

Project Description

The Indiana University Herbarium, the official herbarium for the State of Indiana, is a research museum with over 140,000 specimens. It is the specimen repository for faculty and student researchers at Indiana University (IU), and is an essential campus facility for specimen-based research because specimens are loaned only to established herbaria, not to individual researchers. About ten years ago, the Herbarium moved from Jordan Hall to a remote location in Smith Research Center. The newer, remote location limits the ease-of-use of this facility for research and teaching. A database will help make information from the Herbarium available to students and researchers on central campus and eventually throughout the state and around the world.

The goal of our project is to create a database that will allow the Herbarium to provide up-to-date taxonomic information about the 2,895 species, subspecies, and varieties of vascular plants that are native to or naturalized in Indiana. Two electronic resources have already been compiled that provide the framework files needed to jumpstart the database. The first is a list of the vascular plants of Indiana, compiled by Kay Yatskievych (Missouri Botanical Garden, St. Louis) and refined during a statewide workshop in 2004. Further revision on this list is due out in 2008 and will be available in print and electronic form. The second is an electronic version of the published county-based distribution information compiled by the Biodiversity of North America Project (BONAP). Together, these two resources enable a quick development of a functional and reasonably accurate database that will structure and guide the full implementation of the online system. The Herbarium staff are currently cross-referencing the electronic list of Indiana vascular plants with the major published treatments and field guides for Indiana, recording all synonyms of the current taxonomy that are used in these previous works. By cross-referencing synonymous names used in previously published treatments of the plants in Indiana (and the region), and by incorporating a list of standardized common names, the accessibility of the information will be vastly improved.

The database will be used to facilitate this work by supplying standard entries (such as collectors and authors) from selectable lists, thereby minimizing typing and reducing data-entry errors. The long term goal, which is outside the scope of the current project, is for the database to be available online and accessible to the general public, thereby providing a highly visible contribution to IU-Bloomington's outreach function. The online system will meet the outstanding need for online information on the plants of Indiana that will serve researchers, teachers, students, and the general public. Environmentally oriented researchers will have access to current taxonomic information (and associated synonyms) that can be downloaded and used in spreadsheets and databases for their work. Teachers and students will have a readily accessible resource for plant-oriented courses to be used for specific assignments or for independent study.