

Cultures of Caving Session

Session Organizer: Dr. María Alejandra Pérez

Session Chair: Dr. Joseph Douglas

Tuesday, June 14, 2022 9:00am – 1:00pm

Location: Fine Arts 2

Session Description: Whenever “anthropology” and “caves” are mentioned together, it is usually in the context of archaeology. There is good reason for this, since caves have been and continue to be important sites to examine the past, not just of humans and their ancestors, but also of other living beings and even of the earth itself. Yet, caves continue to be very active spaces of human cultural activity. We suggest that a focus on caving itself, including speleological research, be examined as a cultural activity, and that this examination be put in the broader context of the study of humans and caves (See Pérez’s Chapter 26 of the 4th edition of *Caving Basics* for a more thorough exposition on this view). Cavers explore, they discover. Most cavers survey and map while doing so. They also gather into groups, they tinker with and design their tools, and they establish certain rules (explicitly or implicitly) about who to share their information with and how. On this point, cavers sometimes fight with each other. The many ways cavers deal with territorial politics is a fascinating and complex area that is teeming with insights into how humans establish relationships among each other and the earth. Caver ideas on conservation and cave modification are intriguing evidence of the complex ways humans behave culturally and shape nature. In other words, cavers have culture, or, to be more precise, cavers cave *culturally*. This session is an invitation to think of caving itself from a cultural and historical perspective, and to examine what has changed and what has remained the same when it comes to humans exploring cave passages. After almost three years of an ongoing pandemic and the rise of creative uses of virtual and other technologies—many in support of the International Year of Caves and Karst—it is a good time to stop, reflect, and ponder on new ways to expand/change the ways we cave, together.

Culture of Caving Session Schedule

Time	Presenter	Topic
9:00-9:10	María Alejandra Pérez	Session Introduction (virtual presentation)
9:10-9:40	Montserrat Peralta Méndez	Folklore of the Caves of the Huautla de Jimenez, Oaxaca, Mexico Area
9:40-10:10	Joe C. Douglas	Weaver Caverns and Historic Native American Use of Caves in Eastern North America
10:10-10:40	Kai Bosworth	Cave Conservation: A Perspective from Human Geography
10:40-11:00	BREAK	
11:00-11:30	Devra Heyer	If You Learn How to Cave, What Else Do You Learn: A Pedagogical Look At Caving
11:30-Noon	María Alejandra Pérez (Virtual)	The Power and Potential of a Radical Speleology
Noon-12:30pm		General Q/A Discussion

Culture of Caving Session Abstracts

Folklore of the Caves of the Huautla de Jimenez, Oaxaca, Mexico Area

Montserrat Peralta Méndez (NSS 71182)

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I am an indigenous Mazatec woman from Huautla de Jimenez, Oaxaca, Mexico. My ancestors have lived in the Sierra Mazateca for thousands of years. I am pleased to say that most of what is known about my ancient ancestors comes from archaeological studies done in the caves by speleologists. My people are grateful for this.

Before cavers first arrived in Huautla in the mid-1960s, cave entrances were known and entered a short distance by ancient Mazatecs, limited by their lack of good lights and other equipment. However, one entrance puzzles modern cavers as to how it was reached by the ancients without ropes. Modern cavers reached it by rappelling 100m down a cliff face and inside the cave discovered a stone altar and 2,000-year-old footprints.

There are many stories and beliefs about the caves that have been handed down from one generation to the next for an unknown number of years. For example, there are beliefs in dwarfs living in the caves, and there are strong beliefs in cave spirits.

Along with telling the stories about the beliefs and legends of the Huautla area caves that I have collected as my contribution to the speleological project, I will show photos of the many wall murals located in the area that depict our stories and legends. I will also show photos of cavers taken during their moments of silence and respect at cave entrances.

Cavers with the Proyecto Espeleológico Sistema Huautla (PESH) respect the beliefs of my people. At the start of PESH expeditions they have gathered with a spiritual Mazatec person who has requested that the cave spirits give them safe passage in the caves. My people appreciate this. Cavers are reverent at cave entrances before going caving, they are quiet and respectful, and my people, the modern Mazatecs, are thankful.

Weaver Caverns and Historic Native American Use of Caves in Eastern North America

Joseph C. Douglas* (*Volunteer State Community College*), Kristen Bobo (*Tennessee Cave Survey*), Lacey Fleming (*Tennessee Division of Archaeology*), and James R. Honaker (*Kentucky Technical Solutions*)

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Weaver Caverns is a short (205 meters) but spacious cave located on the western escarpment of the Cumberland Plateau in central Tennessee. Developed in the Monteagle Limestone, the cave was reported in 1987 as a moonshine site. Field research in 2011 and 2021 confirmed the moonshine usage and revealed other historical interactions: graffiti from recreational visitation, possible evidence for saltpeter activity, and a Native American component consisting of charcoal and “stoke marks” from torches of bundled river cane (*Arundinaria sp.*). Although radiocarbon dating for the recent past is confusing due to wiggles in the calibration curve, two AMS radiocarbon dates on two different cane charcoal deposits were obtained. They yielded conventional radiocarbon ages of 200 +/- 30 BP and 270 +/- 21 BP. When calibrated, this likely places the Native American presence in the 17th and 18th centuries, although an early 19th century date (for the first

assay) and a 16th century date (for the second assay) are also possible. There is no evidence for mortuary, extractive, or ritual use involving art; the cave is currently interpreted as an 'exploration' site, although the possibility of non-materialized ritual exists. There are now post-1600 ¹⁴C dates from 18 different caves in eastern North America. Weaver Caverns and similar-aged cave sites provide important evidence for Native American cave utilization following the Spanish *entradas* and throughout the era of increasing entanglements.

Cave Conservation: A Perspective from Human Geography

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Human geographers study how different groups of people understand and value the environment in different ways based on their relationships with media, culture, local history, and the particular landscapes in which they live, work, and play. Nonetheless, we still sometimes make assumptions about what counts as "nature" and environmental protection, focusing on conventional living ecosystems and the impacts of pollution and environmental degradation. This talk asks: how might practices of cave conservation challenge some of the assumptions made about conservation and environmental protection? Do the experiences of cavers and their knowledge of conservation practices require different forms of description than analyses of other sorts of environmental concern, such as habitat, stream, energy or climate change? If so, why? In this talk, I hope to provide an introduction to these questions through a discussion of my past research on controversy surrounding the proposed Dewey-Burdock ISL uranium mine in nearby Edgemont, South Dakota. I show how those who opposed this mine drew on tourist, amateur, and expert knowledge of Black Hills caves. And I hope to describe and get feedback from the NSS community as I begin to develop a research project tentatively called "The environmental politics of the underground." Eventually, I hope to speak to several communities who raise concerns about caves, mines, sinkholes, urban pipelines, abandoned oil wells, impacts to aquifers and groundwater sources around the United States. I think that the care cavers display for underground spaces is exemplary and significant in part because it refuses many of the traditional and restrictive styles of US environmentalism—and I'm interested to hear if you all agree!

If you learn how to cave, what else do you learn: A Pedagogical Look at Caving

Devra Heyer (*National Cave and Karst Research Institute*)
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Just as someone learns music, they implicitly learn fractions. As we learn how to cave, we gain knowledge and techniques from other content areas. This talk is more of an overview of general caving skills and knowledge. While the focus is on becoming an expert in working in the environment of caves other common activities done in the caving environment will be discussed. There will be comparisons of skills utilized by cavers with evaluative criteria of Emergency Management Institute (EMI), Rope Access (SPRAT), Common Core Mathematics and Next Gen Science standards. Cavers have a cross curricular skill set that utilizes communication/organization skills commonly used in emergency services, while implicitly learning math, physics, biology, geology and rope access concepts and techniques.

How Caves Gather: The Power and Potential of a Radical Speleology

María Alejandra Pérez (*West Virginia University*)
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Caves gather, both literally and metaphorically, multiple dimensions of life and earth across time. Speleology reflects this ample range of dimensions and scales, albeit through the dominant and sometimes limiting lens

of Eurocentric science. Emphatically, speleology includes but also exceeds geologic and scientific lens; and thanks to the participation (and often leadership) of non-academics in speleological groups, we are reminded of the value of explorations of the earth that are not bound by academic disciplinary affiliations. Moreover, grasping the degree to which and what caves gather varies immensely—these attributes can only be fully revealed through exploration and the collective eyes, ears, and touch of humans attuned to different attributes. This is one of the features that makes participation in caver grottos or larger speleological organizations so exciting. Drawing on recent insights from anthropology, geography, and philosophy, I illustrate these points with cases from Cuba, Venezuela, and Puerto Rico, whose speleologists push the boundaries of the "for what, how, and for whom" of speleology. In conclusion, I suggest ways of affirming speleology's transformative potential, leading to a radical speleology in which caves not only gather but also open up new and necessary ways of being in the world with others.