



WyGISC Geospatial Forums – Fall 2007

THEME: GEOSPATIAL SCIENCES

Fridays - 12:00pm - 1:00pm, AG C 316

Geospatial science and technology has provided novel ways to visualize and analyze data, revealing patterns and interactions that was not evident before. With advances in computing hardware and software, researchers can combine information from multiple disciplines and perform sophisticated analyses. To highlight these advances and identify future needs, five distinguished speakers will present the contributions of geospatial technology to their fields.

**** Geospatial sciences theme-based talks*

9/14: Mr. Jeff Hamerlinck, WyGISC Director; Mr. Jim Oakleaf, WyGISC Technical Director; Mr. Paul Caffrey, WyGISC Education Coordinator; Dr. Ramesh Sivanpillai, WyGISC Remote Sensing Scientist

---Accessing Geospatial Resources on Campus: Data, Software, Training, & Support

The Wyoming Geographic Information Science Center (WyGISC) serves as the nodal point for geospatial resources at the University of Wyoming. WyGISC manages a campus-wide GIS software site license and has developed state-of-the-art online data distribution systems to benefit a wide range of user communities that includes UW students, faculty and researchers. The Center also provides opportunities for training and professional development through its short course training program and via access to the ESRI Virtual Campus. This seminar provides an overview of these resources, including information on how they may be accessed and best utilized. WyGISC staff will be on-hand to answer any questions you may have about these services, as well as current Center initiatives and opportunities for collaboration and more in-depth assistance.

9/21: Dr. Brent Ewers, Assistant Professor, BOTANY

****--- Geospatial sciences/technology: A boon or a bane in plant ecophysiology?*

Dr. Brent Ewers (Department of Botany & Program in Ecology), the first speaker in this series, will talk about the role of geospatial technology in plant ecophysiology studies.

9/28: Dr. Steven Prager, Assistant Professor, GEOGRAPHY

---The State of GIS and the UCGIS Geographic Information Science and Technology Body of Knowledge

The academic discipline of geographic information science is a broad, encompassing discipline that is constantly growing and changing. In an effort to document a wide cross-section of the discipline, the University Consortium for Geographic Information Science publishes a community-based Body of Knowledge. This presentation shall discuss the GIS&T Body of Knowledge, its content, uses, limitations and long-term ramifications.

10/5: Dr. Dr. Scott Miller, Assistant Professor, RENEWABLE RESOURCES

****--- Geospatial sciences/technology: A boon or a bane for watershed hydrology?*

Dr. Scott Miller (Department of Renewable Resources/Watershed Management), the second speaker in this series, will talk about the role of geospatial technology in watershed hydrology studies.

10/12: Mr. Scott Schell & Dr. Alexandre Latchininsky, Assistant Professor, RENEWABLE RESOURCES

--- Spatial dimensions of grasshopper management in the Western US

Spatial information and the technology to use it have had a major impact on the way rangeland insect pest species are managed. It has changed where and how surveys are conducted, how the hazard is assessed,

and how treatments are planned and conducted. In this presentation, we will talk about specific applications of spatial technology for managing grasshoppers in the western US.

10/19: Dr. Kenneth Driese, Associate Research Scientist, BOTANY

****--- Geospatial sciences/technology: A boon or a bane for vegetation studies?*

Dr. Kenneth Driese (Department of Botany & WYGISC), the third speaker in this series, will talk about the role of geospatial technology for vegetation studies.

10/26: Mr. Eli Rodemaker, Wyoming Geographic Information Science Center

--- Sagebrush Obligate Habitat Characterization: Mapping and Modeling in a Changing Environment

The Sagebrush Biome is recognized as one of the most endangered (and largest) in the United States. Long term viability of wildlife populations obligate to the vegetation communities of the Sagebrush Biome, such as the Greater Sage Grouse, are currently the focus of intense scientific and political discussion in the light of national energy development needs. In the wake of development, information needs of decision makers are formidable. Spatially explicit information is generally lacking. WyGISC is currently leading a multiple agency effort to meet some of these information needs with collaborators in the Wyoming Game and Fish, US Bureau of Land Management, US Fish and Wildlife Service, US Natural Resources Conservation Service, and US Forest Service. This presentation will discuss geospatial information development for habitat characterization in Wyoming; touching upon past, present, and future efforts.

11/2: Dr. Jay Norton, Assistant Professor, RENEWABLE RESOURCES

*-***-- Geospatial sciences/technology: A boon or a bane for soil studies?*

Dr. Jay Norton (Department of Renewable Resources), the fourth speaker in this series, will talk about the role of geospatial technology for soil studies.

11/9: Dr. Matthew Kauffman, USGS Wyoming Cooperative Fish and Wildlife Research Unit

****--- Geospatial sciences/technology: A boon or bane for wildlife ecology?*

Dr. Matthew Kauffman, the fifth speaker in this series, will talk about the role of geospatial technology for wildlife ecology. He will provide examples involving habitat selection, predator-prey interactions, and source-sink dynamics.

11/30: Dr. Daniel Tinker, Assistant Professor, BOTANY

****--- Geospatial sciences/technology: A boon or a bane for landscape ecology?*

Dr. Daniel Tinker (Department of Botany), the sixth speaker in this series, will talk about the role of geospatial technology in landscape ecology.

For more information, please visit the WyGISC web site at: www.uwyo.edu/wygisc