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Newsletter

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**ENVIRONMENTAL IMPACT ON ANCESTRAL PUEBLO FISHING
IN THE MIDDLE RIO GRANDE REGION**

Jonathan Dombrosky

7:30 pm Tuesday, October 20, 2020

Via Zoom

At Your Computer or Smart Phone

Disarticulated fish remains are frequently recovered from late prehispanic and early historic archaeological sites in the Middle Rio Grande region, but they are rare during earlier time periods. Increased aquatic habitat quality brought on by wetter climatic conditions may have impacted Ancestral Pueblo foraging goals, leading to an uptick in fishing practices. Wetter stream conditions can increase the number of different energy channels that help support fish populations and increase ecological stability, which makes fish less risky to pursue for human foragers. In this talk, I illustrate how to identify stable ecological communities in the archaeological record using stable isotopes. I argue that energy derived from terrestrial C₄ plants – a stabilizing “slow” energy source – was important for the Middle Rio Grande aquatic food web during the late prehispanic/early historic period. This suggests that fish populations were supported by a broader resource base and were more stable and less risky to pursue for Ancestral Pueblo people.

Jonathan Dombrosky is a PhD Candidate and Hibben Doctoral Fellow at the University of New Mexico. He received both his BA and MA degrees at the University of North Texas. Jon’s dissertation work – funded by a National Science Foundation Doctoral Dissertation Improvement Award – focuses on better contextualizing Ancestral Puebloan fishing strategies in the Middle Rio Grande region of New Mexico during the Pueblo IV period. He is generally fascinated by Southwest zooarchaeology during the late prehispanic/early historic period, and leads projects centered on understanding past management practices associated with birds of prey and the intricacies of garden hunting. Jon has broad interests in human behavioral ecology, stable isotope ecology, and conservation biology. His research is published in international journals including *Archaeological and Anthropological Sciences*, *The Holocene*, *Hydrobiologia*, and *PeerJ*.

A day or so prior to the October meeting, an email message will be sent to members with the URL for the Zoom meeting. If you haven't participated in earlier meetings via Zoom, they have gone really well, and Zoom proved easy to use even for people new to Zoom meetings. If you haven't joined us before — or even if you have — plan to join the meeting 10–15 minutes before the 7:30 start time to get familiar with Zoom (some procedures may have changed or differ from other Zoom productions) and say "Hi" to everybody already in the meeting.

ANNOUNCEMENTS FROM PRESIDENT EVAN KAY AT THE SEPTEMBER 15 VIRTUAL MEETING

President Evan Kay called the Zoom meeting to order at 7:35 pm and relayed the following reports, noting that the Board has not met in person recently but conducted its September business via email.

From Vice President Gretchen Obenauf: Steve Baumann of El Morro National Monument was to be the October speaker in conjunction with a field trip to El Morro, but both have been postponed due to COVID restrictions.

Second Vice President Ann Braswell has enlisted Jonathan Dombrosky to speak on Ancestral Pueblo Fishing in the Rio Grande region at the October meeting.

From Treasurer Tom Obenauf: The field trip liability insurance premium continues even though we are unable to collect field trip fees to pay it. The fees will be paid from other AAS funds.

The Board voted to use the proceeds from Certificates of Deposit totaling \$6,000 and maturing on September 12, 2020, to open a Money Market savings account; to transfer \$8000 from the checking account, where it earns no interest, to the Money Market account; and also to deposit the proceeds from CDs totaling \$5,000 and maturing on October 30, 2020 into the Money Market account at that time. It was felt that the slightly better interest rate on CDs did not warrant the inconvenience involved in reinvesting in them at this time.

From Membership Chair Mary Raje: The Board has approved the new guidelines for free student memberships. There are no new members.

From the Trustees of the Archaeological Society of New Mexico: Hayward Franklin has received an ASNM Richard A. Bice Award for Archaeological Achievement. The Award will be presented at the 2021 ASNM Annual Meeting.

Nominating Committee is needed to prepare a slate of officers and directors for next year. Anyone interested in serving should contact any member of the current Board or info@abqarchaeology.org.

There will be no September Newsletter, as the meeting has already been held.

SPEAKER

Vice President Gretchen Obenauf introduced Carla Sinopoli, Professor of Anthropology and Director of the Maxwell Museum of Anthropology at UNM, who provided the following synopsis and photos from her talk.

Iron Age Landscapes of South India: The Tungabhadra Corridor Archaeological Project

By Carla M. Sinopoli, Director of the Maxwell Museum of Anthropology



Carla Sinopoli in Lab.

Carla Sinopoli has been working in India since 1983, beginning with work at the medieval imperial city of Vijayanagara, today a UNESCO world heritage site. While conducting survey in the peripheries of the abandoned fourteenth to sixteenth century sites, Sinopoli and her colleague, Dr. Kathleen Morrison of University of Pennsylvania, identified some three dozen late prehistoric/early historic sites spanning from the third millennium BCE to the early centuries CE. A cluster of more than two dozen settlement, mortuary, and rock art sites and agricultural features in a ca. 30-square-kilometer region along the Tungabhadra River became the focus of her current project: Late Prehistoric/Early Historic Landscapes of the Tungabhadra Corridor (LP/EHTLC).

Sinopoli began her talk by providing some background on the central Tungabhadra region and its dramatic landscape of rugged outcropping granitic hills flanking the river. Although not navigable, the river provides a fairly reliable source of water in an area that receives some 10 to 15 inches of rainfall per year, falling mainly during the often-unreliable summer monsoon. Located some 15 degrees north of the equator, temperatures are high year-round – with daytime highs in the low 90s in January and reaching as high as 110 degrees in April and May. Despite this seemingly inhospitable climate, the region was the site of remarkable innovations in the Neolithic and Iron Age and, during the Vijayanagara period, home to one of the largest cities in the world.



Kadebakela Outcrop

The South Indian Iron Age, an important focus of the LP/EHLTC project, dates from ca. 1200 to 300/0 BCE. The period is best known archaeologically for the more than 2000 megalithic mortuary sites found throughout Southern India. These sites with their dramatic stone monuments have understandably, received considerable attention from archaeologists and provide evidence for social and status differences among Iron Age people. One of the largest and most dramatic Iron Age megalithic sites is Hire Benkal with more than 1000 megaliths, located in the great LP/EHLTC research area and documented by project member Dr. Andrew Bauer of Stanford University.

Conducted in collaboration with State of Karnataka Directorate of Archaeology, Heritage and Museums (KDHAM), the LP/EHLTC project is focusing primarily on understanding the settlement sites of the Iron Age. Beginning in 2003, the team conducted four seasons of excavation at the settlement of Kadebakele, a 60+-hectare settlement located on the north bank of the Tungabhadra River in the semi-arid inlands of central Karnataka, with test excavations at several smaller sites.

Kadebakele (“last gate” in the local Kannada language) has revealed a long history of occupation differentially distributed on the terraces and slopes of a rugged granitic inselberg. Initial settlement of the site occurred on the highest and most protected area of the site more than 120 meters above the river plain and the only reliable source of water. Excavations on the settlement’s “Upper Terrace” revealed extensive Iron Age occupation, and a small test unit revealed deposits of the latter part of the preceding Neolithic (2800 to 1400 BCE) period. Interestingly, this unit also revealed a transitional phase between the Neolithic and Iron Age, when residents were experimenting with new technologies and lifeways. Iron Age occupation of the Upper Terrace was long term and intensive, with evidence for houses being rebuilt repeatedly in the same location over more than 700 years. Domestic architecture was far less elaborate than that found at large megalithic sites, consisting of small structures with stone foundations, postholes and daub walls. Large numbers of storage pits were also recovered.

In addition to residential areas and middens, the team documented two areas associated with commemorative or ceremonial activities. On the west side of the Upper Terrace, we excavated 14 superimposed surfaces in a 6 x 8-meter area containing numerous stone features and small offerings. We interpreted the area, one of several presumably similar architectural clusters along the terrace edge, as a place of commemoration and ceremony – begun with a large stone circle and revisited and repeatedly refreshed over 700 years – as people added new monuments, made offerings of pots, iron artifacts, and faunal elements, etc. Like the households, these features show a remarkable commitment to a space over more than 30 generations.

The other ceremonial area, on the southern edge of the Upper Terrace, revealed evidence for multiple large consumption events, or feasts, involving the consumption of cattle. Numerous small serving vessels were found near the cattle bone (all inside a stone circle), evidence for multiple dining and drinking gatherings between the eighth and fifth centuries BCE.



Sherd

Also recovered in the Upper Terrace excavations were hundreds of thousands of fragments of wheel- and hand-formed ceramic vessels; large quantities of domestic (cattle, sheep, goat) and wild fauna; botanical remains (domestic millets, wheat, rice, and other species); and iron and early steel artifacts. Imported stone beads of carnelian and lapis lazuli attested to widespread interactions and exchange networks: lapis lazuli, for example, comes from as far as northern Pakistan and Afghanistan, a distance of more than 2000 kilometers from Kadebakele. Analyses of all of these materials is still ongoing, as the team works to understand changing political, social, economic, and ideological practices and life during the South Indian Iron Age.



Carnelian Beads



Iron Point

REPORT FROM THE ROCK ART RECORDING CREW

Carol Chamberland reports that the crew, on furlough from the BLM for seven months, resumed field work on their own in September, when the temperatures finally dropped a bit, with plenty of COVID precautions. They drive individually to the site, wear masks, keep a safe distance, and work with a tiny subset of the crew – only three people in the field at a time. They are making slow progress and enjoying seeing old friends again – safely.

NEWS AND NOTES FROM HERE AND THERE

Identifying Sites and Resources in Greater Chaco. Tribal governments are working with archaeologists to identify thousands of culturally-sensitive sites and resources in the Greater Chaco region in hopes of preventing oil and gas development in the area from encroaching farther onto the sacred landscape. The studies are part of a multi-pronged strategy to protect the area amid increased oil and gas leasing on federal lands in New Mexico. <https://bit.ly/33ged3B> – NM Political Report. [Via *Southwest Archaeology Today*, a service of Archaeology Southwest.]

Interior Secretary Refuses to Delay Greater Chaco Planning Process. Opponents say the conditions with the COVID-19 pandemic that led Bernhardt to extend the comment period once before have not changed and that the plan should be placed on hold until there can be in-person meetings once again. But during his visit to Farmington on October 5, Bernhardt said the Bureau of Land Management and the Bureau of Indian Affairs will go forward with the Farmington Field Office Mancos-Gallup Resource Management Plan Amendment. Bernhardt said the resource management plan amendment has been in the works since 2014. “We need to move forward and get this plan done,” he said. <https://bit.ly/3jBnrxa> – Farmington Daily Times. [Via *Southwest Archaeology Today*.]

Continuing Coverage: Judge Rules Pendley’s Official Actions Must Be Set Aside. A federal court ruling that the U.S. Bureau of Land Management had an invalid director for more than a year has cast doubt over several of the agency's efforts to drive oil and gas development on federal lands. William Perry Pendley, the BLM's deputy director for programs and policy, served unlawfully as the agency's director for more than 400 days because he was not confirmed by the Senate as required by law, according to the ruling last week by U.S. District Judge Brian Morris in Montana. Morris said “any ‘function or duty’ of the BLM Director that has been performed by Pendley would have no force and effect and must be set aside.” <https://bit.ly/34yjOSm> – Indiana Environmental Reporter.

Aaron Weiss, deputy director at the Center for Western Priorities, said not only did Pendley's tenure exceed the statutory limit, but he named himself to the interim job, which also wasn't legal. "The judge spent a lot of time in his ruling going over just how absurd the series of succession orders were: signed by [Interior] Secretary [David] Bernhardt and signed by William Perry Pendley himself, in his acting capacity, making that acting capacity permanent," Weiss said. <https://bit.ly/33E0CDH> – Utah Public Radio (NPR) [Via *Southwest Archaeology Today*.]

Commentary: Coalition Calls on Bernhardt to Retract Pendley’s Management Plans, Regulations. The National Wildlife Federation, the National Audubon Society, and 58 other conservation organizations have called on Interior Secretary David Bernhardt to retract all management plans, decisions, rulemakings, and regulations that were influenced by William Perry Pendley, after a judge ruled Pendley served unlawfully for 14 months as the Director of the Bureau of Land Management (BLM). In a letter, a coalition of organizations said Pendley had been involved in numerous resource management plans across the West, environmental studies in the Arctic, regulations for oil and gas leasing, rulemaking for timber and recreation, and hundreds of personnel decisions. <https://bit.ly/2I3pOeq> - National Audubon Society. [Via *Southwest Archaeology Today*.]

CALENDAR CHECK

Technology has come to the rescue of today’s involuntary homebodies with (almost too many) virtual meetings and lectures on Zoom or webinars, and many of these lectures have been taped for future viewing on YouTube. Most museums have made virtual tours of exhibitions available that would previously have involved travel. All one needs to do is to check out the websites. A good starting point for lectures and other online events that one might not think to look for is Mike Ruggeri’s Ancient America’s Events (mikeruggerisevents.tumblr.com), which presents a useful and constantly updated compendium of live online events for each month. Also on the site is a list of links to previous Zoom lectures now to be found on YouTube.

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