



SPNHC 2015
30TH ANNIVERSARY
SOCIETY FOR THE PRESERVATION
OF NATURAL HISTORY COLLECTIONS

The Society for the Preservation of Natural History Collections

**30TH ANNUAL MEETING &
GALA CELEBRATION**

*Making Natural History Collections Accessible through
New and Innovative Approaches and Partnerships*



MAY 17-23, 2015
THE FLORIDA MUSEUM OF NATURAL HISTORY
GAINESVILLE, FLORIDA, USA

RESTORING NATURAL HISTORY COLLECTIONS OF NATIVE AMPHIBIANS AND REPTILES IN SOUTH DAKOTA

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This project involved the construction and restoration of two small natural history and teaching collections located at South Dakota State University and Oak Lake Field Station. It also contributed to collections and academic research at the University of South Dakota and Black Hills State University. The primary objective of this project was to generate a complete teaching collection for the Survey of Reptiles and Amphibians course taught at South Dakota State University. Secondary objectives included finding innovative ways to utilize teaching collections that will encourage future research and conservation efforts. Combining field and laboratory identification techniques with citizen science training, students in this course were introduced to several ways they could contribute to global conservation efforts. With global declines of amphibian and reptile populations on the rise, there is an increased need for understanding biological diversity. Having these natural history collections establishes a foundation for this understanding and will ultimately aid future research and conservation efforts in this region.

General Session 3

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COOPERATIVE PROTECTION OF SENSITIVE SPECIES DATA: A PARTNERSHIP BETWEEN NATURAL HERITAGE PROGRAMS AND THE COLLECTIONS COMMUNITY IN THE NORTHEASTERN USA

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As we move forward with digitization of collections and release of data over the internet, the potential consequences of greater access to locality information for rare and endangered species has become a concern for biologists in state agencies and other conservation organizations whose job it is to track, manage and protect these populations. To address this concern, a partnership has been formed between members of the Consortium of Northeast Herbaria, the staff of several Natural Heritage Programs in New England, and the Symbiota Software Project. We are working together to identify plant species on a state by state basis that may benefit from locality data protection, and to develop methods to limit the availability of these data in Symbiota portals. This paper will discuss the methods being used and the progress of the work to date.

Contributions Small Nat. Hist. Coll. Symp. 2 TH 05/21/2015 04:50 PM

THE ROLE OF SMALL NATURAL HISTORY COLLECTIONS IN CONTRIBUTING TO UNDERSTANDING SPECIES' DISTRIBUTIONS

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How do small natural history collections contribute to our understanding of biodiversity patterns through space and time? To begin addressing this question, collaborators in eight states (AR, CA, CO, FL, GA, MI, TN, and WV) gathered vouchered vascular plant collection information from large and small institutions in their respective states. In each state, 40 species were randomly selected, 10 from each of four categories: rare S1, rare S2, common native, and invasive. Collection data were partitioned by size of herbarium into two classes, large (>100,000 specimens) and small (<100,000 specimens) collections. From the resulting data sets, occurrence data were analyzed by collection size, county, specific locality, and date of collection. The four species categories were compared to determine the relative contribution of small collections to the distribution information available in the states. We found that small collections contribute to county-level and even more so to site-level spatial distribution knowledge, and that the proportion of these contributions differ by state, species category, and geographic focus and research interests of personnel from individual collections. Our study quantifies and summarizes the patterns. We conclude that small collections are important, often uniquely so, in documenting distribution of species through space and time. Therefore, in order to accurately characterize biodiversity, it is imperative to include small collections in national digitization and data sharing efforts.

Plenary Session

T 05/19/2015 10:30 AM

WEDIGBIO—PUBLIC PARTICIPATION IN DIGITIZATION OF NATURAL HISTORY COLLECTIONS HITS ITS STRIDE

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Public participation has recently emerged as an important strategy for closing digitization backlogs, sustaining digitization beyond project funding cycles, increasing biodiversity science literacy, and increasing local support for collections. As just one example, the >100 herbaria in the Southeastern Regional Network of Expertise and Collections (SERNEC) project are using the online public participation site Notes from Nature (NfN) to transcribe >3 million specimens. A 2015 BioScience article by Libby Ellwood and colleagues provides an overview of developments in this area, including the first workshop on the topic in 2012 and work to build critical cyberinfrastructure (e.g., two hackathons and biospex.org at iDigBio). At the 2014 CITStitch Hackathon, representatives from three online transcription sites (Paul Flemons from Atlas of Living Australia's DigiVol, Paul Kimberly from the Smithsonian Transcription Center, and Rob Guralnick from NfN) and Austin Mast, Libby Ellwood, Deborah Paul, and Kevin Love from iDigBio