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ASB 77TH ANNUAL MEETING MARCH 31 – APRIL 3, 2016

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**Davidson College, Davidson, North Carolina
Queens University of Charlotte, North Carolina
Charlotte Teachers Institute, North Carolina
University of North Carolina at Charlotte**

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**Meeting Site: Convention Center at the
Embassy Suites Hotel, Concord, North Carolina**

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Abstracts of Papers and Posters Presented at the Annual Meeting

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Meeting of the Charlotte Teachers Institute (CTI) Teacher Leadership Council made up of classroom teachers in the Charlotte-Mecklenburg, North Carolina Schools. From left to right: Matt Kelly, Connie Wood, Teresa Strohl, Alexandra Edwards, Deb Semmler, Annie Calloway, Robin McLennon, Jackie Smith, Connie George, Gloria Brinkman, Miesha Gadsden, Nikki Guevara, Stephanie Misko, Jennifer Ladanyi, Katelyn Gardepe, Calen Clifton, and Julie Ruziska Tiddy. Photograph taken at the University of North Carolina Charlotte Center City by CTI Executive Director Scott Gartlan.

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of April 2016. Once the digitization project has been completed, our collection will serve both educational and research communities here and online.

- P82 Richard Carter, Ashlee D. Robinson, Phillip D. Lowe
Biology, Valdosta State U, GA

Advances in Wiregrass Georgia: Infrastructural Improvements to Sustain another Half-Century of Herbarium-Based Research and Teaching at Valdosta State University

In April 2015, the Valdosta State University Herbarium [VSC] began a three-year project to initiate infrastructural improvements funded by the National Science Foundation Collections in Support of Biological Research (CSBR) Program. A compactor system has been installed, including 41 new herbarium cabinets, increasing specimen holding capacity by 35% and providing secure and safe storage for this valuable biodiversity resource. Through this support, 5,000 backlog specimens will be mounted and digitized and nearly 15,000 specimen records will be georeferenced, making these vouchers and derived digital images and data readily available to the community of biodiversity researchers and others through the Internet and through direct access to specimens. This project will also secure and revitalize the extensive and currently dormant Vanderbilt University teaching collections by bringing them to Valdosta State University where they will be used to train future generations of students and biodiversity researchers, and it will promote learning through direct involvement of students in a variety of herbarium activities bringing them new perspectives about possibilities for careers in science. Promoting participation of under-represented groups by providing opportunities to work in biological collections and biodiversity research, outreach programs will place issues of biological collections and biodiversity before a large and diverse audience through herbarium tours and informal presentations, targeting young people at an impressionable age and their teachers.

- P83 Jennifer M. McKenzie¹, Steven J. Price¹, Leo J. Fleckenstein¹, Andrea N. Drayer¹, Jeffrey M. Lorch²
¹ Forestry, U of Kentucky, Lexington; ² US Geological Survey, National Wildlife Health Center, Madison, WI

Assessment of the Distribution of Snake Fungal Disease in Kentucky

Snake fungal disease is an emerging infectious disease caused by the fungal pathogen, *Ophidiomyces ophiodiicola*. Clinical signs of SFD include skin ulcers, hyperkeratosis, subcutaneous nodules, abnormal molting, localized thickening of the skin, facial swelling, and cloudiness of the eyes. In some cases, altered behaviors and substantial population declines have been documented. Snake fungal disease appears to be widespread in the eastern U.S. and has recently been documented in Kentucky. Our objective was to determine the ubiquity of SFD across Kentucky by sampling multiple species in several physiographic regions. From March to September 2015, we collected swab samples from a total of 231 snakes across 15 different species. Snakes were captured opportunistically and the presence of *O. ophiodiicola* was tested through quantitative PCR. Our results suggest that SFD is widespread in Kentucky and infects several snake species. Further research is required to determine the population-level consequences of SFD, however, the exceptionally secretive behavior of snakes presently complicates these efforts in Kentucky and elsewhere.

- P84 Alanna R. Horton, Meagan A. Thomas, Michael E. Dorcas
Biology, Davidson College, NC

Developing Length Estimates for Incomplete Rattlesnake Skeletons Through Vertebral Measurements and X-Ray Technology

The Eastern diamondback rattlesnake (*Crotalus adamanteus*) is the largest species of rattlesnake in the world, with adults typically reaching lengths of 1.2-1.5 m (4-5 ft). Although there are reports of individuals up to 2.4 m (7.8 ft), physical evidence (e.g. museum specimens,
