scientific research and gives them a taste of life as a professional field biologist. In the 5-year funding period end-

ing in 2009 the program sponsored fifty-six students from forty different colleges and universities. 34% of participants have belonged to groups under-represented in science. 38% of them have already published their work, and more manuscripts

are in prep. Over half of Mountain Lake REUs have ended up in graduate school. In short, the program has been a huge success.



Thirty-one generous mentors contributed to the program. Without them, we have no program. Thank you!

In October 2009 Associate Director Eric Nagy and DiEric Nagy

rector Butch Brodie submitted a proposal to the NSF requesting renewed support for the program. The proposal was successful, giving

> us five more years of funding. Featured in the renewed program are new formal partnerships with the University of Puerto Rico and the Ecological Society of America's SEEDS program. MLBS will also continue its long-

standing partnership with HBCU Hampton University. With NSF's support we can now look forward to many more years of high-quality, fun, and inspiring REU student researchers at the station.



OVER 50% OF REUS
IN THE GRANT
CYCLE HAVE
ENROLLED IN
GRADUATE SCHOOL

## **NEON Setting Up Shop at MLBS**

Eric Nagy

The National Ecological Observatory Network (NEON) has identified MLBS as a site for the installation of one of its "relocatable" facilities.

Station Associate Director Eric Nagy has represented MLBS, the national Organization of Biological Field Stations (OBFS), and the American Institute of Biological Sciences (AIBS) in NEON planning for almost ten years.

In 2008 MLBS, in collaboration with Oakridge National Laboratory and Great Smokey Mountains National Park, put forth an offer to NEON Inc. and the National Science Foundation (NSF) to serve as one of the twenty NEON "domains" (see map). Last April NEON held a site visit at MLBS, and in February 2010



NEON met with all "Domain 7" representatives in Knoxville. Planning is underway, and construction could begin in another year.

NEON is a research infrastructure platform designed to observe and forecast continental-scale ecological patterns and processes. When it comes on line, NEON will be a single instrument, like a supercollider or large astronomical array, which can be "focused" on a wide range of ecological processes. NEON will collect data on invasive species and disease dynamics, changes in biodiversity, atmospheric chemistry, and biogeochemistry resulting from regional or

global processes such as Urbanization and climate change.

The installation at MLBS will consist of a large atmospheric tower surrounded by above and below-ground water and soil monitoring equipment. Identical measurements collected at all NEON sites, transmitted instantly and analyzed together, give NEON its power as a huge observatory, pointed down at the Earth.

MLBS is proud to have been identified as a NEON site. Our researchers and students will benefit from having NEON on site. And MLBS is excited for the opportunity to contribute to what could be a historical transformation in ecological science. Learn more about NEON at NEON-inc.org.

#### MOUNTAIN LAKE BIOLOGICAL STATION CONTACT INFO

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#### **SUPPORT MLBS**

You can support Mountain Lake Biological Station by making a taxdeductible donation.

Your gift promotes learning, education, scholarships, and research and has the potential not only to impact students' lives but to change our world. Help support our students and researchers today by making a donation on-line at www.mlbs.org.

For more information about the Department of Biology at the University of Virginia please visit virginia.edu/biology/

#### **SUMMER 2010 COURSES**



**SESSION I, May 17—June 11** 

**FISH ECOLOGY** (BIOL 4510/7510, Sec 1—4 cr)
Jamie Roberts, Virginia Tech

#### **BIOLOGY OF INVASIVE SPE-**

CIES (BIOL 4510/7510, Sec 2—4 cr) Lorne Wolfe, Georgia Southern University, and Leslie Rissler, The University of Alabama



**SESSION II, June 14—July** 

**PLANT CONSERVATION AND ECOLOGY** (BIOL 4510/7510, Sec 3—4 cr) **Zack Murrell**, Appalachian State
University

FIELD BIOLOGY FOR SCI-ENCE EDUCATORS (BIOL

*4510/7510—4 cr)* Heather Bleakley, Smith College



**SESSION III, July 12—July 30** 

**FIELD HERPETOLOGY** (BIOL 4510/7510, Sec 5—3 cr)
Kristine Grayson, University of Virginia, and Linda Green, Georgia Tech

FIELD METHODS IN WILD-LIFE ECOLOGY (BIOL 3510, Sec 1— 3 cr)

Tami Ransom and Eric Liebgold, University of Virginia