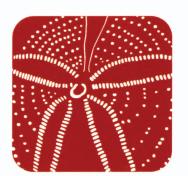


North American Paleontological Convention Abstracts Paleontological Society Special Publication Volume 13

10th NORTH AMERICAN PALEONTOLOGICAL CONVENTION



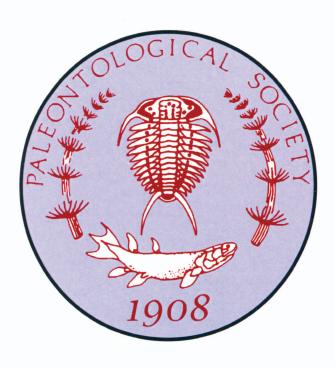






FLORIDA MUSEUM OF NATURAL HISTORY

ABSTRACT BOOK





February 15th-18th, 2014

University of Florida, Gainesville, Florida, USA





10th NORTH AMERICAN PALEONTOLOGICAL CONVENTION









FLORIDA MUSEUM OF NATURAL HISTORY

Hilton University of Florida Conference Center

1714 SW 34th Street

Gainesville, Florida

February 15th – 18th, 2014

Abstract Book

The Paleontological Society Special Publications

Volume 13

A Publication of the Paleontological Society

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Welcome from the Organizing Committee for NAPC 2014

It is our great pleasure to welcome you to Gainesville for the 10th North American Paleontological Convention (NAPC 2014). Since its inception in 1969, NAPC has evolved into a highly successful quadrennial meeting that brings together those who study the fossil record: professionals, students, and avocational paleontologists. NAPC meetings are organized under the auspices of the Association of North American Paleontological Societies, but their scope is global. Indeed, paleontologists from all continents, except for Antarctica, are in attendance at this NAPC conference.

This meeting attests to the impressive topical breadth of NAPC, with sessions and presentations covering all major groups of organisms and the entire span of the fossil record, from the Archean to the Anthropocene. Also, critical themes that motivate the science of paleontology and novel methodological advancements in our field are well represented at this conference. We are thus confident that all of us will emerge from this meeting energized and inspired by advancements and discoveries unveiled here in Gainesville over the next four days.

We are delighted by the strong presence of students at this convention. You are the future of our discipline and we extend our warmest welcome to you all. We look forward to learning about your current research and hope that this meeting will prove to be a truly transformational career experience for you. Also, we are pleased to announce the launching of a new award program dedicated to students: the NAPC Student Awards.

Likewise, we are elated by the active participation of avocational paleontologists who are well represented at this gathering. You are an important part of our profession, and we hope that this meeting will facilitate networking and scholarly interactions between you and professional paleontologists. You are most welcome here!

We hope that you will enjoy the venue of this convention. The University of Florida is one of the largest academic, research, and cultural centers of the southeast, the Florida Museum of Natural History houses a vibrant paleontology program and immense research collections, and the state of Florida is a mecca for avocational fossil collectors. Let us enjoy it while sea level remains relatively low.

This conference could not have happened without generous support from our sponsors and the selfless efforts of numerous volunteers who participated behind the scene in various organizational aspects of this convention. We owe them our deepest gratitude.

Welcome, again, and enjoy the meeting!

The Organizing Committee of the 10th North American Paleontological Convention Florida Museum of Natural History, Gainesville, Florida



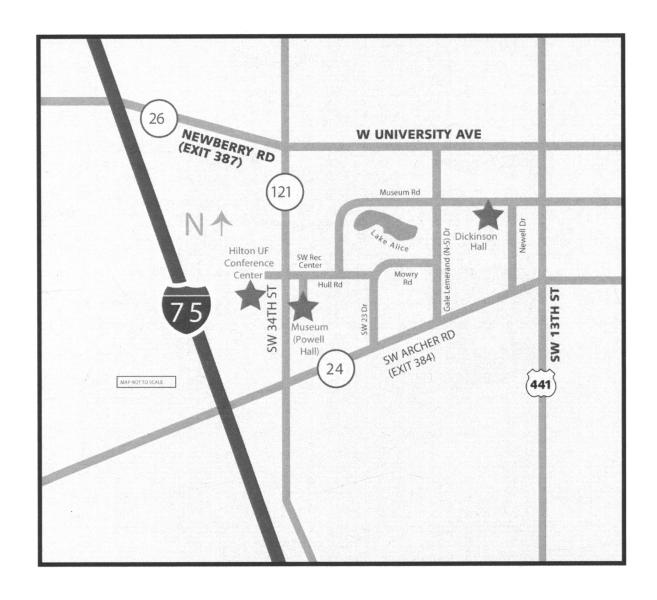
NAPC 2014 Organizing Committee

Michal Kowalewski, Chair | Florida Museum of Natural History Troy Dexter, Associate Chair | Florida Museum of Natural History Barry Albright | University of Northern Florida Richard Aronson | Florida Institute of Technology Jonathan Bloch | Florida Museum of Natural History Jon Bryan | Northwest Florida State College Laurel Collins | Florida International University Peter Harries | University of South Florida Austin Hendy | Florida Museum of Natural History Greg Herbert | University of South Florida Richard Hulbert | Florida Museum of Natural History Douglas Jones | Florida Museum of Natural History Bruce MacFadden | Florida Museum of Natural History Steve Manchester | Florida Museum of Natural History Jim Mead | East Tennessee State University G. Harley Means | Florida Geological Survey Arnie Miller | University of Cincinnati Roger Portell | Florida Museum of Natural History Mike Savarese | Florida Gulf Coast University David Steadman | Florida Museum of Natural History Peter Swart | University of Miami Hongshan Wang | Florida Museum of Natural History Aaron Wood | Florida Museum of Natural History Peg Yacobucci | Bowling Green State University

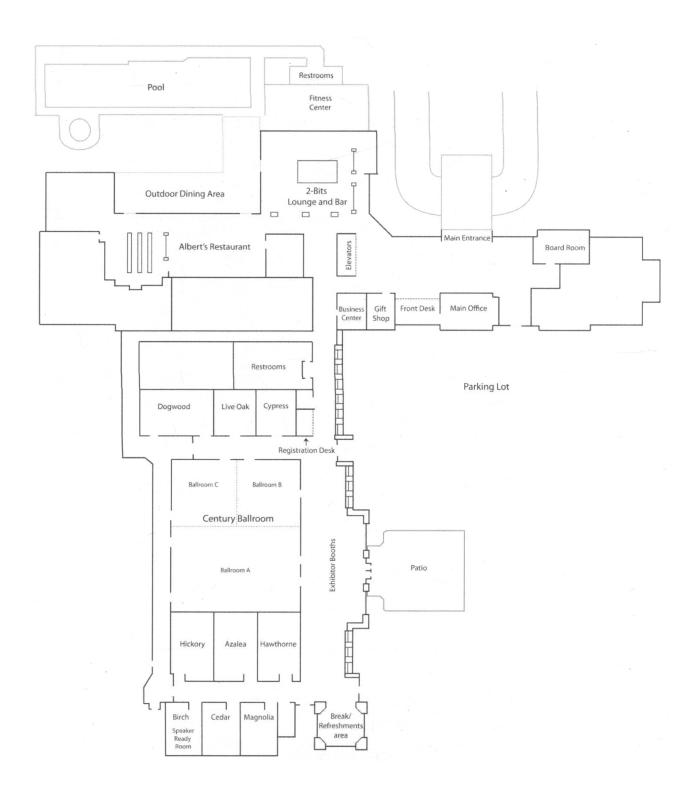
NAPC 2014 Student Organizing Committee

Sarah Allen | Florida Museum of Natural History
D. J. Buren | University of Florida
Sahale Casebolt | Florida Museum of Natural History
Paul Morse | Florida Museum of Natural History

Map of Gainesville Area (including Florida Museum of Natural History and Hilton UF Conference Hotel)

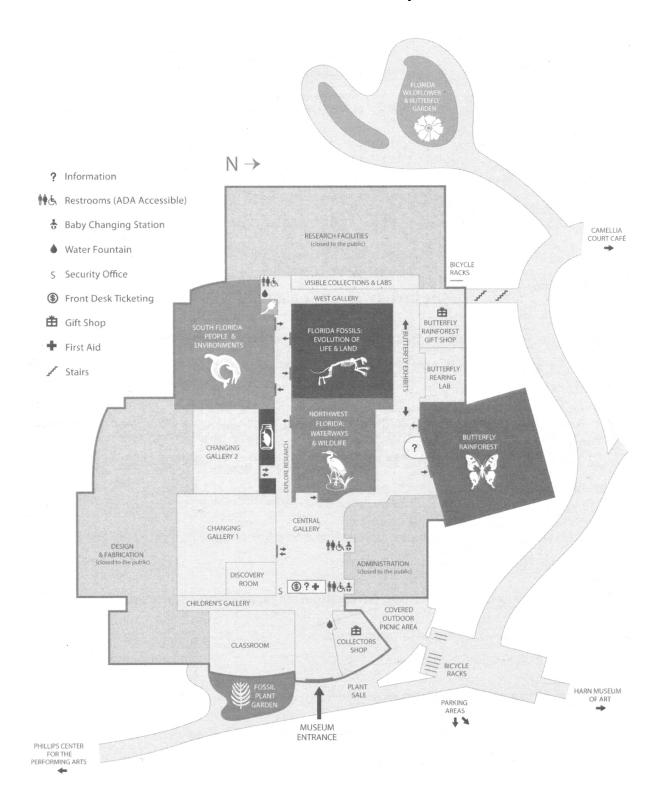


Hilton University of Florida Conference Center Floor Plan



NAPC ABSTRACT BOOK: MAPS

Florida Museum of Natural History Floor Plan



10th North American Paleontological Convention List of Sessions

Opening Ceremony

Saturday Morning, 9:00-10:00 AM, Century Ballroom A, B, and C

Opening Plenary Session

Saturday Morning, 10:00-11:30 AM, Century Ballroom A, B, and C

Saturday Oral Sessions

Session 1: Ecological fidelity and resolution of the fossil record across broad spatial and temporal scales

Chairs: Adam Tomašových, Joshua Miller, James Nebelsick, and Martin Zuschin

Session 2: The microfossil record: The past is the key to the future (or present) in conservation paleobiology

Sponsor: The Cushman Foundation

Chairs: Pamela Hallock and Laurel S. Collins

Session 3: Phylogenetics, systematics, paleoclimatology, paleoceanography, paleobiogeography

Chairs: Javier Luque and Sarah Allen

Session 4: Pantropical Cenozoic reefs

Chairs: James Klaus, Kenneth Johnson, and Willem Renema

Session 5: New advances and applications in sclerochronology

Chairs: Donna Surge and David Goodwin

Saturday Poster Sessions

Session 6: Pantropical Cenozoic reefs

Session 7: Phylogenetics, systematics, paleoclimatology, paleoceanography, paleobiogeography

Session 8: Biostratigraphy, paleoecology, taphonomy, and extinction

Session 9: New advances and applications in sclerochronology

Sunday Oral Sessions

Session 10: Reconstructing past continental environments from the biogeochemistry of fossils

Chairs: Yurena Yanes and Brooke Crowley

Session 11: Form and function: Tracing the foundations of animal diversity, ecology, and functional morphology

Chairs: Mike Meyer and James Schiffbauer

Session 12: From macroecology to macroevolution: the ecological context of extinction and origination

Chairs: Seth Finnegan and Carl Simpson

Session 13: Conservation paleobiology: Ecosystem, community, and species response to environmental change

Chairs: Carrie L. Tyler, Sahale N. Casebolt, and Rebecca Terry

Session 14: The Cretaceous-Paleogene Gondwanan expressway

Chairs: Maria A. Gandolfo and Elizabeth J. Hermsen

Sunday Oral Sessions, continued

Session 15: Modern approaches to educational outreach in paleontology

Chairs: Peg Yacobucci and Christy Visaggi

Session 16: Diversity, origination, and extinction

Chairs: Kristopher Rhodes and Blaine Schubert

Session 17: Morphological Patterns

Chairs: Kristin Polizzotto and Troy Dexter

Sunday Poster Sessions

Session 18: Diversity, origination, and extinction

Session 19: Morphological patterns

Session 20: Reconstructing past continental environments from the biogeochemistry of fossils

Session 21: Modern approaches to educational outreach in paleontology

Session 22: From macroecology to macroevolution: the ecological context of extinction and origination

Session 23: Form and function: Tracing the foundations of animal diversity, ecology, and functional morphology

Session 24: Conservation paleobiology: Ecosystem, community, and species response to environmental change

Monday Oral Sessions

Session 25: Celebrating public participation in paleontology

Sponsor: The Florida Paleontological Society

Chairs: Austin J.W. Hendy and Bruce J. MacFadden

Session 26: Critical paleobiological transitions in Earth history: The value of multidisciplinary approaches

Sponsor: STEPPE

Chairs: Sandra J. Carlson and Philip D. Gingerich

Session 27: The Cenozoic assembly of the grassland biome: pattern and process in ecosystem evolution

Chairs: Caroline Strömberg and Bonnie Jacobs

Session 28: Exceptional Records: Evolution and ecology of microfossils

Chairs: Gene Hunt and Pincelli Hull

Session 29: What comes after death: current topics in actualistic taphonomy and integrative paleobiology

Chairs: Emma R. Locatelli, Madeline S. Marshall, Marc Laflamme, James D. Schiffbauer, and Simon Darroch

Monday Poster Sessions

Session 30: Ediacaran environments and ecosystems

Session 31: What comes after death: current topics in actualistic taphonomy and integrative paleobiology

Session 32: Stratigraphic paleobiology: Integrating sedimentary and fossil records

Session 33: Digitization in vertebrate paleobiology

NAPC ABSTRACT BOOK: LIST OF SESSIONS

Monday Poster Sessions, continued

Session 34: Celebrating public participation in paleontology

Session 35: Critical paleobiological transitions in Earth history: The value of multidisciplinary approaches

Tuesday Oral Sessions

Session 36: Ediacaran environments and ecosystems

Chairs: Lidya Tarhan and Marc Laflamme

Session 37: Stratigraphic paleobiology: Integrating sedimentary and fossil records

Chairs: Jackie Wittmer and Daniele Scarponi

Session 38: Digitization in vertebrate paleobiology

Chairs: Aaron R. Wood and P. David Polly

Session 39: Paleoecological patterns

Chairs: Richard Hulbert and Adiël Klompmaker

Closing Ceremony and Plenary Session

Tuesday Afternoon, 3:00-4:45 PM, Century Ballroom A, B, and C

Banquet

Tuesday Afternoon, 5:00–8:00 PM, Touchdown Terrace,
Ben Griffin Stadium, University of Florida

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