

**Department of Biological Sciences  
COLLEGE OF ARTS AND SCIENCES**

**SUMMER RESEARCH OPPORTUNITIES  
FOR UNDERGRADUATE WOMEN**

**APPLICATION DEADLINE: March 1, 2010**

*The Department of Biological Sciences is pleased to offer the following research project for the summer of 2010. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and, if possible, develop a timetable for the twelve-week research period.*

**PROJECT TITLE: The spread and impact of ornamental invasive plant species within an urban-wildland gradient in southwestern Ohio Populations**

**Project Supervisors:** Theresa Culley and Guy Cameron (Biological Sciences); Arnie Miller and Sarah Kolbe (Geology)

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**Project Description**

Even though invasive plant species pose a substantial problem worldwide in terms of damage to ecosystems, the role of ornamental plants introduced through horticulture remains relatively understudied. As part of an interdisciplinary project on vegetational diversity in southwestern Ohio being conducted by faculty and graduate students from the Departments of Biological Sciences and Geology, this new investigation will focus on the escape of ornamental plant species into natural areas surrounding local arboreta and parks. Preliminary evidence gathered to date suggests that some ornamental plants do escape but the extent and dispersal distance remains unknown. During this project, the WISE participant will work closely with other members of the group to conduct vegetation surveys and will use GPS to locate and identify horticultural escapees in local forests. The student will also be responsible for analyzing plant lists at the arboreta and parks to reconstruct the history of introductions of these ornamental plants. The goal of the project is to determine the abundance and extent of ornamental invasives and whether these factors are related to time since introduction of the species. The WISE participant will also have the opportunity to participate in a revision of the list of top invasive plants for the state of Ohio being conducted by the Ohio Invasive Plants Council. This revision will specifically address ornamental plant species for the first time in the history of the state.