

Wildlife ecology and conservation across global to local scales



Science & Mathematics Colloquium Series

Presentation by Jesse S. Lewis

Postdoctoral Scientist, Conservation Science Partners

Wed., Feb. 22, 2017, 3 pm

**Cooley Ballroom C, Student Union
ASU Polytechnic campus**

It is increasingly important that wildlife ecologists work across broader spatial scales for the successful long-term conservation of species and landscapes, especially in the face of land use and climate change. Dr. Lewis will explore topics of wildlife conservation across global to local scales. At a global scale, biotic and abiotic factors influence the population density of an invasive large mammal, the wild pig. Biotic factors resulting from human activities can be particularly important for understanding broad-scale species distributions. This information is used to evaluate population characteristics at national and state-level scales. At finer scales that characterize many study areas, the impacts of human activities can have diverse effects on carnivore populations. For example, urbanization can influence the population characteristics and interspecific interactions of bobcat and mountain lions. In addition, when large carnivores, such as black bears, cross major roadways they often select for key habitat characteristics.



With a research emphasis in applied ecology, **Jesse Lewis's** research incorporates the principles of wildlife biology, landscape ecology, and conservation biology. His focus is on understanding how human activities affect animal populations, ecological communities, and landscape connectivity, to help inform management actions and conservation strategies for the short and long-term persistence of species and populations.

Lewis investigates ecological questions focused on population and community ecology, animal movement, and habitat relationships. Much of his research involves field-based studies, and he conducts broad-scale analyses using geographic information systems.

He earned his doctorate at Colorado State University.

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Faculty and practitioners discuss their current research and field projects in the college's Science and Mathematics Colloquium Series, held throughout the academic year at the ASU Polytechnic campus. All seminars are free and open to the public.

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