The analysis of spatially explicit data is common to population research, especially demography, and contemporary sustainability science, whether around planning, spatiotemporal modeling of species distributions, or remote sensing/GIS and associated spatial modeling. There are numerous groups on campus with strengths in various areas of spatial analysis; however, the level of interaction and collaboration between these groups is currently unclear. Moreover, faculty, student and staff that lack specialization in spatial methods may be unaware of the resources and skills that currently exist on campus.

The objective of this lunch, sponsored jointly by the CCSF and the Cornell Population Program (www.cpp.cornell.edu), was to determine what sorts of activities are currently taking place on campus, where prospective collaborations might prove fruitful, what structural barriers to collaboration and research may or may not exist, and related topics. Three speakers from diverse groups (ORIE, Natural Resources, and Developmental Sociology) gave short presentations on their work to help initiate discussion. Ultimately, a wide range of topics were discussed; however, two central themes emerged from the discussion, both of which relate to facilitating and improving intra-campus collaboration as well as the quality of research carried out on campus:

1. Development of and support for advanced technology and analytical methodology. An important barrier here is the lack of faculty critical mass in various areas, including spatial statistics and remote sensing.

2. Development of and support for faculty, staff and students that desire/require assistance with the collection and analysis of spatially explicit data. Barriers here include the limited knowledge of available courses and workshops and/or availability of resources for consultation in GIS and geospatial analysis and associated statistical methods.

A web portal on geospatial analysis and statistics at Cornell was proposed as one step towards providing a more centralized source of information on existing campus resources, including course listings and workshops. Another proposal under consideration is the creation of a working group that will work towards improving existing intra-campus connections as well as better defining the strengths and weaknesses in key areas of spatial analysis that currently exist on Cornell's campus.

Attendees:

1. Rob Strawderman (rls54), Host
2. Chris Barrett (cbb2)
3. Liz Peters (ep22)
4. Helene Schember (hrs6)
5. Pat Sullivan (pjs31)
6. Peter Woodbury (pbw1)
7. Saskya Van Nouhuys (sdv2)
8. David Ruppert (dr24)
9. Dawn Woodard (dbw59)
10. David Dieterich (dd355)
11. Joe Francis (jdf2)
12. Keith Jenkins (kgj2)
13. Ben Zuckerberg (bz73)
14. Steve DeGloria (sdd4)
15. Laura Jones (lej4)
16. Jan Vink (jkv3)
17. Jeff Tester (jwt54)
18. Ann Forsyth (forsyth@cornell.edu)
19. Megan McDonald (mcdonald@cs.cornell.edu)
**Geospatial Science and Technology Instruction at Cornell**

**S.D. DeGloria and K.G. Jenkins**

*Institute for Resource Information Sciences (IRIS), Department of Crop and Soil Sciences, Cornell University, Ithaca, NY 14853*

**Mann Library, Cornell University, Ithaca, NY 14853**

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### College of Agriculture and Life Sciences

**Crop and Soil Sciences**

**CSS 4110: Environmental Information Science**

- Geospatial technology applications in crop and soil sciences including spatial analysis of satellite imagery, field data, and with the global positioning system (GPS) to discriminate, measure, inventory, and monitor agricultural and environmental resources and processes.

**CSS 4200: Geographic Information Systems**

- Introduction to spatial data acquisition, management, and mapping including database standards, spatial databases, cartography, spatial decision making, and the role of spatial data in agricultural and environmental sciences. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CSS 4650: Global Positioning System**

- Introduction to GPS, the global satellite-based system that allows for precise positioning on Earth. Topics include antenna technology, surveying, and navigation with an emphasis on the role of GPS in agricultural and environmental sciences. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CSS 6200: Spatial Modeling and Analysis**

- Theory and practical application of applying geospatial data to resource inventory and analysis, biophysical modeling, and environmental analysis. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CSS 6210: Applications of Space-Time Statistics**

- Emphasizes accessing, updating, analyzing, and mapping geo-spatial data. Considers needs for decision making, spatial information modeling, and information management. Topics include geostatistics, temporal statistics, spatiotemporal, spatiotemporal modeling, spatial regression analysis, and spatial statistics. Focus on problems in climate, ecology, geography, and related fields.

**CRP 3540/5540: Introduction to Environmental Planning**

- Focuses on role of GIS in environmental planning practice. Topics include spatial analysis techniques, environmental planning and management, development assessment, navigation, and environmental decision-making. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CRP 4800: Introduction to Geographical Information Systems**

- Focuses on GIS and spatial analysis techniques. Topics include spatial data management, geographic information systems (GIS), and the use of remote sensing and spatial data for natural resource management, development assessment, and environmental planning. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CRP 5250: Introductory Methods of Planning Analysis**

- Emphasizes applications of geographic information systems (GIS) in planning and policy analysis. Topics include spatial data management, geographic information systems (GIS), and the use of remote sensing and spatial data for natural resource management, development assessment, and environmental planning. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

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### College of Architecture, Art, and Planning

**City and Regional Planning**

**CRP 3540/5540: Introduction to Environmental Planning**

- Focuses on role of GIS in environmental planning practice. Topics include spatial analysis techniques, environmental planning and management, development assessment, navigation, and environmental decision-making. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

**CRP 4800: Introduction to Geographical Information Systems**

- Focuses on GIS and spatial analysis techniques. Topics include spatial data management, geographic information systems (GIS), and the use of remote sensing and spatial data for natural resource management, development assessment, and environmental planning. Emphasis on the development of skills in spatial data management, geographical information systems (GIS), and spatial analysis.

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### College of Engineering

**Civil and Environmental Engineering**

**CEE 6010: Remote Sensing Fundamentals**

- Development and applications of remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems.

**CEE 6150: Digital Image Processing**

- Emphasizes applications of remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems.

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### Resource Libraries

**Mann Library Workshops, Consultations, and Equipment**

- Collection of maps, books, electronic resources, and literature. Core collection is supplemented by geographic images, maps, historical and modern city plans, aerial photographs, cartographic maps, reproductions of art or maps, series, photographic, and mapping collection of digital geospatial data.

**Cornell University Geospatial Information Repository (CUGIR)**

- Emphasizes applications of remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems. Emphasis on remote sensing technology for the development of human-centered, human-environmental systems.