

# UNIVERSITY OF OKLAHOMA College of Arts and Sciences

## WELCOME TO THE OKLAHOMA BIOLOGICAL SURVEY

**Biological**Survey

The Oklahoma Biological Survey is both a research unit of the University of Oklahoma and a state office. Our purpose is to gather, analyze and disseminate information regarding animal and plant forms and ecological communities within the state. We work closely with other departments on campus, including Zoology, Botany and Microbiology, and Geography. In addition to scholarly research and

campus, including Zoology, Botany and Microbiology, and Geography. In addition to scholarly research and publication, we provide information to citizens, organizations, businesses, and agencies concerning Oklahoma's biota, and we assist in the protection and preservation of the natural heritage of Oklahoma.

### GRADUATE STUDENT RESEARCH

The Survey often supports graduate students on externally funded projects as Graduate Research Assistants (both during the academic year and in the summer). We also have some internal graduate student funding. To find out more about research opportunities at the Survey, please contact one of the program directors listed here or visit our website: http://www.biosurvey.ou.edu/.

#### RESEARCH PROGRAMS

We have a strong interdisciplinary research focus, which includes the five permanent programs listed below. Faculty research interests and current projects are highlighted on our website: http://www.biosurvey.ou.edu/.

The General Survey (GEN) is the administrative core of the Biological Survey and comprised the original Biological Survey. GEN faculty conduct research in ecology, evolutionary biology, conservation biology and systematics in Oklahoma and on a global scale.

Contact: Caryn C. Vaughn, Director 405-325-4034 cvaughn@ou.edu

*The Robert Bebb Herbarium* (BEBB), a research museum jointly operated with the Department of Botany and Microbiology, houses well over 230,000 preserved plants from Oklahoma, other regions of the United States and abroad. The Bebb Herbarium is located in George Lynn Cross Hall on the main campus of the University.

Contact: Wayne Elisens, Curator 405-325-7533 elisens@ou.edu

The Oklahoma Natural Heritage Inventory (ONHI) gathers and provides information Oklahoma's rare species of plants, animals, and ecological communities. The Heritage Inventory presents unique training and research opportunities for students in conservation biology as well as many aspects of ecology.

Contact: Bruce Hoagland, Coordinator 405-325-1985 bhoagland@ou.edu

The George Miksch Sutton Avian Research Center (GMSARC), located in Bartlesville, is a scientific research and education center dedicated to bird conservation. GMSARC offers temporary employment for students wanting to gain field experience with birds.

Contact: Steve K. Sherrod, Director 918-336-7778 gmsarc@aol.com

The Oklahoma Fisheries Research Laboratory is a cooperative project of the Survey and the Oklahoma Department of Wildlife Conservation that serves as a state research unit for applied fisheries biology. This jointly operated laboratory provides for the training of graduate students interested in the study of fish, particularly species with special recreational value.

Contact: Greg Summers, Director 405-325-7288 gregsumm@aol.com

#### **FACILITIES**

We have advanced geographic information systems facilities; networked personal computer and workstation computing; general and wet laboratory space; gene sequencer and other molecular ecology facilities; field vehicles and an extensive inventory of field equipment for research use. Offices for most faculty, staff, graduate students and administration are located in the Biological Survey building on South Campus.

## **FACULTY**

All of our faculty hold a joint appointment with an academic department at the University of Oklahoma.

Academic Department

Dr. Liz Bergey Zoology
Dr. Richard Broughton Zoology

Dr. Wayne Elisens Botany & Microbiology

Dr. Bruce Hoagland Geography
Dr. Jeff Kelly Zoology

Dr. Michael Patten Zoology (adjunct)
Dr. John Skvarla Botany & Microbiology

Dr. Caryn Vaughn Zoology

# "WAY DOWN YONDER IN THE INDIAN NATION..." -- Woody Guthrie

Larger than any state east of the Mississippi River, saving Minnesota, Oklahoma is a biological theme park *par excellence*. We have 69,903 square miles (181,748 km²) of land and water, home to more than 2,500 vascular plant species, 113 mammal species, 140 species of amphibians and reptiles, 394 bird species, 177 species of fish, 55 mussel species and myriad other invertebrates (not to mention those species that fly, crawl, or swim through the state on the way to someplace else). Annual rainfall varies from 15" (38 cm) in the Panhandle to more than 50" (127 cm) in the southeast. Featuring a mosaic of grasslands, savannas, and forests, about one-fourth of the state is forested, mainly the region to the east bordering Missouri and Arkansas; the natural vegetation of the western three-quarters of the state is mainly tallgrass prairie, mixed and shortgrass plains, and oak woodlands. Most of the state is a great rolling plain, elevation 4,973 feet (1515 m) to a low 287 feet (87 m) above sea level, sloping from northwest to southeast. Clear rivers and streams drain the Ozark and Ouachita mountains in the east, while braiding sand rivers flow southeastward across the western body of the state. Oklahoma has four significant areas of geologic uplifts and low mountains: the Ouachita Mountains in the southeast, the Ozark Plateau in the northeast, the Arbuckle Uplift in south central Oklahoma, and the Wichita Mountains in the southwest.

We look forward to hearing from you. If you have any questions, or need more information, please do not hesitate to contact us.