



### ***1. Organizational Approach to GIT:***

The Iowa Division of Forests and Prairies (<http://www.state.ia.us/forestry/index.htm>), within the Department of Natural Resources (DNR) (<http://www.state.ia.us/government/dnr>), is an active user of GIT on an individual application level. The Division receives some assistance from Iowa State University (ISU). Additionally, DNR's Geographic Information Group has a staff of ten full-time and five temporary employees assisting with Division GIT applications. The Group maintains DNR's Natural Resources Geographic Information System (NRGIS), which improves the availability, integration, and analysis of natural resource information and improves decision making regarding the management, development and protection of Iowa's natural resources (<http://www.igsb.uiowa.edu/nrgis/gishome.htm>). GIT activities are a minor component of several staff within the Division, and 14 members of the Division's staff are utilizing components of GIS and GPS, a practice which began over 15 years ago. The Division's State Forest Bureau Chief promotes and facilitates support through authorization of software and hardware upgrades, and coordinates staff GIT training. GIS and GPS are used in nine Division field offices and by five staff at the Des Moines headquarters. There are no official policies regarding the Division's use of GIT. Problems regarding GIT in the Division are related to funding for software, computers, and staff.

### ***2. GIT Applications and Data Utilized:***

The Division is currently using digital orthophotos and aerial surveys with GIS to monitor **forest health**, including insect and disease tracking. GPS is also utilized for monitoring in the Division's Gypsy Moth trapping program. The data is then used with ArcView 3.2a to generate maps of insect outbreak. Currently, five field foresters have received training in the use of laptop computers equipped with ArcView 8.0 to enable on-site management plan preparation with **private landowners**. The Division also uses GIS in the management of 42,000 acres of **state lands**, in which all stands are digitally mapped, and become the basis for management plans. The initial digitizing work for this effort was contracted to ISU. Use of digital orthophotos for forest management was restricted to state forests until recently, when coverage for the entire state was made available by DNR. GIS use in DNR was specifically authorized by Iowa's 1987 Groundwater Protection Act, which authorized DNR to develop and maintain a state natural resource GIS and comprehensive **water resources** data system. DNR was also involved in the Iowa Gap Analysis Program (GAP). Presently, DNR is contracting a \$1.4 million project for statewide color infrared photography in 2002 with availability for public use in 2003. DNR is the lead agency among 22 cooperators in this effort, including Alliant Energy, the Iowa Emergency Management Division, the U.S. Fish and Wildlife Service and the Iowa Department of Transportation. The Division plans to make use of this imagery once available.

### ***3. Statewide and Other GIT Linkages:***

Iowa does not have an authorized lead entity for GI/GIT in state government, but Iowa State University's (ISU) Extension to Communities Unit serves as the unofficial lead, and supports a new State GIS Coordinator to assist the Iowa Geographic Information Council (IGIC), as described below (<http://www.gis.state.ia.us>). The GIS Coordinator provides support and services to the IGIC including map generation, data development, geocoding, project management, and grant writing. The IGIC is the official GI/GIT coordinating group in the state. Select responsibilities of the IGIC include maintaining a clearinghouse for GIS information and expertise in Iowa; encouraging the use of telecommunication networks for the exchange of ideas, like the Iowa Communications Network; and serving as a focal point for intergovernmental efforts to receive additional funds (especially federal funds) for GIS development in Iowa. IGIC membership is open to any resident of Iowa. As mentioned above, the Division contracted with ISU for the digitizing of stand information on the state forests system. In addition, the GIS Coordinator of DNR's Geographic Information Group attends IGIC meetings and represents the Division in forestry matters.

Most statewide databases are accessible through the Iowa GIS Clearinghouse (<http://www.gis.state.ia.us>). Efforts are underway to move it from the state's Information Technology Department (ITD) to the GIS Support and Research Facility at Iowa State University where it will be maintained through a contractual arrangement with them. A *Web-based GIS Resource Guide* was recently developed by IGIC, ITD and GeoAnalytics, Inc., to promote awareness of GIS and facilitate GIS user education, and is accessible through the GIS Clearinghouse. In addition, the Iowa Geographic Image Map Server (<http://ortho.gis.iastate.edu/>) was developed by the USDA Natural Resources Conservation Service (NRCS) in cooperation with Iowa State University and the Massachusetts Institute of Technology (MIT). The images from this site are derived from various USGS datasets including Digital Orthophoto Quads, Digital Raster Graphics (DRGs), Digital Elevation Model (DEMs), and LANDSAT imagery. The site is maintained by the GIS Support and Research Facility at ISU. Data are also available from individual agencies. As noted above, DNR has used GIS for a long time, including with its unique statutory authorization.