

## Five million Museum of Zoology specimens find new home

Over the past year some five million specimens from the U-M Museum of Zoology's "wet" research collection – animals preserved in alcohol inside various containers – moved from the Ruthven Museums Building on central campus to an impressive new off-campus facility.

"The move was designed to update the infrastructure of all ethanol collections. Basic standards and safety codes for storage of flammable material have changed comprehensively," said Diarmaid Ó Foighil, EEB professor and director and curator of the UMMZ. "The 1920s-era ethanol collection infrastructure in Ruthven no longer met code. The university has invested very heavily in providing a new state-of-the-art research collection facility on Varsity Drive."



The new facility, adjoining the U-M Herbarium in Ann Arbor, was designed and built to safely store the ethanol collections and to provide modern facilities for collection-based research activity. The budget for the project, which included building the new storage facility, moving the collection and other selected renovations, was \$17.6 million. The move was completed five weeks ahead of schedule from December 2011

to July 2012, under budget, and with only a miniscule number of jars broken.

The U-M News Service filmed two videos about the "epic move" featuring an interview with Ó Foighil that appeared on the U-M Gateway.

According to Ó Foighil, highlights of the ethanol collections include an extraordinary assemblage of freshwater fish



credit: Mark O'Brien

biodiversity and an amphibian and reptile collection that is "easily one of the best in the world." In the video, Greg Schneider, collections manager for the Amphibian and Reptile Division, shows some examples of this global richness, including a goliath frog from Cameroon, the smallest known chameleon, and an Indian cobra with spread hood.

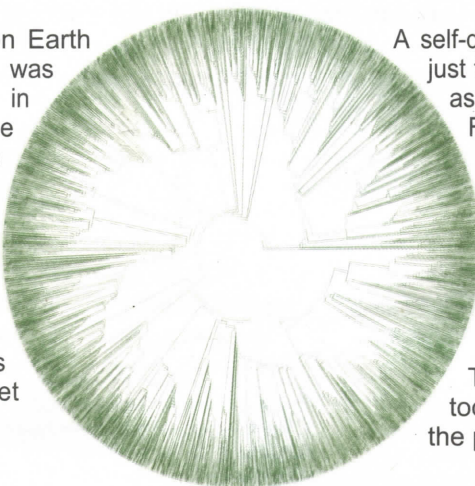
"We are looking forward to an equally first-class facility adjoining the U-M Herbarium for the dry collections, which are slated to move next," said Deborah Goldberg, professor and chair of EEB. "The co-location of the collections will bring about even greater integration of research between the Herbarium and the Museum of Zoology, including our ongoing efforts to make information available online through international databases."

"Two years of detailed planning and design paid off in a smooth problem-free move," Ó Foighil said. "The challenge is now to replicate this process for the dry collections and the entire UMMZ program, which is also relocating to Varsity Drive."

View the video: [http://bit.ly/ummz\\_move\\_video](http://bit.ly/ummz_move_video)

## Smith to tackle first ever draft of the tree of life

The realization that all organisms on Earth are related by common descent was one of the most profound insights in scientific history. The goal of elucidating the phylogenetic relationships of all species – building the complete tree of life – has since emerged as one of the grandest and most daunting scientific challenges ever undertaken. Imagine a tree of life that synthesizes all living and extinct creatures ever to grace the face of the planet – more than two million species named to date and millions more as yet unnamed.



A self-described computer nerd, Stephen Smith, is just the person to embark on this enormous task as part of a \$5.76 million National Science Foundation three-year grant called OpenTree. Collaborators from the National Evolutionary Synthesis Center (NESCent) at Duke University, and seven other institutions will work together to grow this revolutionary draft tree. OpenTree is part of a larger NSF-funded effort called Assembling, Visualizing and Analyzing the Tree of Life (AVAToL).

This tree is expected to be a powerful tool that will enable scientists to interpret the patterns and processes of evolution

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