New Database To Track Honeybee Decline

With Colony Collapse Disorder (CCD) in honeybees making so many headlines over the past few years, many people will be interested in a new on-line database.

A $1.5 million National Science Foundation (NSF) multi-institutional grant – co-led by Cornell University Entomologist Bryan Danforth – will consolidate data from 10 natural history bee collections across the United States. This effort will include Cornell's estimated 250,000-specimen collection and create a searchable, publicly available online database at **www.discoverlife.org**.

The project's data will allow researchers to assess past and present distributions of bee species, help establish conservation status of species and better predict global risks to bee pollination services from climate change and habitat loss.

"This grant was funded, in part, because of concerns about declining honey bee populations across the U.S.," Danforth stated in a university press release. "There is interest in the role that wild bees are playing in crop pollination across the country, and this project will make available collection data on bee distributions, phenology and host-plant preferences via a centralized website."

Cornell's Insect Collection started in 1871 and includes up to 270,000 bee specimens representing about 3,600 species. The collection strongly represents bees of North America, though over time Cornell researchers have collected bee specimens in South America, Australia, Africa (including Madagascar) and Europe.

The grant, from the NSF Improvements to Biological Research Collections program, will build a database from bee collections from such collaborators as Cornell, the American Museum of Natural History, University of California at Riverside, Davis and Berkeley, Rutgers University, University of Connecticut, the U.S. Department of Agriculture's Agricultural Research Service Bee Biology and Systematics Lab at Utah State University, California State Collection of Arthropods and the Los Angeles County Natural History Museum.