

## Careers with a Ecology Degree:

Field/Research Technician Laboratory Assistant Intern Park Naturalist Wildlife Specialist Volunteer Coordinator Program Scientist Teacher Forester Natural Resource Mgr. Wildlife Biologist Field Ecologist Environmental Consultant

\*Ecology degree prepares student to apply for advanced degree or to work in government and/ or nonprofit organizations along with conservation of natural resources.

### **Show Me the Money!** Graduates with a Biology

degree typically earn between \$30,000 and \$60,000 for entry-level jobs. As a college graduate, you can earn an average of 75% more than those with only a high school degree, per The Chicago Tribune! (NACE 2018 Salary Report)



# **Ecology** DEPT of BIOLOGICAL & ENVIRONMENTAL SCIENCES



Ecology is the study of organisms, including humans, and a diverse array of interactions with their environment. Ecologists work with organisms over a broad scale from bacteria in soils to landscape ecosystem processes. Ecologists inform us about threats to biodiversity due to invasive organisms, increased water system health through wetland filtration, organisms such as horseshoe crabs that provide vital medicine (hemolymph that treats leukemia), when we are at risk for diseases like Lyme disease, ways to protect our at-risk species so that we can bring them back like the Bald Eagle, ways to increase forest health, management solutions for agriculture and so much more. Graduating with a concentration in Ecology prepares you for a diversity of careers, including research, writing, policy, ngo's, consulting, government and more.

### Department Coursework



Coursework in this program includes a variety of courses that align with the Ecological Society of America. Courses include Zoology, Chemistry, Organic Chemistry, Biostatistics, Comparative Vertabrate Anatomy, Animal Parasitology, Field Methods, Herpetology, Plant Physiology, Wildlife Management, Human Physiology, Ecology, and Undergraduate Research Experience. A lot of learning happens in the field with hands-on experience.



East Central University 1100 E. 14th St. Ada, Oklahoma 74820 www.ecok.edu/BIO 580-559-5497



Campus Tours: ecok.edu/take-a-tour 580-559-5628 ecutiger@ecok.edu

## Department of Biological & Environmental Sciences

## > Meet the Ecology Faculty



#### Mike Bay, Ph.D.

- Vertebrate Biologist
- B.S. in Biology, M.A. and Ph.D. in Zoology
- Office: PES 158 / 580-559-5497 / mbay@ecok.edu
- Courses Taught: Comparative Vertebrate Anatomy, General Ecology, Human Anatomy, Ichthology, Marine Biology, Medical Entomology, Ornithology

 Research Interest: Avian Ecology and Behavior, Parasite-Host Interactions, Mosquito Biology, Vertebrate Ecology



#### Leah Dudley, Ph.D.

- Plant Eophysiologist
- B.S. in Biology, Ph.D. in Biology
- Office: PES 168 / 580-559-5495 / Idudley@ecok.edu
- Courses Taught: Botany, Medical Botany, Ecology, Ethnobotany Evolution, General Biology, Mycology, Plant Ecophysiology, and Evolution

• Research Interest: My research generally explores how plants deal with a drying world, using dichotomies such as male versus female plants of dioecious species and outcrossing vs. selfing plant mating systems to test predictions. I meld tools and ideas from both plant ecophysiology and evolution in both field and greenhouse environments from extreme montane environments to lowland prairies. Currently, I am applying these themes to a culturally relevant agricultural system, The Three Sisters. I am addressing how plant-pollinator interactions are influenced by polyculture (bean, corn & squash) compared to monoculture growing conditions under varying soil water availability.



#### Bruce Moring, Ph.D.

- Stream Ecologist
- B.S. in Biology, M.S. in Zoology and Ph.D. in Ecology
- Office: PES 148 / 580-559-5657 / bmoring@ecok.edu
- Courses Taught: General Biology, General Zoology, Limnology, Senior Seminar, Stream Ecology

• Research Interest: The influence of altered streamflow on the ecological integrity of stream ecosystems. I study invertebrate and fish-community structure and functions to help define reference-condition streams in different ecoregions of Oklahoma.



#### George Wang, Ph.D.

- Community Ecologist
- B.S. in Zoology, M.S. in Biology, Ph.D. in Environmental and Evolutionary Biology
- Office: PES 104 / 580-559-5694 / gwang@ecok.edu
- Courses Taught: Evolution, General Biology, General Ecology,
- General Zoology, Human Anatomy, Medical Terminology

• Research Interest: I am a community ecologist interested in plant–insect interactions. I conduct field-and-laboratory based experiments to examine the effects of various biotic and abiotic factors on insect performance and community dynamics.



& Environmental Sciences

#### Dean: Dr. Ken Andrews,

College of Health & Sciences Chair: Dr. Mike Bay Degree: Bachelor of Science Concentrations: 7 Minors: 2 Faculty: 8 full-time & 2 Part-time Organizations: 4 Scholarships: 25 Location: 158 PES Building



Undergraduate Enrollment: 3,000 Undergraduate Majors: 70+ Student to Faculty Ratio: 13 to 1 Average Class Size: 22 Faculty with PhDs: 65% States Represented: 28 Countries Represented: 30+ Year Founded: 1909 Campus Size: 140 Acres Area Location: Ada, Oklahoma



Mascot: Roary the Tiger School Colors: Orange & Black Student Organizations: 60+ Athletics: NCAA Division II

Men's:	Football Baseball Basketball	Cross Country Track & Field
Women's:	Basketball Volleyball Softball	Soccer Cross Country Track & Field

## We educate and empower students to understand and transform our world.

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