



# **ECOLOGY AND EVOLUTIONARY BIOLOGY**

Embracing education and research on virtually all aspects of biodiversity, from the origins and evolution of species to the processes by which diversity has evolved, to the ecological context in which evolution takes place

The Department of Ecology and Evolutionary Biology (EEB) at the University of Michigan is among the top ten EEB departments in the country, and our associated museums—the University of Michigan Museum of Zoology and University Herbarium—are in the top three university collections nationwide. The department focuses on research and education in the biological principles and processes that account for the origin, diversity, and complexity of life on earth. Our distinguished faculty includes many of the best-known researchers in their fields who have received multiple honors and awards. Many hold positions as editors of prestigious journals and/or as officers of national and international professional societies.

The department encompasses education and research in its mission to investigate and teach about phenomena across many levels of organization and spatial scales, ranging from evolution at the molecular level to the ecology of the global biosphere. We play a unique role within the life sciences on campus through our expertise on diverse organisms from bacteria to elephants, and because of our focus on biological interactions in the context of heterogeneous natural environments. Thus, we are a pivotal unit in the study of ecosystem sustainability, including effects of humans on food production, invasions by exotic species, habitat quality, and many other processes that, in turn, have large impacts on human societies. Our undergraduates majoring in EEB are well prepared to pursue careers in business, government, teaching, health care, research and consulting, as well as to earn advanced degrees at leading institutions. Our graduate students go on to positions at academic and governmental institutions, businesses, and NGOs around the world.

With our great strengths in areas such as ecology and evolution of infectious disease, molecular evolution, theoretical ecology and phylogenetics—and thanks to our extensive facilities, including the university's research museums and field stations—we are already one of the top ten departments in the United States for research and graduate education in the biodiversity sciences. Our goal is to further enhance our programs to make the University of Michigan the premier institution in this discipline for undergraduate education, graduate training, and faculty research.



### UNDERGRADUATE SUMMER RESEARCH INTERNSHIPS

Internships provide an opportunity for undergraduate students to conduct research with faculty during the summer, whether in Ann Arbor laboratories or at field sites around the world. These immersive experiences often help to shape an undergraduate's future career aspirations and help them be competitive for graduate school and research positions. While many students work in EEB faculty labs during the academic year, funding is often lacking to support students conducting independent research during the summer. A gift of \$5,000 supports a student for a summer so they have the opportunity to gain this important experience.

## **GRADUATE RESEARCH SUPPORT**

Support is needed to enable our graduate students to carry out research at the cutting-edge of the biodiversity disciplines. Gifts of \$5,000 per research project could fund the purchase of specialized laboratory equipment and supplies for fieldwork or traveling expenses to other laboratories or remote field sites.

### **GRADUATE STUDENT FELLOWSHIPS**

The study of ecology and evolution at U–M has long attracted outstanding graduate students who go on to fill key faculty positions nationally and internationally, as well as make important contributions as scientists in government agencies and non-profit environmental organizations. A gift of \$1M would endow a named graduate fellowship in perpetuity, while a gift of \$50,00 would fully support a graduate student for one year (stipend, tuition, health benefits) and enable the department to continue to attract the very best graduate students to study at Michigan.

"The Ecology & Evolutionary Biology department has been incredibly helpful and supportive throughout my Ph.D. dissertation. The access to museums and stateof-the-art facilities, ample funding opportunities, admin support, and generally collaborative community has made it possible for me to conduct almost any project that I can imagine. It's truly an amazing resource for an early-career scientific researcher." *—Haley Crowell, EEB Ph.D. Student* 

### **STRATEGIC FUND**

Each year, expendable funds are a vital means of addressing urgent needs for the department, providing key resources, and increasing our ability to take advantage of opportunities as they arise. Contributions of all sizes to the EEB strategic fund are critical to our ongoing development and could support purchasing cutting edge technology, hosting special guest lecturers, piloting new programs, and enabling students and faculty to take advantage of time-sensitive research and educational opportunities.



### FRONTIERS MASTER'S PROGRAM

The Frontiers Master's Program in Ecology and Evolutionary Biology prepares students to be competitive for top-ranked Ph.D. programs in ecology and evolution. This program is designed to enhance the diversity of the discipline by providing students who are part of underrepresented groups in the field with opportunities to learn about the full range of subjects in ecology and evolution. Students start the program with a summer at the U-M Biological Station, where they take a field course, conduct research, and participate in professional development workshops. Over the next two years, students take a course in laboratory methods and other areas, complete a focused research project and thesis with a research mentor, develop teaching skills and experience, and receive mentoring and advice from the faculty, program director, and staff. A gift of \$50,000 annually for two years would enable a student to participate in the program and go on to pursue a Ph.D. at Michigan or another prestigious institution.

### WAYS TO FUND YOUR GIFT

Your partnership connects the college's rich past to a boundless and bright future. You can change lives with gifts of cash, pledges, or appreciated securities, and create a meaningful legacy through your bequest, trusts, gift annuities, and other planned gifts. Your generosity makes an impact on what's next, for a better tomorrow.



"We tend to pursue biology in silos," notes Professor D. Andre Green about the slow, piecemeal nature of the scientific process. He insists, however, opportunities exist —with the monarch and with other insects, animals, and plants—that allow for a more integrative and holistic approach to research. "You can study entire populations on global scales or you can study biophysics or biochemistry. I love the idea of connecting these segments."

## for what's next > Look to Michigan

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