

# HANCOCK BIOLOGICAL STATION SUMMER 2014 May 27 – June 30



Each summer Murray State University's Hancock Biological Station provides an outstanding offering of field oriented environmental and ecological courses. Courses meet all day, twice a week so that people can take 2 courses during this session. All courses carry 4 credit hours. Scholarships and housing are available. Contact the Station for additional details. Scholarship applications should be competed by May 1, 2014. Find out more by visiting the Station's web site (<a href="www.murraystate.edu/hbs">www.murraystate.edu/hbs</a>) or calling 270-809-2272 (ask for Gerry Harris, or e-mail her at gharris@murraystate.edu).



## **BIO 330 - PRINCIPLES OF ECOLOGY**

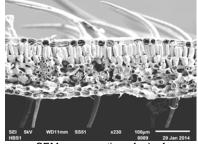
#### Dr. Susan Hendricks

An introduction to the basic principles and concepts relating to environmental systems. Emphasis is placed on community ecology. Much of the course is devoted to field observations and experimentation. The course is aimed primarily at undergraduate Biology majors but is open to others. Tuesday & Friday

# **BIO 506/606 ADVANCED FIELD BIOLOGY**

#### Dr. Ed Zimmerer

This course is for people who wish to learn how to identify living organisms and their functions in the environment. Course work will include the use of keys, field identifications, and analysis of local habitats as well as understanding how the species are distributed in the environment. Techniques for teaching about nature will be highlighted. The course emphasizes habitats and species from this area and prepares people to become good naturalists and teachers. Monday & Thursday



SEM cross section of a leaf

## **BIO 514/614 SCANNING ELECTRON MICROSCOPY**

#### Ms. Karla Johnston & Dr. David White

The theory, principles and applications of scanning electron microscopy (SEM). After a predetermined number of instructional hours, the participants are expected to successfully complete a test that measures competency in SEM operation, specimen preparation, and remote operations. The course includes remote operations where researchers and teachers have access to the microscope for use in their own labs or classrooms. The course is limited to a maximum of 5 students. Monday & Thursday

# **BIO 553/663 – FIELD BOTANY**

## **Dr. Richard Abbott**

A survey of the plants of western Kentucky and surrounding states. Emphasis is on field identification of common species, use of keys, collection and preparation of specimens, and general plant ecology of the region. Wednesday & Saturday (Dr. Abbott is a visiting scholar from the Missouri Botanical Garden)

## **BIO 596 FIELD STUDIES IN ECOLOGY – KENTUCKY LAKE**

#### Dr. Todd Levine

The course will focus on the biology, ecology, and management of Kentucky Lake in the western Kentucky landscape. The location of HBS on the shore of Kentucky Lake provides a unique opportunity to study the largest reservoir in the eastern US up close. Topics will range from water chemistry to fisheries, to dam management to the effects invasive species. Tuesday & Friday

## **Sessions Arranged**

**491 - 494 UNDERGRADUATE RESEARCH TOPICS -** Designed for undergraduates who wish to do directed independent research in an area of field biology. A faculty member must agree to direct the research. (1 to 4 hours credit may be taken). Time arranged.

**691 - 694 GRADUATE TOPICS IN BIOLOGY** - Designed for graduate students who wish to do directed independent research in an area of field biology. A faculty member must agree to direct the research. (1 to 4 hours credit may be taken). Time arranged