THE RESEARCH LABORATORIES OF ARCHAEOLOGY
PRESENT

# Ancient Foodways:

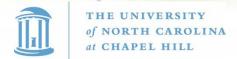
Integrative Approaches to Understanding Subsistence and Society in the Past

March 3 and 4, 2017

University Room, Hyde Hall

University of North Carolina at Chapel Hill





## Schedule

#### **THURSDAY**

3:30-5:00 **Judy Knight** Behind the Pages of Publishing

#### **FRIDAY**

8:30-9:00 Coffee

9:00-9:10 Introduction

9:10-10:50 Session I: Foodways that Divide

10:50-12:30 Lunch

12:30-1:10 Session II: Foodways that Unite (Part I)

1:10-2:00 Discussion of Papers

2:00-3:00 Break

3:00-4:30 Professionalization Beyond Teaching Roundtable

#### **SATURDAY**

8:30-9:00 Coffee

9:00-9:10 Introduction

9:10-9:50 Session II: Foodways that Unite (Part II)

9:50-10:10 Break

10:10-11:50 Session III: Foodways that Intercede

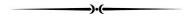
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## Program

### **THURSDAY**

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9:00-9:10 Introduction

### **SESSION I: FOODWAYS THAT DIVIDE**

9:10-9:30 **Stephanie Berger, Anna F. Graham, and Julia Longo** *Envisioning Late Woodland Lifeways: An Integrative Approach at the Forbush Creek Site* 

9:30-9:50 Amber M. VanDerwarker, Gregory D. Wilson, Steve Kuehn, Dana N. Bardolph, and Mallory A. Melton Hunting, Farming, Fishing, and Gathering: The Reorganization of Foodways during the Early-Middle Mississippian Transition of the Central Illinois River Valley

9:50-10:10 Elizabeth Berger, Liang Chen, Zhanwei Sun, and Zhouyong Sun Food, Inequality, and Conquest in Warring States China

10:10-10:30 **Kandace D. Hollenbach** *Late Archaic and Woodland Foodways and Landscapes in Tuckaleechee Cove, East Tennessee* 

10:30-10:50 **Ben Arbuckle** Food for the Ancestors: Exploring Causation in the Process of Animal Domestication in SW Asia

10:50-12:30 Lunch

## FRIDAY (CONTINUED)

## **SESSION II: FOODWAYS THAT UNITE (PART I)**

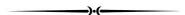
12:30-12:50 **Sara Juengst** *Ritual, Feasting, and Community-Building on the Copacabana Peninsula, 800 BC-AD 200* 

12:50-1:10 Erin Nelson, Ashley Peles, and Mallory Melton Foodways and Community at the Late Mississippian Site of Parchman Place

1:10-2:00 Discussion of Papers

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#### **SATURDAY**

8:30-9:00 Coffee

9:00-9:10 Introduction

## **SESSION II: FOODWAYS THAT UNITE (PART II)**

9:10-9:30 C. Margaret Scarry, Donald C. Haggis, Margaret S. Mook, Rodney D. Fitzsimons, and W. Flint Dibble Commensal Politics and Identity Performance at Azoria an Archaic City on Crete

9:30-9:50 **Heather Lapham, Gary Feinman, and Linda Nicholas** *Dogs in Diet and Ritual in Ancient Oaxaca, Mexico* 

9:50-10:10 Break

## SATURDAY (CONTINUED)

#### **SESSION III: FOODWAYS THAT INTERCEDE**

10:10-10:30 **Kristina Kilgrove and Andrea Acosta** *Dietary Pathologies and Isotope Diversity in Imperial Rome* (1<sup>st</sup>-3<sup>rd</sup> *centuries A.D.*)

10:30-10:50 Maia Dedrick, Shannon Vance, Patricia A. McAnany Food for the Dead and the Living: Contextualizing Biological Remains from Late Classic Maya Structures at K'axob, Belize

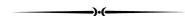
10:50-11:10 **Gabrielle C. Purcell** A Community-based Approach to Studying Cherokee Foodways

11:10-11:30 **Sophia C. Dent and Dale L. Hutchinson** *The Complexities and Interpretive Benefits of Employing Local Food Resources for Dietary Reconstruction via Stable Isotope Analysis* 

11:30-11:50 **Sophia C. Dent, Marissa W. Bruce, and Dale L. Hutchinson** *The Unbearable Complexity of Nutrient Deficiencies* 

11:50-12:00 Break

12:00-12:30 Discussion of Papers



## **Abstracts**

## SESSION I: FOODWAYS THAT DIVIDE (FRIDAY MARCH 3<sup>RD</sup>)

Friday 9:10-9:30

## Envisioning Late Woodland Lifeways: An Integrative Approach at the Forbush Creek Site

Stephanie Berger, Anna F. Graham, and Julia Longo

The Piedmont Village Tradition was a pervasive material culture that dominated the river valley systems of the North Carolina Piedmont region from AD 800-1600 (Ward and Davis 1999). Despite the similarities between many of these Late Woodland communities, limited evidence suggests that Yadkin River Valley groups faced unique ecological and cultural challenges living on the edges of Mississippian and Piedmont Village Traditions societies (Jones 2016). In order to better understand the experiences of these communities and the diversity of Late Woodland lifeways, this study employed an integrative analysis of the archaeological assemblage from the Forbush Creek site, The floral and faunal remains highlight the complexities of balancing seasonal foraging and agricultural tasks with interaction in large, regional networks, and new evidence of interpersonal violence in the skeletal assemblage demonstrates the difficulties of living in such a liminal space in the Piedmont Region.

## Friday 9:30-9:50

# Hunting, Farming, Fishing, and Gathering: The reorganization of foodways during the Early-Middle Mississippian transition of the Central Illinois River Valley

Amber M. VanDerwarker, Gregory D. Wilson, Steve Kuehn, Dana N. Bardolph, Mallory A. Melton

This paper evaluates subtle changes in plant and animal foodways during the Early-Middle Mississippian transition in the Central Illinois River Valley from two sequential sites: Lamb (1100-1150 CE) and C. W. Cooper (early 1200s CE). Previous discussions of C.W. Cooper considered this occupation to pre-date the eruption of regional hostilities. New AMS dates, however, place Cooper later in the sequence than previously supposed, suggesting the Mississippian occupation of Cooper was coincident with the very beginnings of regional hostilities. An evaluation of changes in farming, gathering, hunting, and fishing at this critical transition allows us to assess how families reorganized their foodways as their safety became increasingly uncertain but before widespread violence erupted and palisade walls were erected.

#### Friday 9:50-10:10

## Food, inequality, and conquest in Warring States China

Elizabeth Berger, Liang Chen, Zhanwei Sun, Zhouyong Sun

This paper presents bioarchaeological data from Zhaitouhe and Shijiahe, two cemeteries in the western Loess Plateau in use during the Warring States period. People of this time had to contend with an arid climate as well as increasing social stratification, life within a state, and frequent conflict. Zhaitouhe was used in the early Warring States period (~475-330 BCE) by a non-Chinese group called the Rong. Shijiahe was used in the late Warring States period (~330-221 BCE), after conquest by the State of Oin, by both the Rong and the Oin. The health profiles of the early and late Rong groups are quite distinct, whereas the health profiles of the Rong and Qin from Shijiahe are virtually indistinguishable. Therefore, though the Rong of Zhaitouhe and Shijiahe had similar material cultures and biological relatedness, they seem to have consumed different diets and faced different stressors; and though the two groups buried at Shijiahe had different mortuary traditions and material cultures, they apparently experienced similar living conditions. These data support the interpretation that the earlier Rong people of Zhaitouhe were of a higher status than either group buried at Shijiahe. The findings also suggest that sociopolitical conditions and status differences had a larger influence on health, and extracted a larger price for adaptation, than did environmental conditions such as the local ecology and diet.

## Friday 10:10-10:30

## Late Archaic and Woodland Foodways and Landscapes in Tuckaleechee Cove, East Tennessee

Kandace D. Hollenbach

The Townsend Archaeological Project mitigated four sites that represent occupation of approximately 5 km along the Little River in Tuckaleechee Cove in Blount County, Tennessee, from roughly 2500 BCE through 1720 CE. Here I focus on the Late Archaic (2500 BCE 1000 BCE), Early Woodland (1000 BCE – 200 BCE), and Middle Woodland (200 BCE - 600 CE) occupations. These components document increasingly intensive use of the Cove as the occupants intensified their use of native cultigens. The macrobotanical, vessel, and feature data indicate a shift from more communal focus on processing, consumption, and storage in the Late Archaic to an emphasis on household-level activities during the Woodland occupations. In turn, these suggest a shift in community relations, as well as people's ties to local landscapes.

#### Friday 10:30-10:50

## Food for the ancestors: exploring causation in the process of animal domestication in SW Asia

#### Ben Arbuckle

The transition from hunting to herding in early Holocene SW Asia is usually explained as a response to environment and subsistence stress—particularly to declines in big game in the face of increasingly large and sedentary human populations. This model is primarily based on data collected from sites in the southern Levant, including modern Israel, Jordan and Syria. In this paper, using zooarchaeological evidence for animal exploitation at the Pleistocene-Holocene boundary from other regions of SW Asia, I explore alternative models for the transition from hunting to herding. In particular, I explore the social context of animal exploitation in early Neolithic communities and present several hypotheses linking the origins of animal management to emergent ritual practices and social competition in increasingly complex communities of the ninth and tenth millennia BC.

## SESSION II: FOODWAYS THAT UNITE (FRIDAY MARCH 3<sup>RD</sup> AND SATURDAY MARCH 4<sup>TH</sup>)

Friday 12:30-12:50

## Ritual, Feasting, and Community-Building on the Copacabana Peninsula, 800 BC - AD 200

Sara Juengst

Food and drink has been and remains central to identity and community-building in the past and present Andes, especially during times of social change or fluctuating power relationships. Archaeological research has shown that the Early Horizon (800 - 200 BC) and Early Intermediate period (200 BC - AD 200) in the Titicaca Basin of Peru and Bolivia were times of dramatic social and economic transformation. People increasingly relied on agricultural products, exchanged exotic goods over long-distances, and built sedentary settlements. It was in this changing social milieu that the Yaya-Mama Religious Tradition emerged. The archaeological components of this ritual tradition, such as sunken temple courts, anthropomorphized iconography, and ritual paraphernalia, have been documented and described; however, the activities that took place within temple settings and who had access to these ceremonies are unclear. Archaeological remains suggest feasting (Logan et a. 2012) may have occurred, especially in light of the well-documented Andean connections between feasting and ritual. This paper investigates the skeletal and dental evidence for maize consumption and feasting at Yaya-Mama temples and argues that feasting may have facilitated social bonding and marshaled communal labor during this time of social change.

#### Friday 12:50-1:10

## Foodways and Community at the Late Mississippian Site of Parchman Place

Erin Nelson, Ashley Peles, & Mallory Melton

Communal eating events or feasts were important activities associated with the founding and maintenance of Mississippian communities in the prehistoric eastern United States. As the substantial literature on feasting demonstrates, archaeologists are faced with two significant problems in interpreting food-related deposits: (1) distinguishing feasting from everyday food-related practices; and (2) characterizing the social contexts of feasts with attention to the number and status of participants, degree of exclusivity, and matters of sponsorship. We highlight these problems by examining two sequential deposits containing food remains at Parchman Place (22CO511), a late Mississippi period site in the northern Yazoo Basin of northwest Mississippi. For each deposit, we examine ceramic vessel assemblages as well as faunal and botanical samples. Ceramics analyses suggest that the earlier deposit contains a typical domestic or everyday assemblage, while the later one is primarily a serving assemblage, suggestive of feasting. Analyses of faunal remains, however, lead to the opposite interpretation, with several indicators of non-typical faunal utilization evident in the earlier deposit, while the later one seems representative of routine day-to-day consumption. Botanical results are more ambiguous, though maize remains in the earlier deposit are indicative of everyday food preparation while the later deposit contains more maize and a greater proportion of edible kernels. Thus, in integrating these datasets, we are forced to reckon not just with ambiguity, but also with contradiction. In thinking through these contradictions, a fourth source of information—context of deposition—becomes prominent in our interpretations.

#### Saturday 9:10-9:30

## Commensal Politics and Identity Performance at Azoria an Archaic City on Crete

C. Margaret Scarry, Donald C. Haggis, Margaret S. Mook, Rodney D. Fitzsimons and W. Flint Dibble

Azoria (1200-500 B.C.E.) is a small urban center on the island of Crete. Nine seasons of large-scale excavations have shed light on the formation, organization and operation of this early city-state. At its heart is a massive civic complex with shrines, assembly halls, public dining rooms, and associated kitchens and storerooms. Surrounding the civic complex are "townhouses" of important families: here too storage, preparation and consumption of foods were prominently displayed. The layout and contents of these public and residential buildings manifest the importance of food display and commensal dining in urban politics. This paper draws on ceramic, architectural, archaeobotanical, zooarchaeological and ground stone evidence to discuss the varied forms and contexts of commensality at Azoria. We argue that people, especially male citizens, claimed and performed varied social identities and affiliations through contributions, displays and consumption of food in several venues.

#### Saturday 9:30-9:50

## Dogs in Diet and Ritual in Ancient Oaxaca, Mexico

Heather Lapham, Gary Feinman, and Linda Nicholas

The domestic dog (Canis familiaris) became a staple in the meat diet of Zapotec peoples during the Formative period (1500 BC - AD 200) in the Valley of Oaxaca, Mexico, and continued to be increasingly important in subsistence and ritual into the Classic and Postclassic periods. Recent zooarchaeological research has identified low-intensity household production of animals and animal by-products at sites throughout the valley, with each settlement marked by its own unique signature of animal use. Households within each community also showed differences, both marked and subtle, in animal-based subsistence practices, dietary preferences, and use of animals and animal byproducts. Drawing on data from dog skeletal remains and ceramic dog figurines, we explore similarities and differences among households in dog raising, consumption, and use at three Classic period sites (El Palmillo, Mitla Fortress, and Lambityeco) in the valley to gain a more holistic understanding of dogs in ancient Zapotec foodways, ritual practices, and craft activities.

## SESSION III: FOODWAYS THAT INTERCEDE (SATURDAY MARCH 4<sup>TH</sup>)

Saturday 10:10-10:30

## Dietary pathologies and isotope diversity in Imperial Rome (1st-3rd centuries AD)

Kristina Killgrove and Andrea Acosta

Perhaps no civilization's diet has been as well-described as that of the Roman Empire. Plant and animal remains, agricultural and fishing tools, mosaics and frescoes, military records, and even a cookbook all speak to the variety of foodstuffs available during the Empire. But research into Roman palaeodiets during this time period using stable isotope analysis has demonstrated that diet varied based on age, sex, social status, and geographic location. Most importantly, these analyses show that diet deviated from elite historical assertions and provide a glimpse into what the lower classes ate. This paper contextualizes the dietary isotope data from three cemeteries in Imperial Rome with archaeological and historical information, and further correlates palaeodiets with diet-related pathologies within the populations. The result is a more nuanced understanding of the ancient Roman diet and the lines along which it varied.

## Saturday 10:30-10:50

## Food for the Dead and the Living: Contextualizing Biological Remains from Late Classic Maya Structures at K'axob, Belize

Maia Dedrick, Shannon Vance, and Patricia A. McAnany

A key problem in archaeological research is how to identify the variable ways in which social groups resided within their landscapes. This study examines the physical remains of two adjacent structures at K'axob, Belize. Through time the structures were used for a range of activities but here particular emphasis is placed on complementary tasks undertaken during the Late Classic period (A.D. 600-830). Originally the two structures were thought to have been the residential spaces for two Late Classic households of differing social statuses, but comparison of mollusk-shell size and the richness and types of charred seeds and wood found at the two structures indicate distinct uses. Burial and ceramic data further corroborate the discrete distribution of household tasks and mortuary rituals between the two platforms and provide new insight into structure use and household composition at K'axob. These findings also more broadly demonstrate the importance of combining multiple biological datasets to understand intrasite social structure and task areas.

#### Saturday 10:50-11:10

## A Community-based Approach to Studying Cherokee Foodways

Gabrielle C. Purcell

Through a topic most people enjoy—food—the relationship between archaeologists and Native communities can pivot from a focus on regulation-based research to community-based research. In this paper I will discuss how the study of foodways can help expand collaborative interactions between Native communities and archaeologists, focusing on Cherokee, North Carolina as an example. Many CRM and academic archaeologists working in the Appalachian Summit of North Carolina have collaborated with the Tribal Historic Preservation Office (THPO) of the Eastern Band of Cherokee Indians for decades, particularly on sites protected by NAGPRA. Archaeologists have shown that such relationships create opportunities for producing professional research while adhering to regulations and respecting Cherokee beliefs. These connections also provide a starting point for applying community-based research methods that engage Native communities in making sense of archaeological data. Foodways studies can expand these interactions beyond the THPO to the broader community, providing a link between archaeology and contemporary Cherokees. This approach can make archaeological research relevant to modern-day populations looking to preserve and protect their cultural heritage. In turn, incorporating Native ideas, interpretations, and beliefs into archaeological studies of food also adds nuance to our analyses, revealing details about past foodways otherwise unattainable.

#### Saturday 11:10-11:30

## The complexities and interpretive benefits of employing local food resources for dietary reconstruction via stable isotope analysis

Sophia C. Dent, Dale L. Hutchinson

Comparing stable isotope values of human biomaterials to isotope values of local food resources enhances the interpretive resolution of dietary reconstruction. An interpretive baseline for dietary reconstruction can be established by analyzing isotope values for food resources local to the regions of archaeological sites this includes modern flora as well as modern and archaeological fauna. Establishing isotope values for local resources is important because isotopic ranges used to distinguish plant groups and types of animal protein can vary according to local ecology and isotope mixing systems. In this chapter, we will discuss the benefits and challenges of establishing a dietary interpretive baseline and provide a review of established interpretive baselines for different geographical regions.

#### Saturday 11:30-11:50

## The Unbearable Complexity of Nutrient Deficiencies

Sophia Dent, Marissa W. Bruce, Dale L. Hutchinson

Pathological lesions indicative of nutrient deficiencies have long served a primary role for interpreting the health and disease profiles of past populations. Yet, our understanding of metabolism, physiology, and growth has grounded and nuanced our interpretations of such lesions, and we now recognize that pathways to lesion formation are non-linear and complex. In this paper, we explore the many factors that contribute to the formation of dental and skeletal lesions attributed to nutrient deficiency, and the unbearable complexity of interpreting them. We focus on three main issues: the overlapping nature of metabolic/physiologic pathways to nutritional deficiencies and resultant pathological expressions, confusion of pathological lesions with the normal growth process, and the many variables that contribute to the final food product (e.g., food availability, food choice, food processing).

# We would like to thank all of our sponsors, presenters, and attendees

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