CGA AidData Geospatial Lecture Series

DR. HEALY HAMILTON

THE VALUE OF BIODIVERSITY IN A RAPIDLY CHANGING WORLD

November 9 Washington Hall 301 2:30-4:30 Reception to follow lecture

The diversity of life on Earth provides the economic and ecological infrastructure upon which human civilization depends. Traditional stressors on biodiversity, such as land and water degradation, invasive species, and direct overexploitation, continue to rapidly diminish both the diversity of species and the essential services they provide to humanity. As we enter the new geologic epoch of the Anthropocene, dominated by the visible imprint of human activities on the natural and physical world, the pace of global change is poised to interact with and overtake traditional stressors, with dramatic negative consequences for both nature and human well-being. A rapidly changing climate is already having significant negative impacts on food security, public health, and societal infrastructure. With limited resources to confront increasing challenges, conservation of biodiversity is often seen as a luxury rather than a priority directly linked to the improvement of human well-being. Biodiversity is the ultimate resource for creating societies more resilient to change. From genetic variation in wild crop relatives that can enhance food productivity, to the clean water provisioning services of well forested watersheds, to the ability of wetlands to absorb rising seas, to the carbon sequestration potential of trees, biodiversity has never been more essential to humanity as we navigate a planet committed to rapid and significant global change.



Dr. Healy Hamilton Chief Scientist, NatureServe

Dr. Healy Hamilton is currently Chief Scientist and Vice President for Conservation Science at NatureServe. She is a biodiversity scientist with broad interests in the evolution and conservation of the diversity of life. Her current research focus is global change biology, with an emphasis on forecasting the impacts of climate change on species and ecosystems for natural resource management and conservation. Dr. Hamilton is committed to public understanding of global change, and explores data visualization approaches to improve ecological literacy. In her spare time, she studies the taxonomy, evolution and conservation genetics of seahorses and their relatives. She obtained her masters degree at Yale University and her Ph.D. at UC Berkeley, and for both degrees she conducted extensive fieldwork in South America. Dr. Hamilton is President of the Society for Conservation GIS and serves on the Science Committee of the National Park Service Advisory Board. She is a Switzer Foundation Environmental Leadership grantee and a former U.S. Fulbright Scholar.