



# MOUNTAIN LAKE ECHOES

MOUNTAIN LAKE BIOLOGICAL STATION

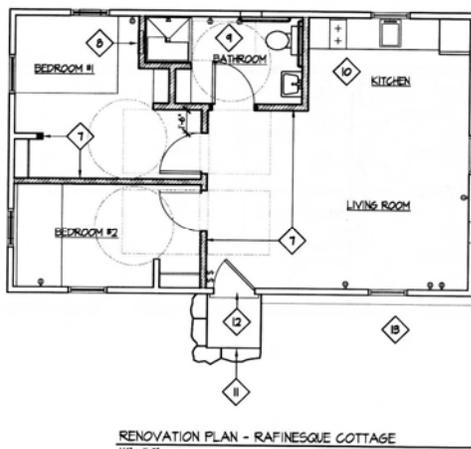
Spring/Summer 2009

Mountain Lake Biological Station is a division of the Department of Biology at the University of Virginia ([www.virginia.edu/biology/](http://www.virginia.edu/biology/))

## NSF Grant Funds Station Renovations

Construction crews have been hard at work all winter gutting and renovating many of the residences. When all is said and done, a total of 12 cabins will see major interior renovations and another two dormitories will have minor work and winterization.

The work is funded in part by a NSF grant from the Field Station and Marine Laboratory program to support partial winterization and the generation of family-friendly residences. Related updates and safety upgrades to additional cabins are being supported through matching funds from the University of Virginia.



RENOVATION PLAN - RAFINESQUE COTTAGE  
1/4" = 1'-0"

Four cabins (Gattinger, Hentz-Mohr, Michaux and Rafinesque) are having their interiors redesigned and renovated to include more efficient space for families and

long-term residents in the offseason. The most significant changes include small kitchenettes and three-season winterization to extend the usable period for resident researchers. Two dormitory spaces (Chapman and Elliot) will also see winterization of the plumbing to provide group use space in the spring and fall. Virtually every other summer cabin (including the much maligned "Shantytown") will receive new interiors and electrical upgrades to bring us up to current safety codes.

## Important Dates

### SUMMER COURSES

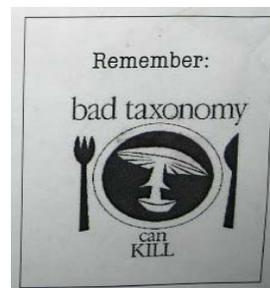
- MAY 22: STREAM ECOLOGY
- JUNE 8: PLANT CONSERVATION AND DIVERSITY
- JUNE 8: BIOLOGY OF BIRDS
- JULY 6: FOREST ECOLOGY
- JULY 6: EVOLUTION OF PLANT REPRODUCTIVE STRATEGIES

## Bad Taxonomy Can Kill

One of the highlights of the 2008 summer season was the Mycology class final exam. Over the course of the 4 week class, Rytas Vilgalys (Duke University) led students through the wonderland of natural history and systematics of local fungi. A long-time member of the MLBS com-

munity, Rytas teaches a course that highlights the wonders of an underappreciated group of organisms with a panache that makes everyone at the station a convert to the world of mushrooms.

The grand finale of the 2008 class was the collection, identification, and preparation of local wild fungi. Rytas presented each student with an official "MLBS" logo mushroom basket and off they went to harvest culinary adventures. The exam included a dinner prepared for the station community that highlighted various classes of



fungi. Despite a few nervous diners that were temporarily unconvinced that about the identification skills of the students, the meal went down as the finest culinary extravaganza to hit the tables of Jefferson Dining Hall in anyone's memory.



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# Mountain Lake Echoes

## From the Director

Butch Brodie

Winter 2008-09 has been an unusually busy season on the mountain. Mark Larson has been run ragged assisting and overseeing the construction crews busy on our renovation and expansion projects. Despite the appearance that the work is more destruction than construction, renovations seem to be on track for early May completion of the work to most of the residences.

In addition to the renovations, other construction efforts this winter involve a new director's cabin that includes semi-public space for social events and post-seminar gatherings. The cabin was designed by Michael Osteen of TEC, in collaboration with preservationists from UVA, and should reflect the aesthetics, historical architecture, and general character of the Station. The new building will go up between Hariot and Clayton on the north side of the Lawn and should be finished in June 2009. Somewhat less glam-

orous, but clearly a critical need, is the construction of a large storage barn going up on the East side of the parking lot. The barn will have storage space for individual labs and general station use, and hopefully will decompress the storage use of the Wilbur Lab, making that space available for the research mission.

The most significant change this year will undoubtedly be the retirement of our friend and caretaker Julian McCroskey

key. After many years of keeping the massive operation that is MLBS intact and healthy, Julian stepped down from his post to seek a new opportunity. He assures me that he'll not become a stranger, and I hope to hold him to his word. He will continue to live in Narrows and undoubtedly be a critical re-

source as the next caretaker learns the ropes and the nuances of seasons on Salt Pond Mountain. Julian's presence and person will be missed dearly, but we are happy for his new prospect. In conjunction with our colleagues in Facilities Manage-

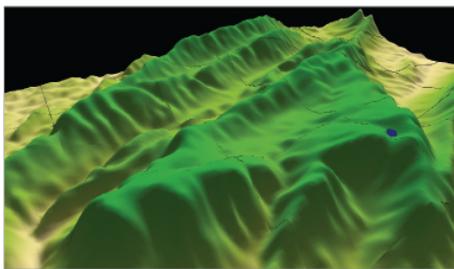
ment, we are well through the process of selecting the next MLBS caretaker. We hope to have the person on site within the month and fully integrated before the summer season begins in earnest.

This season will also mark the changing of another long-running tradition at the station as we pursue a new model for dining hall services. We will be partnering with our neighbor, Mountain Lake Hotel starting in May 2009. We are excited to be able to work with Mike Porterfield and Buzz Scanlon at the Hotel and expect this to be arrangement that has many benefits for users. As with any major change, there will undoubtedly be a few bumps in the road and we ask for your patience as we work out the details. Finally, we are grateful for the many years (no one can recall the exact number) of service provided by Virginia Tech.



Julian McCroskey

## GIS Project



3-D Rendering of Salt Pond Mountain and Vicinity

Keep your eye out for new maps at MLBS this summer. The new hiking and

grounds maps are part of an effort to update the station's Geographic Information System (GIS). As Mountain Lake's research associate, Vince Formica has been working with the UVA Library Scholar's Lab to incorporate the station's map data into the University's Geospatial Data Portal ([\[lat.lib.virginia.edu:8080/geonetwork/\]\(http://lat.lib.virginia.edu:8080/geonetwork/\)\). Once the data are "ingested" into this portal, anyone from around the world \(or on grounds\) will be able to access MLBS's spatial data and make maps of the station and surrounding areas right from their web browser.](http://</a></p></div><div data-bbox=)

As part of this effort, Vince represented the station in the GIS day celebration at the Scholar's Lab. At the MLBS booth Vince showed

off the collection of maps and data that have been collected over the years.

The new hiking trail and grounds maps will be available, for free, at both MLBS offices, and on our web page ([www.mlbs.org](http://www.mlbs.org)). Color, water-proof hiking maps will also be available for a nominal fee. If you can't make it up the mountain this year but would like one of these new maps please contact: [mlbs@virginia.edu](mailto:mlbs@virginia.edu)

# Spring/Summer 2009

## Summer Classes 2009

**MAY 22– JUNE 5**

### **Stream Ecology**

BIOL 463/863 (3 cr), Christine May and L. Scott Eaton – *James Madison University*

This course will focus on integrating principles of stream and watershed ecology as a means of gaining insight into stream dwelling organisms and their environments. Course goals are to introduce students to: 1) the physical, chemical, and biological organization of aquatic ecosystems, 2) current theories in stream and watershed ecology, and 3) lab and field methods for conducting stream research.

Students will design and conduct a field research project, partake in field and laboratory explorations, and participate in lectures and student-led discussions. The class will meet daily, and students should be prepared to hike and wade in rugged terrain and willing to work in wet conditions.

**CURRENTLY WAITLISTED**

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**JUNE 8–JULY 3**

**Plant Conservation and Diversity** BIOL 351/851 (4 cr), Zack E. Murrell – *Appalachian State University*

The extraordinary diversity of the southern Appalachians will serve as a backdrop to explore the world of plants. We will visit unique regional mountain habitats to develop an appreciation for the different species assemblages in these ecologically wide-ranging sites. Issues at these sites concerning conservation of biodiversity will be ex-



– *University of Virginia*

This course is about the population and community ecology of forest habitats in the Southern Appalachians, including northern hardwoods, southern coves, riparian, shale barrens, and spruce-fir. Field-

work will emphasize sampling techniques to answer conceptual questions using comparative and historical methods. Trees will be featured, but their impacts on non-woody plants and vertebrates will also be studied. Students must be capable of working in rugged terrain.

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**Biology of Birds** BIOL 359/859 (4 cr), Lynn M. Siefferman – *Appalachian State University*

This course is study of behavior, ecology, natural history, distribution, morphology, physiology, and identification of birds. The behavior and evolution of breeding birds of the Appalachian Mountains will be emphasized. The class will consist of lectures and field-based laboratories. Students will learn to identify birds based on sight and song. Students will conduct independent projects based on observing, recording, and analyzing data using a research project format.

**JULY 6–JULY 31**

**Forest Ecology** BIOL 464/864 (4 cr), Henry M. Wilbur and Rebecca B. Wilbur

work will emphasize sampling techniques to answer conceptual questions using comparative and historical methods. Trees will be featured, but their impacts on non-woody plants and vertebrates will also be studied. Students must be capable of working in rugged terrain.

**Evolution of Plant Reproductive Strategies** BIOL 358/858 (4 cr), Janet C. Steven – *Sweet Briar College*

Plants exhibit a wide range of approaches to achieving reproductive success, including asexual reproduction, specialized flower structure and pollination mechanisms, and specific seed germination cues. Through investigations of the primary literature and field observations and experiments using the local flora, we will investigate the diversity of reproductive strategies in plants and the evolutionary forces shaping them. Topics will include phenology, life history, asexual reproduction and clonal growth, pollination, self-fertilization, unisexual flower production, floral structure, fruit production and dispersal, and seed dormancy and germination. The course emphasizes the roles of hypothesis construction and experimentation in the study of evolution.

**Christine May and Scott Eaton** combine expertise in aquatic ecology, geology and conservation. 2009 marks the third offering of their *Stream Ecology* course, which takes advantage of MLBS's unique position atop the Eastern Continental Divide.

**Zack Murrell** is the curator of the I. W. Carpenter, Jr. Herbarium at Appalachian State University and the director of SERNEC, the initiative to bring individual herbarium collections together as a bioinformatic resource. He is an expert in southeastern plant diversity and bioinformatics and has taught at MLBS for over 10 years.

**Lynn Siefferman** studies the evolution of sexually selected traits such as behavior and coloration in birds. She has conducted field research at MLBS in the past; 2009 marks her first summer joining the teaching faculty at the station.

**Henry Wilbur and Rebecca Wilbur** have spent more than 20 years living, teaching and working at MLBS. Their collective knowledge of the mountain and surrounds is astonishing and their enthusiasm for the biology and geology of the area is positively infectious.

**Janet Steven** is an expert in the ecology and evolution of plant sex - her course could be titled "The secret sex lives of plants". Janet began her research career as an REU student at MLBS and returns to offer her first course this summer.

## MOUNTAIN LAKE BIOLOGICAL STATION CONTACT INFO

### MOUNTAIN LAKE BIOLOGICAL STATION

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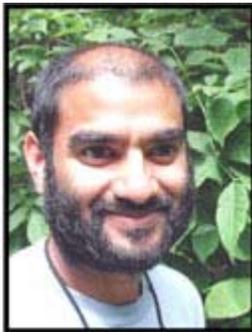


## SUPPORT MLBS

You can support Mountain Lake Biological Station by making a tax-deductible 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](http://www.mlbs.org).

## 2009 WALTON LECTURE



### *Community and Evolutionary Ecology of Insects and Plants*

**Dr. Anurag Agrawal**  
**Cornell University**  
**Tuesday, June 23**  
**8:00 pm**

## Other News

### **SUMMER POSITION: Assistant to the Station Manager**

The Mountain Lake Biological Station (University of Virginia) is located in Pembroke, Virginia, just a half hour drive from Blacksburg. Applications are currently being accepted for a full-time seasonal Assistant to the Station Manager, to work April - August 2009. This position provides administrative, financial, and general operational support. Duties include providing clerical support, answering telephones, greeting visitors, copying, faxing, sorting mail, station deliveries, and assisting the Station Manager with billing, purchasing of supplies, and receiving. This position also assists with maintaining the shop and stockroom, ensuring shop safety issues are reviewed and communicated. Ensure records on equipment use are maintained and accurate. Will assist researchers and students with building experimental apparatuses, providing repair, coordination, and movement of station equipment and furnishings. Waste removal, recycling duties, cleaning duties, and trail maintenance are also needed. A high school diploma

is required. Knowledge of office reception, office procedures, accounting, and bookkeeping is preferred. Experience with Microsoft Word, Excel, and Access is helpful.

Please apply on-line at: <https://jobs.virginia.edu>. Posting Number 0603212. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

### **We're on FACEBOOK!**

Add Mountain Lake Biological Station to your social network! Jumping in to the twenty first century, MLBS has created a Facebook page. We think this is a great way to keep in touch with all our supporters. So, if you're plugged into Facebook, visit our site and become a "fan" of the station (<http://www.facebook.com/pages/Pembroke-VA/Mountain-Lake-Biological-Station/56574851014?ref=mf>), where you can upload photos and videos of your Mountain Lake experiences.