Spatial Visualization of Biodiversity

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Abstract

The Department of Integrative Biology at Oregon State has collected a large sample of biodiversity data from various sites in the Southwest United States. Handling this data in its raw form requires certain technical knowledge of databases, as well as a bit of patience. This presents a problem for biodiversity researchers and Department of Defense land managers, who need to be able to understand and make decisions about this data easily. Our team addressed this problem by creating a web interface for spatially visualizing this data. We enabled users to easily display useful graphs and maps about areas and species of interest, putting the information they care about most at their fingertips.

The Department of Defense made an investment in collecting all these samples so that it could better manage its land. However, extracting meaning from that information is challenging for land managers and researchers alike. Any good solution to this problem would allow users to easily access the information that is important to them. Our solution provides an interface that allows users to select information of interest and see it in map and graph form. Passerby at Expo will be invited to interact with our system and discover meaningful biodiversity patterns for themselves. Oregon State biodiversity researchers have indicated that our product meets their needs.