"Pandas, People, and the Planet"

Dr. Vanessa Hull - Michigan State University

One of the central questions in ecology concerns how animals behave across space and navigate coupled human and natural systems, contested spaces where humans and nature undergo complex interactions. One such species is the endangered giant panda (*Ailuropoda melanoleuca*), a large mammal of international conservation concern that is native to increasingly fragmented forest habitat in southwestern China. The panda is an elusive animal whose behavior in the wild is not well understood. In this seminar, job candidate Vanessa Hull will describe a study on wild panda behavior that she conducted along with her colleagues in Wolong Nature Reserve, China. GPS collars were used to collect novel data on locations from a cohort of wild pandas every four hours for a period of two years. These data were integrated with other field data and analyzed using a variety of methods including movement models of space use, habitat suitability analysis, and spatial overlays in a geographic information system (GIS). The analyses revealed new information about the species, such as the fact that the pandas used numerous core areas and incorporated habitats previously considered to be sub-optimal (e.g., steep slopes, non-forested areas) as part of their home ranges. The study also has important implications for understanding the impact of people on giant pandas and their habitat. Giant pandas avoided areas used intensively by grazing livestock owned by local residents and also roamed extensively across zoning ordinances intended to separate pandas from human activities. Hull will discuss ways to integrate these new findings into management planning for this and other endangered species facing similar pressures. She will also describe her recent efforts to apply lessons learned about panda-people interactions in this study to related global wildlife and conservation issues.

RESEARCH TALK – Monday February 1; Room 27 Alumni Memorial Building 4:30 – 5:30 PM