





### Highlands Biological Station

MEMBER INSTITUTION PROGRAM



265 N. 6th St., Highlands, NC 28741 USA (828) 526-2602 www.highlandsbiological.org

# HIGHLANDS BIOLOGICAL STATION

Nearing its 94th year, the Highlands Biological Station (HBS) has a long tradition of supporting field-based research and education in a full spectrum of organismal, ecological and evolutionary disciplines. Operating as a research non-profit supported by a consortium of regional universities for its first 50 years, since 1976 HBS has been a University of North Carolina institution, and is today administered as a multi-campus center of Western Carolina University. In keeping with its roots, the institutional consortium remains an active and vital part of HBS in the form of the *HBS Member Institution Program*.

## What kinds of institutions can become members of the HBS consortium?

Our member institutions are diverse, and include public and private schools, research universities and liberal arts colleges, schools with baccalaureate programs only, and those with graduate programs.

#### What are the benefits of membership?

1. *Tuition discount on HBS summer courses and workshops* Students from HBS member institutions receive a **20% discount** on tuition for our summer courses and workshops; at current rates, this is a reduction of \$160 for 2-week courses and \$80 for 1-week short courses and workshops. HBS offers more than a dozen specialty courses and workshops in field biology and ecology each summer, capitalizing on the natural assets of the exceptionally bio-rich and ecologically diverse southern Appalachian region. Our immersive



The southern Appalachian Mountains are home to 76 species of salamanders, nearly half of which are endemic.

courses are field-oriented and taught by expert faculty intimately familiar with regional systems and organisms. Students obtain quality hands-on field experience and intimate introduction to regional organisms, communities, and ecosystems by studying in our "natural classroom and laboratory." HBS courses and workshops are fully accredited through UNC-Chapel Hill (BIOL 459) and Western Carolina University (BIOL 493 / 593); credits are typically transferrable to students' home institutions.

2. Priority for researchers and faculty with visiting classes Faculty and graduate student researchers from HBS member institutions are given **priority** in reserving bench space and equipment for their research based at HBS. Faculty from member institutions wishing to bring a class to HBS for a field trip are given priority in reserving classrooms, labs, or equipment for their classes.

HBS offers first-rate **teaching** and **research** space, including a stateof-the-art teaching wet lab, GIS lab, seminar room, and general-use classrooms (all with sinks and prep areas for flexible use for lecture or lab activities). Teaching is further supported by digital projectors, high-quality dissecting and compound microscopes, and videomicroscope demonstration systems. Four individual research laboratories are available, as is a general purpose lab with walk-in environmental chambers, an Aquatics Lab with tanks and chillers, and a molecular lab with a full range of molecular-genetics equipment for DNA isolation, purification, and amplification.

#### 3. Advanced notice of program schedules

Students from member institutions are given advanced notice of the summer program of courses and the paid internships that HBS offers each summer, including two Botanical Garden internships and three Nature Center internships.

#### 4. Acknowledgement on our website and use of our logo

We acknowledge members of the HBS consortium on our website, and provide member institutions with a high-resolution image of the HBS logo. Members are encouraged to use the logo on their website or print materials to highlight their HBS membership among the opportunities they advertise for their students and faculty.

Dr. Jessica Allen, a 2014 and 2015 Grant-in-Aid recipient, collecting the endangered rock gnome lichen for population genetics research. Since 2015, HBS has awarded over 50 Grant-in Aid of Research to graduate students and faculty from 15 colleges and universities nationwide



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## What other privileges do member institutions enjoy?

Member schools are entitled to appoint a faculty member representative to serve on the HBS Board of Scientific Advisors. This Board evaluates our annual Grantin-Aid proposal submissions, and is consulted periodically on matters pertaining to HBS policy and teaching and research opportunities as they relate to HBS users.

# What do member institution funds support at HBS?

Member institution funds support mainly graduate research at HBS. For 60 years, our Foundation has had an annual Grant-in-Aid of Research program for graduate research that is based at HBS. Funding is based on weeks in residence at the Station, up to a 12 week maximum. We typically fund about a dozen projects, amounting to \$20-\$25K each year. For more information about this program and the projects we support, please visit https://highlandsbiological.org/ foundation/grants-in-aid-of-research/.

### Why become involved with the HBS consortium — can't my students simply take the same courses at my university, or take courses at HBS anyway?

Consortium membership is not a requirement for students to take HBS courses; however, we do give preference to students from membership institutions for course space and financial aid. Consortium membership provides easy access to the field-based, in-depth experiential courses at HBS.

Field stations are all about **immersion education**. Colleges and universities nationwide are experiencing a sharp reduction in the availability of a full range of field biology courses, including organismal field biology courses, that teach students the nuts-and-bolts of what makes biological communities and ecosystems tick. These are the types of courses in which we specialize.



A group from Berry College at the top of Whiteside Mountain in Highlands, NC during a trip to the Highlands Biological Station in Fall 2014.



Students taking a summer field biology course at the Highlands Biological Station snorkel in the Wild and Scenic Chattooga River in search of native fish.



After collecting aquatic insects in the field, students return to the main teaching laboratory of Coker Laboratory at the Highlands Biological Station to identify their specimens.

# LOCAL FOCUS. GLOBAL SIGNIFICANCE.



HBS is dedicated to the "up close and personal" model of field biology education, and we do so in a region nearly unrivalled in temperate zone biodiversity. Our students study their subject all day every day for up to two weeks, offering unparalleled openings for a deep and meaningful experience in the field and lab with their study systems. The southern Appalachian landscape—with the highest, wettest, and greatest extent of mountainous terrain in eastern North America—is our classroom and laboratory. We invite you to join our institutional supporters and partner with us to share these unique opportunities with your students, researchers, and faculty.

## How much does it cost to become an institutional member of the HBS consortium?

The institutional membership fee is \$500 annually.

### How does a school join the HBS consortium?

Arrange Payment

Contact the Highlands Biological Foundation at 828-526-2221 to arrange for payment of the annual membership fee (\$500, payable to the Highlands Biological Foundation, Inc.). Fees are due December 31st in order to receive the benefits the following calendar year.

Nominate someone from your school for the Board of Scientific Advisors HBS Executive Director Jim Costa (costa@wcu.edu) or Associate Director Jason Love (jlove@wcu.edu) will assist with your nominee and with any questions you may have.

We will provide you with information about HBS research and course opportunities for your students and faculty, and send you a link to download a high-resolution image of the HBS logo.

We value your membership! You will become part of a venerable group of regional colleges and universities, many of which have been a part of the Highlands Biological Station community for decades.



### TAKING ADVANTAGE OF YOUR MEMBERSHIP BENEFITS

The opportunities that are available through the Highlands Biological Station complement and reinforce the concept that instructors cover in class and on campus: Dr. Chris Mowry teaches Advanced Ecology at Berry College. Each year, he picks a few topics to focus on in class, and then the class comes to the Station for a weekend to see the concepts illustrated first-hand. They cover the distribution of salamander communities and the life cycles of the Red-spotted Newt. The also talk about granite outcroppings and primary succession, and the impact of invasive species such as the hemlock woolly adelgid on southern Appalachian communities.



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A multi-campus center of Western Carolina University, a unit of the University of North Carolina System 265 North Sixth Street, Highlands, North Carolina 28741 USA (828) 526-2602 www.highlandsbiological.org

#### **Photo Credit:**

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