

Environmental GIS in the management of visitor flows

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Besides monitoring visitor numbers and activities, spatial data on borders, restrictions, and environmental and natural characteristics is needed to manage visitor flows in recreation and protected areas. The Finnish Environment Institute (SYKE) compiles and provides data on the state of the environment and environmental trends, and acts as a national environmental information center; collecting, formulating and disseminating data to various interest groups. These data, including GIS databases and registers, consist of natural environment data (monitoring, modeling and inventories etc.) and also land use and planning data. Wide variety of data can be used through GIS methods to reduce negative ecological impacts and conflicts between different user groups in recreational and protected areas.

This poster will present a cross-section of the characteristics of some of the most useful GIS data supporting management of visitor flows. These include e.g. networks of conservation areas, land use plans, and distribution of threatened species. Furthermore, it will present more closely the GIS databases on land and water traffic restrictions and the GIS database on outdoor recreation supply (VIRGIS). Land and water traffic restrictions are usually given in more densely populated areas to avoid conflicts e.g. between recreational use and need of protection of natural values. VIRGIS, for one, will be a nationwide continuously updated information system on recreation areas, trails, and recreation services. It is currently under construction in SYKE.

Keywords: GIS, outdoor recreation, environmental data, land use.