



Virginia Geospatial Extension Program

VIRGINIA TECH EXTENSION, FORESTRY DEPARTMENT PARTNER WITH VIRGINIA SPACE GRANT CONSORTIUM IN GEOSPATIAL PROGRAM

BLACKSBURG, September 3, 2003, – Virginia Tech and the Virginia Space Grant Consortium have established the Space Grant Geospatial Extension Program in the College of Natural Resources at Virginia Tech’s Blacksburg campus. The program will facilitate educational programs and workforce training to help deal with the serious shortfall of professionals and trained specialists who can utilize geospatial technologies at the local, regional, and state levels.

“ The key goal is to expand opportunities for citizens and organizations across the Commonwealth to apply geospatial tools such as geographic information systems (GIS), global positioning systems (GPS), and remote sensing data, analysis and interpretation to help with local needs,” says Steve Umberger, director of the Virginia Cooperative Extension. The program will also work with educational outreach programs for pre-college teachers and students through 4-H and VSGC educational programs. The worldwide market for geospatial technologies, which is currently estimated at \$5 billion, is projected to have annual revenues of \$30 billion by 2005, according to a NASA 2001 report.

Geospatial tools such as GIS allow users to precisely define any location on the face of the earth and then to add layers of information to describe what is at that location. It is a way to combine data from many sources about a specific area and to display it in a map format.

Agricultural uses of GIS include property boundaries, crop and soil analysis, precision farming, and management. City and state planners use GIS to decide where to put new roads and developments and how they will affect the environment.

GIS is used for management of coastal resources, homeland security, and law enforcement. Ultimately, GIS technology provides a basis for better understanding and improved stewardship of natural resources and public services. It also provides important decision making tools to enhance the economy and quality of life.

The new program is funded through a NASA grant through the Virginia Space Grant Consortium based in Hampton. Virginia Tech and the George Mason University-led VAX-MAGIC initiative are also providing substantial resources. Supported by NASA's Stennis Space Center, VAX-MAGIC works to provide tools and training that apply NASA data to specific problems.

John McGee has been hired as the geospatial Extension specialist at Virginia Tech to serve as a statewide resource for Extension agents, state agencies, local governments, and other end users. He will be organizing workshops to help them learn how to apply geospatial technologies and data to solve local problems. McGee says, "The Extension agents will be our key link to local community needs."

"The program is part of a NASA National Space Grant Program initiative that has established programs in ten other states besides Virginia," explains Mary Sandy, Virginia Space Grant Consortium director. "Other supporters include the Virginia Community College System, Virginia Sea Grant, and the Virginia Geographic Information Network." Virginia Tech partnering organizations include the university's Department of Forestry in the College of Natural Resources, and the College of Agriculture and Life Sciences. NASA Langley Research Center, NASA Goddard Space Flight Center and NASA Stennis Space Center are participating on the project's Advisory Committee. "All of the partners," says Sandy, "share the vision of how geospatial data and tools can improve resource management and yield economic and social benefits."

McGee, who holds a Ph.D. from the University of Massachusetts in regional planning, has worked with several Extension and outreach projects in the United States as well as internationally. He served as the assistant coordinator with the Virginia Geographic Information Network, the lead public agency in the Commonwealth for spatial data and GIS. McGee has held a faculty position at Eastern Kentucky University, organized geospatial workshops for local professionals, and most recently taught at the International School in Addis Ababa, Ethiopia.

Paige Baldassaro, the program's geospatial applications developer, previously worked at The Institute for Scientific Research, Inc., in Wheeling, West Virginia. She is experienced in integrating virtual reality and high-resolution geospatial data and using hyperspectral remote sensing data to identify pollution pathways. Baldassaro holds master degrees in geology and geography from Virginia Tech.

Part of NASA's National Space Grant College and Fellowship Program, the Virginia Space Grant Consortium is a coalition of Virginia universities, NASA centers, state agencies, and other organizations with an interest in science and technology education

and research. For additional information, contact the Virginia Geospatial Extension Program at jmcg@vt.edu or visit the program's Web site at www.cnr.vt.edu/gep. For more information on the Virginia Space Grant Consortium, visit www.vsgc.odu.edu.