Purpose

Geographic **I**nformation **S**ystems (GIS) is a rapidly developing science providing a valuable tool for geographers in understanding processes and patterns in a spatial context and in assisting in the tasks of modeling and making decisions about the nature of the world around us. GIS is a constantly evolving science with a multitude of purposes and applications. The advent of the **G**lobal **P**ositioning **S**ystem (GPS) has made it possible for beginners, as well as experts, to collect their own spatial data in the field and investigate the characteristics of that data in a GIS.

The purpose of this link is to present a cursory explanation of the data collection capabilities of the Global Positioning System and the fundamentals of a GIS. Background, important concepts, and terminology will be discussed and a start to finish walkthrough, from GPS data collection to GIS data display, will be conducted using ESRI's ArcExplorer (a free GIS program available over the internet) and a relatively inexpensive GPS unit, the Garmin E-Trex Legend.

Click here for: A Walk-Through Example - From GPS Data Collection to GIS Data Display