

**Patricia Kambesis**

Center for Human GeoEnvironmental Studies  
Associate Director of Exploration and Research  
Department of Geography and Geology  
Western Kentucky University  
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**Education:** \_\_\_\_\_

PhD, May 2014, Earth and Atmospheric Sciences, Department of Geoscience,  
Mississippi State University, Mississippi State, Mississippi  
M.S. Geoscience, 2007, Western Kentucky University, Bowling Green, Kentucky  
B.S. Geology, 1982, Southern Illinois University, Carbondale, Illinois  
B.S. Biology, 1974 University of Illinois, Chicago, Illinois

*Certificates and Professional status:*

- Instructional Design, 2016 Western Kentucky University
- GIS Professional 2014
- Graduate Certificate – Geographic Information Systems, 2005, Western Kentucky University
- Graduate Faculty since Fall 2014

**Academic Experience** \_\_\_\_\_

**2014-ongoing:** Graduate Faculty: Instructor – Department of Geography and Geology, Western Kentucky University. Courses: Fundamentals of GIS (GISC 316) (GIS 317,, Our Dangerous Planet (227), Our Vulnerable Planet (226), Writing in the Geosciences (GEOG 300).  
Karst field methods and cartography

**2010-2013:** Instructor: Survey of Earth Science, Mississippi State University

**2013:** Teaching assistant: Water Resources, Geophysics, Karst Processes, Mississippi State University, Mississippi State, MS

**2002-2013:** Adjunct faculty for Karst Field Studies for Western Kentucky University Mammoth Cave National Park, teaching summer field course at Mammoth Cave National Park, Kentucky.

**2009-2010:** Associate Director of Education, Hoffman Environmental Research Institute (HERI), Western Kentucky University, Bowling Green, KY.

**2003-2010-** Assistant Director of Hoffman Environmental Research Institute, Western Kentucky University, Bowling Green, KY . Instructor for: Introduction to Geology, Fundamentals of GIS

**2001-2003 -** Hydrologic research assistant, Hoffman Environmental Research Institute, Bowling Green, KY.

**Professional Experience** \_\_\_\_\_

**1990-1998** – Telecommunications/computer specialist, Coca Cola Company- Atlanta, GA.

**1986-1989** – Independent Geological Consultant, Denver, Colorado

**1982-1986** – Exploration Geologist: Petroleum Exploration, Inc, Denver, CO.

**1978-1982** – Administrative staff: Southern Illinois University, Carbondale, IL

Department of Physical Education; Department of Geology.

**Awards and Honors:**

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2015 – Exploration Award, Cave Diving Section, National Speleological Society  
2013 – George M. Huppert Scholarship, National Cave and Karst Research Symposium  
2012 – National Speleological Foundation Research Grant  
2011 – PhD. Research Fellowship – Cave Research Foundation  
2011 – George M. Huppert Scholarship, National Cave and Karst Research Symposium  
2007 – Outstanding Geoscience Graduate Student, Ogden College, Western Kentucky University  
2004 – National Speleological Society Research Award  
2003 – Master of Science Research Fellowship – Cave Research Foundation  
1994 – Certificate of Merit for Cave Survey and Cartography – Dogwood City Grotto  
1993 – Fellow, Cave Research Foundation  
1993 – Lew Bicking Award for Cave Exploration, National Speleological Society  
1989 – Bureau of Land Management Volunteer Recognition (1989)  
1985 – Fellow, National Speleological Society

**Memberships:**

American Geophysical Union  
American Institute for Professional Geologists  
Association for Mexican Cave Studies  
Cave Research Foundation - Fellow  
Explorers Club - Fellow  
Gamma Theta Epsilon Chapter of Geoscience Honor Society at Mississippi State University  
Geological Society of America  
Kentucky Academy of Sciences  
Kentucky Speleological Survey  
Hawaii Speleological Survey  
National Speleological Society- Fellow

**Student Engagement:**

*MSc Thesis Advisor*

Hali Steinman: A Geomorphological Investigation of Lithology, Structure, and Their Effects on Speleogenesis in the Pennington Formation, Savage Gulf State Natural Area, Tennessee (proposal defended, comprehensive exams Fall 2017)  
Chelsey Kipper: Green River stream reversals into Mammoth Cave System (proposal in progress)

*MSc. Thesis Committee Member:*

Elizabeth Willenbrink: Policy communication and the Impact of Agricultural Communities on Karst Landscapes: An Example from *Phong Nha-Kẻ Bàng* National Park, Vietnam  
Tyler Bodine: Reservoir Study and Facies Analysis of the Big Clifty Sandstone in South Central Kentucky (thesis defended April 2016)  
Robert Schaefer: Evaluating the Influences of Karst Hydrogeology on Freshwater Harmful Algal Blooms in Kentucky Lakes (thesis defended Spring 2016)  
Leah Jackson: Epikarst Hydrogeochemical Processes in Telogenetic Karst Systems in South - Central Kentucky (Proposal defended Spring 2016)

Stacy Antle: Assessing Biochar Amended Soil for Dissolved Greenhouse Gas Mitigation in Karst Groundwater Systems (Proposal defended Spring 2016)

*Undergraduate Honors thesis Advisor:*

Moore, Brittinity: Inventory and Distribution of Bedrock Collapses in Bowling Green, Kentucky, Spring 2017

*Undergraduate Honors thesis committee member:*

Baugh, Kayla, 2016 – H<sub>2</sub>SO<sub>4</sub> Contamination of Freeman Branch, Alabama from Disturbance of Geologic Materials During Highway Construction Honors thesis committee member

*Supervised Independent studies:*

Anderson, Kailey: Fall 2014-Spring 2015 undergraduate, Stratigraphic Controls on Cave Passage Development of Dogwood Cave, Hart County, Kentucky. Undergraduate. Presented at 2015 WKU Student Science Conference, Bowling Green, KY

Moore, Brittinity: Fall 2015-Spring 2016 - undergraduate. Distribution of Bedrock Collapses in Warren County, Kentucky, Undergraduate, Presented at 2016 WKU Student Science Conference, Bowling Green, KY

Morgan, Ethan: Fall 2015 – undergraduate. Dripwater chemistry and land-use study at Diamond Caverns, Hart County, KY: Science and student engagement at a show cave. Undergraduate. Presented at National Cave and Karst Management Symposium, Cave City, Kentucky

Bodine, Tyler: Spring 2016 - graduate, Petrographic Analysis of thin sections from coastal areas of Quintana Roo, Mexico, Graduate: paper pending

Kipper, Chelsey: Spring 2016 – undergraduate Hydrograph Analysis of a karst conduit in Winneshiek County, Iowa - A Pilot Study. Undergraduate: Undergraduate: Presented at 2016 WKU Student Science Conference, Bowling Green, KY

Scott, Rhiannon, Fall 2016, undergraduate, Tsunami deposits on Yucatan Peninsula, FUSE grant received for 2016-17 Academic year.

**Journal articles (peer reviewed)**\_\_\_\_\_

Kambesis, P. N., Larson E. B., Mylroie J. E., 2016, Morphometric analysis of cave patterns using fractal indices, GSA Special Volume: Caves and Karst Across Time, Eds. Feinburg, J., Gao, Y., Alexander, C.E. p. 67-84.

Kambesis, P., and Coke, J., 2016, The Geology of Sac Actun Cave System, Quintana Roo, Mexico In: Robledo, P.A. and Duran, J.J. (eds.). Large Cave Systems of the World. Boletín Geológico y Minero, 127 (1): 177-182.

Lace, M.J., **Kambesis, P.N.** and J.E. Mylroie, 2016, Sistema Faro, Isla de Mona, Puerto Rico: Speleogenesis of the World's Longest Flank Margin Cave. In: Robledo, P.A. and Duran, J.J. (eds.). Large Cave Systems of the World. Boletín Geológico y Minero, 127 (1): 205-217.

Cooper, Jago, Samson, Alice V.M., Nieves, Miguel A., Lace, Michael J., Caamano-Dones, Jose, Cartwright, Caroline, **Kambesis, Patricia N.**, del Olmo Frese, Laura, 2016, The Mona Chronicle: the archaeology of early religious encounter in the New World, *ANTIQUITY* 90 352 (2016): 1–18

North, L.A., **Kambesis, P.**, Baker, P., Groves, C., 2015, The China Environmental Health Project's Technical Program for Water: Addressing Water-related Environmental Health Issues Through Training and Outreach. *U.S.-China Education Review B* 5(6): 353-364

Kambesis, P.N., Brucker, R., 2014 Mammoth Cave National Park: Home to the World's Longest Cave, in *US National Parks: Pioneering Steps in the Management of Natural Resources*. Ed. A. Palmer, Environmental Dynamics p. 46-61

Hans G. Machel, Jonathan B. Sumrall, **Patricia N. Kambesis**, Joan R. Mylroie, John E. Mylroie, Michael J. Lace, 2014, Episodic Fluid Flow and Dolomitization By Methane-Bearing Pore Water of Marine Parentage In An Accretionary Prism Setting, Barbados, West Indies, *Journal of Sedimentary Research*, Vol. 84 (2014), No. 2., Pages 58-71

Iker, B., D., **Kambesis, P.**, Oerhle, S., Groves, C., Barton, H., 2010 Microbial Atrazine Breakdown in a Karst Groundwater System and its Effect on Ecosystem Energetics, *Journal of Environmental Quality* 39(2): 509-518.

All, J., **P. Kambesis**, R. Elrod, and J. Goldsmith. 2009. Stormwater Remediation in a Karst Watershed: Bowling Green, KY. *Stormwater*. 10(3):52-57.

Jiang, Y., L. Linli Li, Groves, C., Yuan, D., and **Kambesis P.**, 2009 Relationships between rocky desertification and spatial pattern of land use in typical karst area, Southwest China. *Environmental Earth Sciences*, Vol. 59(4), pp. 881-890.

Jiang, Y., Wu, Y., Groves, C., D. Yuan, and **Kambesis P.**, 2009 Natural and anthropogenic factors impacting groundwater quality in the Nandong karst underground river system in Yunnan, China. *Journal of Contaminant Hydrology*, Vol. 109 (1-4), pp. 49-61.

Kambesis, P., 2007, Cueva de los Indios, *NSS News*, Vol. 65, No. 10.

Kambesis, P., 2007, Importance of Cave Exploration to Scientific Research, *Journal for Cave and Karst Studies*, Vol 69 (1), p. 46-58.

### **Conference Proceedings**

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Kambesis, P., 2017, Analysis of cave morphology and type using fractal indices, *Proceedings of the 3<sup>rd</sup> International Symposium of Speleology, Varenna (Como, Italy, April 29-30<sup>th</sup>, 2017.)* *Memorie dell'istituto Italiano di Speleologia S. 2, XXII*, pp.

Mylroie, J. E., **Kambesis, P. N.**, Owen-Nagel, A. M., Sumrall, J. B., Larson, E. B., Mylroie, J. R., and Lace, M. J., 2015, Flank margin cave development at Cala Pi and Cala Figuera, Mallorca Island, Spain, in Glumac, B. and Savarese, M., eds., *Proceedings of the 16th Symposium on the Geology of the Bahamas and other Carbonate Regions*, p. 213-221.

Mylroie, J.E., Ho, H.C., Infante, L.R., **Kambesis, P.N.** and Leist, J.W., 2015. Banana Holes as syndepositional flank margin caves within an advancing strandplain and their prediction using fuzzy based spatial modeling. in Glumac, B. and Savarese, M., eds., Proceedings of the 16th Symposium on the Geology of the Bahamas and other Carbonate Regions, p. 222-236.

Kambesis, P. N., Mylroie, J. R., Mylroie, J. E., Larson, E. B., Owen-Nagel, A. M., and Sumrall, J. B., 2015, Influence of karst denudation on the northwest coast of Curaçao, in Glumac, B. and Savarese, M., eds., Proceedings of the 16th Symposium on the Geology of the Bahamas and other Carbonate Regions, p. 200-212.

Kambesis, P., Oakes, B., Lace, M., 2013, Challenges of Cave Management in a developing country: A case study of Grotte Marie-Jeanne, Département Sud, Haiti, Proceedings of the National Cave Management Symposium 2013, Ed. L. Land.

Kambesis, P., Lovaas, J., Lace, M. J., 2013, High Resolution temperature sampling of cave climate variations as a function of allogenic recharge, Coldwater Cave, Iowa, USA, 16<sup>th</sup> International Congress of Speleology Proceedings, eds, M. Filippi and B. Bosak, p. 413-416.

Kambesis, P., North, L., Groves, C., Polk, J., 2012, Incorporating Karst/Cave Science in Cave Guide Training, 2011 Proceedings National Cave and Karst Management Symposium, ed. C. McKinney.

Croskrey, A., Foote, J., **Kambesis, P.**, 2011, The Three Fingers Survey Project, "Beneath the Forest" ed., J. Kovarik, Spring 2011 [www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5328760.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5328760.pdf) p. 13-17

Kambesis, P., Burger, P., Lace, M., and Despain, J., 2009, Coastal Karst of Caguas National Park, Sancti Spiritus, Cuba, pp. 502-508 in W.B. White (ed.) Proceedings of the 15th International Congress of Speleology Vol. 1, Symposia. San Antonio, TX: International Union of Speleology.

Lace, M. and **Kambesis, P.** 2009, Coastal Speleogenesis in Puerto Rico, pp. 509-515 in W.B. White (ed.) Proceedings of the 15th International Congress of Speleology Vol. 1, Symposia. San Antonio, TX: International Union of Speleology.

Kambesis, P., Osburn, B., Pollack, J., Bunnell, D., 2009 Tham Khoun Xe of Khammoune Province, Lao People's Republic, pp. 1813-1816 in W.B. White (ed.) Proceedings of the 15th International Congress of Speleology Vol. 3, Contributed Papers. San Antonio, TX: International Union of Speleology.

Hendrickson M., **P. Kambesis**, C. Groves, and R. Kessler, 2006, A Template for Academic/NGO Partnership in the Evaluation of Cave and Karst Resources. Proceedings of the 8th International Conference on Limestone Hydrogeology, Neuchâtel, Switzerland. Vol. 1, N. Goldscheider et al. (eds.). Besançon, France: Presses universitaires de Franche-Comté

Kovarik, J., & **Kambesis, P.** 2005, Cave Inventories and why they are important, Proceedings from the 2005 Cave and Karst Management Symposium, St. Louis, Missouri, Ed. B. Elliott.

Hawkins, W., **Kambesis, P.**, Groves, 2005, Potential Impacts of Acid Mine Drainage on the Hydrogeologic System of Russell Cave National Monument, USA, Proceedings of the 2005 International Congress of Speleology, Athens, Greece, International Union of Speleology

Kambesis, P.N., 2004, A systematic approach and partnership in the study of contaminant sources and transport in a karst groundwater basin. Proceedings of the International Transdisciplinary Conference on Development and Conservation of Karst Regions (Hanoi, Vietnam), p. 114-116

Kambesis, P.N., 2004, Subterranean Field Studies as a basis for cave management and cave research. Proceedings of the International Transdisciplinary Conference on Development and Conservation of Karst Regions (Hanoi, Vietnam), p. 117-119

### **Encyclopedia, Book Chapters and Book Contributions**

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Kambesis, P. 2017, Cave Development in Caguanes National Park, Cuba, in *Caves of Sancti Spiritus, Cuba*, ed. Joel Despaigne,

Kambesis, P., 2016, The Karst Landscape and the Great River Cave of Him Nam No, Khammoune Province, Lao People Republic, in *The Great Cave of Xe Bang Fai*, Eds. D. E. E. Bunnell and P. Kambesis, ISBN 978-1-68044-005-8, p. 12-13

Mylroie, J. E., Lace, M. J., **Kambesis, P. N.**, Mylroie, J. R., 2015, Karst processes and estuarine coastlines, in Kennish, M. J., ed., *Encyclopedia of Estuaries*, p. 373-380. Springer Science +Business Media, Dordrecht. DOI 10.1007/978-94-017-8801-4.

Kambesis, P., and Coke, J.G. IV, 2013, Overview of the controls on eogenetic cave and karst development in Quintana Roo, Mexico, . In *Coastal Karst Landforms*. M.J. Lace and J.E. Mylroie eds., Coastal Research Library Series. Vol. 5, Amsterdam: Springer Publishing p. 347-373

Kambesis, P.N. and H.G. Machel 2013 *Caves and Karst of Barbados*. In *Coastal Karst Landforms*. M.J. Lace and J.E. Mylroie eds., Coastal Research Library Series. Vol. 5, Amsterdam: Springer Publishing p. 227-244

Kambesis, P., Groves, C., Baker, P., Bledsoe, L., Kreitzer, L., Tracy, M., Smith, D., Bolster, C.H. 2009. *Agriculture and Karst in Kentucky-Informational Brochure*, pp. 34

Kambesis, P. 2009 *Appalachian Mountains, Overview: Caves of the Lower Tennessee River Basin, Tennessee, Alabama and Georgia*, pp. 91-100 in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society.

Kambesis, P. 2009 *Glaciated Central Highlands, Overview: Caves of Iowa*, pp. 151-153 in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society.

Kambesis, P. 2009 *Overview: Glaciated Central Highlands, Coldwater Cave System, Winneshiek County, Iowa*, pp. 154-155 in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society.

Kambesis, P. 2009 *Karst of Florida Block, Sistema Rio Encantado, Puerto Rico*, in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society. p. 337-39

Kambesis, P. and Lace, M., 2009 *Coastal Caves of Puerto Rico*, pp. 342-343 in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society.

Kambesis, P. and Lace, M. 2009 *Overview: Isla de Mona, Puerto Rico*, pp. 343-345 in A.N. Palmer and M.V. Palmer (eds.) *Caves and Karst of America*. Huntsville, AL: National Speleological Society.

Kambesis, P. Lechuguilla Cave, New Mexico, 2005 in Encyclopedia of Caves, Eds. D. Culver and W. White, Elsevier Academic Press, London, UK, p. 339-346

Kambesis, Patricia, Brucker, R., 2005, Collapsed Sinkhole at Dishman Lane, Kentucky," in T. Waltham, F. Bell, and M. Culshaw (eds.), Sinkholes and Subsidence: Karst and Cavernous Rocks in Engineering and Construction. Chichester, UK: Springer. pp. 277-282

Kambesis, P., 2004 – Geology and Hydrogeology of the Rio Encantado System, Puerto Rico, Encyclopedia of Caves and Karst Science, Ed. John Gunn, Fitzroy Dearborn, New York, NY. p. 317-18.

Reames, S., Fish, L., Burger, P., Kambesis, P., 2000, Deep Secrets, The Discovery and Exploration of Lechuguilla Cave, Cave Books, ISBN: 0939748282

Kambesis, P., 1998 Into the Ballroom, Lechuguilla Cave: Jewel of the Underground, Ed. Widmer, U., Speleo Projects, Basel, Switzerland

#### **Publications (non-peer reviewed)**

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Kambesis, P., 2014 Karst Geology of the Classic TAG Region (Tennessee, Alabama, Georgia), in 2014 NSS Convention Guidebook, Ed. J. Schenk-Brown, Huntsville, AL, p. 2-23

Kambesis, Patricia, 2014, Grotte Marie-Jeanne: An Initiation into Haitian cave exploration, NSS News, Volume 72, No. , p7-14

Kambesis, P., 2010, Training in Hydrologic Field Techniques – East Mountain Plateau, Yunnan, China, China Environmental Series #11, Woodrow Wilson Center for Scholars

#### **Professional Presentations**

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##### **2017**

Risk Analysis of Bedrock Collapse Sinkholes in Bowling Green, Kentucky, Kentucky Academy of Sciences Annual Meeting, Murray, KY November

Analysis of Bedrock Collapse Sinkholes in Bowling Green, KY, National Cave and Karst Management Symposium, Eureka Springs, Arkansas, October

Cave Genesis in the Eastern Great Basin, Nevada and Utah, USA, 2017 GSA Annual Meeting, Seattle, WA October (poster)

Karst Hydrogeologic Research in the Upper Midwest, USA, 2017 GSA Annual Meeting, Seattle, WA, October (oral)

Challenges of Mapping Earth's Final frontier, Seminar for Department of Geography and Geology, WKU, Bowling Green, KY September

New discoveries on Isla de Mona, International Congress of Speleology, Sydney, Australia, July  
Enigmatic Caves of the Great Basin, Nevada, International Congress of Speleology, Sydney, Australia, July

Hitting the Wall: Explorations on the North Coast of Isla de Mona, US Exploration, NSS Convention, Rio Rancho, NM, June

Caves of 1880-81 Lava Flow – Big Island of Hawaii, NSS Convention Rio Rancho NM June  
Analysis of cave morphology and type using fractal indices, 3<sup>rd</sup> International Symposium of Speleology, Varenna (Como), Italy, April (invited)

Geology and Hydrology of Mammoth Cave area, to Okemos High School field trip at Hamilton Valley, Kentucky, March

Update on Exploration and Survey of the Mammoth Cave System inside and outside of the National Park, invited Mammoth Cave Biosphere Reserve Advisory Council at Mammoth Cave National Park, KY, February

## **2016**

Exploration Potential at Mammoth Cave National Park, presented to the Kentucky Speleological Survey Annual Meeting in Bowling Green, KY September

Enigmatic Caves of the Western United States, Geological Society of America Annual Meeting, Denver, CO September

Overview on Geography and Karst Science, Presentation to freshman class on Social Science, South Warren County High School, Kentucky, September

Hitting the Wall, Explorations on Isla de Mona, Puerto Rico, US Exploration Session NSS Annual convention, Ely, Nevada, July

Cave Exploration and Science – Advanced Placement Science Teachers Workshop, Hidden River Cave, sponsored by Western Kentucky University and American Cave Conservation Association, June

Hydrogeology of the Mammoth Cave System – Field trip lecture for Boy Scouts of American Eagle Scout Speleologists at Mammoth Cave, June

How do we explore Mammoth Cave? For Okemos High School at Hamilton Valley Research Station, April

Rocks, People and the Environment: Pseudokarst of Hawaii, Department of Geography and Geology Colloquium, Western Kentucky University, April

Geology of Karst, AIPG Seminar (Kentucky-American Institute of Professional Geologists), Cave City, Kentucky, April

Morphometric Analysis of Hypogene Caves of the Western United States, DeepKarst, Carlsbad, New Mexico (poster), April

Ongoing Geographic Documentation of the Mammoth Cave System and related caves, 2016 National Park Research Symposium, Mammoth Cave National Park, April

Exploring the Great River Cave of Laos, presentation for Cincinnati Grotto at Mammoth Cave Restoration Camp, March

Using GIS for the study of caves, BioBlitz for South Warren County Kentucky Middle School field trip, Western Kentucky University, March

## **2015**

A Needle in the Haystacks – Cave Exploration in Beaumont, Haiti, International Exploration Session, NSS Annual Convention, Waynesville, MO, July



Jaguar Chronicles – Quintana Roo, Mexico, International Exploration, NSS Annual Convention, Waynesville, MO.

Him Namno Karst – Cave Exploration in Laos, International Exploration session, NSS Annual convention, Waynesville, MO, July

Isla de Mona – US Exploration session, NSS Convention, Waynesville, MO, July

Geology of the Historic Tour, Mammoth Cave Kentucky, at Hamilton Valley Field Station and in Mammoth Cave for Shawnee University Field Geology class. March

## **2014**

World Class Tourism on a World Class Karst, Impact of touristic development on the karst of Quintana Roo, Mexico, Colloquium Series of Department of Geography and Geology, Western Kentucky University. October

Morphometric Analysis of Cave types using Fractal Indices, Geology Section, NSS Annual Convention, Huntsville, Alabama July

Reconnaissance in Southern Haiti, July National Speleological Society Annual meeting, International Exploration Session, Huntsville, Alabama July

Influence of coastal processes on speleogenesis and landforms in the Caribbean Region, March, Presentation for Dissertation Defense, Department of Geoscience, Mississippi State University, Starkville, MS. March

Vadose, epiphreatic and phreatic cave development in northeast Quintana Roo, Mexico, February Conference on Hypogenic Cave Morphologies, Karst Waters Institute, San Salvador, Bahamas. February

## **2013**

Challenges of Cave Management in a developing country: A case study of Grotte Marie-Jeanne, Departement Sud, Haiti, 2013 National Cave and Karst Management Symposium, Carlsbad, New Mexico, November

Morphometric analysis of caves using fractal indices, Geological Society of America Conference, Poster Presentation, Denver, Colorado, November

Geologic Controls on Cave Development along the Quintana Roo Coast, Conference Círculo Espeleológico de Mayab, Akumal, Mexico, August.

Reconnaissance of the Caves and Karst of the ABC Islands, International Exploration Session, National Speleological Society, Shippensburg, Pennsylvania, August

All caves are not created equal, Creek Run Geology Symposium, French Lick, Indiana, July

High Resolution temperature sampling of cave climate variations as a function of allogenic recharge, Coldwater Cave, Iowa, USA, 16<sup>th</sup> International Congress of Speleology, Session on Cave Climate and Paleoclimate Record, Brno, Czech Republic, July

The Making of a Connection –the Potential of a Mammoth Cave System- Whigpistle Cave Connection, 10<sup>th</sup> Mammoth Cave National Park Science Symposium, February

Race for the Longest Cave, Department of Geoscience Brown Bag Seminar, Mississippi State University, Starkville, Mississippi March

Karst and Water Resources, guest lecturer, Water Resources GG, Department of Geoscience, Starkville, Mississippi February

## **2012**

Karst Denudation on the Northwest Coast of Curacao, Geology Section, NSS Convention, Greenbrier West Virginia

Haiti by Polaris – Cave Reconnaissance in the Northern Regions, International Exploration, NSS Convention, Greenbrier, West Virginia July

## **2011**

Cave Research Foundation and Cooperative Caving, Annual Meeting Cave Research Foundation, Cumberland Gap, KY. October

Techniques for Incorporating Cave Science in Cave Guide Training, National Cave Management Symposium, Midway, Utah. October

Sea caves in the Tongass National Forest, Alaska, US Exploration session, National Speleological Society Annual Meeting, Glenwood Springs, CO

How we measure caves, Survey and Cartography Section, National Speleological Society Annual Meeting, Glenwood Springs, CO July

Haiti Connection: Geology, Climate, Culture, Department of Geoscience Brown Bag Seminar, Mississippi State University, Starkville, MS March

Occurrence of Hypogenic Caves in Coastal Re-entrants and Gullies, (abstract), poster presentation International Conference on Karst Hydrology and Ecosystems, Eds. J. Polk and L. North, Bowling Green, KY

## **2010**

Great Cave Systems of the World, Department of Geoscience Brown Bag Seminar, Mississippi State University, Starkville, MS

Training Efforts and Outreach Programs of the China Environmental health Project's Technical Program for Water, 2010, GSA Denver Annual Meeting (31 October – 3 November 2010) . Paper No. 248-4, Poster presentation

Extreme Geology, radio interview, Monday 29 November 2010  
Permalink: [http://radio.seti.org:80/episodes/Extreme\\_Geology](http://radio.seti.org:80/episodes/Extreme_Geology)

## **2009**

Resource inventory of Deer Cave System, Presentation to staff of Mulu National Park, Borneo, Malaysia  
Invited presentation. December

Understanding, Managing and Protecting Cave and Karst Resources, Principles and Methods of Karst Resource Management Conference, Aug. 11-13, Kunming, Yunan Province, China, Invited Oral Presentation

Coastal Karst of Caguanes, National Park, Sancti Spiritus, Cuba, 15<sup>th</sup> International Congress of Speleology, Kerrville, Texas July

Exploration of Tham Khoun Xe of Khammoune Province, Lao People's Republic: International Union of Speleology, Poster Presentation, Kerrville, Texas July

## **2008**

The Evolution of Cave Mapping and Cartography. Trimboli SR (editor). Proceedings from Mammoth Cave National Park's Max Kaemper Centennial Symposium & 9th Science Symposium: Cultural History and Research. October 9-10. Mammoth Cave, KY

Reconnaissance of Southwest Coast of Haiti, International Exploration Session, National Speleological Society Annual Meeting, Lake City, Florida July

Coastal Caves of Puerto Rico, International Exploration, National Speleological Society Meeting, Lake City, Florida July

Caves of Caguanes, Cuba, Karst-O-Rama, Sponsored by Greater Cincinnati Grotto, at Great Saltpeter Cave, Kentucky, invited presentation July

Recent expedition results from the Cayo Caguanes coastal area of Cuba, Centro Ecologico Akumal Presents: An evening of discussion on karst and cave science and exploration in the Western Caribbean: Yucatan Peninsula, Puerto Rico & Cuba, Akumal, Mexico, invited presentation. May

## **2007**

Caves of Sardinera, Puerto Rico, , International Exploration Session, National Speleological Society Annual Meeting, Marengo, Indiana July

Groundwater delineation of the Coldwater Cave Karst Groundwater Basin, presentation for Masters Thesis defense, Department of Geography and Geology, Western Kentucky University, Bowling Green, Kentucky.

Caves and Karst of Isla de Moa, 1<sup>st</sup> FEPUR Congress/5<sup>th</sup> FEALC Congress, July 29-August 4, Aguadilla, Puerto Rico, July

Coastal Cave Development in Puerto Rico, 2007, International Conference on Karst Hydrology and Ecosystems, Bowling Green, Kentucky, August 13-15, 2007 (poster) Abstract in Conference program p. 22

## **2006**

Baseline Information for Understanding, Managing and Protecting Caves and Karst, Survey and Cartography section, National Speleological Society Annual Meeting, Bellingham, Washington

Understanding agricultural contaminant sources and transport within a karst groundwater basin in the Upper Midwest, USA, Conference on Climate change and underground waters, Malaga, Spain

**2005**

Geology and Hydrogeology of Wanhua Cave System, Hunan Province, China, National Cave and Karst Management Symposium, Albany, New York.

Chinese/American Cooperation in Cave Management, National Cave Management Symposium, Albany, New York

Geologic Controls on the Deep Caves of Tennessee, Alabama and Georgia, National Speleological Society Annual Meeting, Huntsville, Alabama

Hydrogeology of Tumbling Rock Cave, Alabama, , National Speleological Society Annual Meeting, Huntsville, Alabama

Caves and Karst of Isla de Mona, Puerto Rico, 14<sup>th</sup> International Congress of Speleology, Greece.

**2004**

Why is Mammoth Cave the Longest Cave? , Speleofest- annual event of the Louisville, Grotto, Invited Guest Speaker Bonnieville, Kentucky.

A systematic approach and partnership in the study of contaminant sources and transport in a karst groundwater basin: International Transdisciplinary Conference on Development and Conservation of Karst Regions, Hanoi, Vietnam.

Use of subterranean field studies as a baseline for karst research and resource management. Case study : Lechuguilla cave, New Mexico. : International transdisciplinary conference on development and conservation of Karst regions, Hanoi, Vietnam

Groundwater basin delineation of Coldwater Cave, Winneshiek County, Iowa, , Invited presentation sponsored by Decorah, Iowa Northeast Iowa RC&D, Inc. and Luther College Environmental Studies in support of the Upper Iowa River Watershed Project, Decorah, Iowa

**2003**

Dishman Sink Collapse, International Sinkhole Conference, - Poster presentation Huntsville, Alabama

Agricultural Contaminant Source and Transport in a karst groundwater basin: Case Study: Coldwater Cave, Iowa, USA. National Cave and Karst Management Symposium, Gainesville, Florida, October.

Hawaii Cave Projects, with Don Coons, Cave Research Foundation Annual Meeting, Sequoia Kings Canyon National Park, California.

Exploration and Mapping on Isla de Mona, Puerto Rico, One of the Caribbean's most cavernous islands. US Exploration Session, NSS Convention, Porterville, CA

**2002**

Genesis and Characteristics of Tumbling Rock Cave, A Valley Wall Conduit in Jackson County, Alabama: Southeastern/North-Central Section Meeting, Lexington, Kentucky, March

Cave Research Foundation in the Mammoth Cave System, a half-century of exploring and mapping the world's longer known cave (Poster). Environmental Geoscience Session, Proceedings for the Geological Society of America, 2002.

**2001**

A Prerequisite to Managing Karst Systems: A model for developing basic elements of karst development. National Cave and Karst Management Symposium, Tucson, Arizona (Oral presentation)

Cave Research Foundation in the Mammoth Cave System, a half-century of exploring and mapping the world's longer known cave. Geological Society of America poster Presentation

Hydrology of Kaumana Cave, Hawaii, National Speleological Society Annual Meeting, Geography and Geology Session, Great Saltpetre Preserve, Kentucky, July, Oral Presentation

Caves of Isla de Mona, Puerto Rico 48<sup>th</sup> Indiana Cave Cavers 2001 Aug 10–12 Camp Rivervale, Indiana

**2000**

"Mauka-Makai" - Recent Cave Discoveries on Hawaii's Big Island.- Faculty Student Seminar Department of Geology and Geography, Western Kentucky University, Bowling Green, Kentucky