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2019

FOOD SECURITY IN FLUX:

ARCHAEOLOGICAL METHODS
For Economic Sustainability

V14

MPI

SHH



Food Security in Flux: Archaeological Methods for Economic Sustainability
Max Planck Institute for the Science of Human History, Jena, Germany

May 2-3, 2019
Conference Schedule

As the world population approaches 8 billion and we are faced with climatic and political uncertainty, global food security is becoming a growing concern. However, humans throughout history and prehistory have faced uncertainty in their food production systems, often in response to political changes, social turmoil, climate change, and/or technological shifts. There are many historical examples of changing political regimes directly effecting which crops farmers plant or the way that crops are cultivated, harvested, and processed. This workshop will discuss reconstructions of ancient food security strategies as a tool to develop practices for future economic sustainability. The study of ancient food security allows us to examine this issue at a chronological scale inaccessible to modern research, and in diverse social, cultural, and political contexts. We are particularly interested in exploring the ecological and social consequences of the transition from traditional agricultural systems, focused on low investment crops to systems dependent on crops of high yield, but high labor and resource input. Often, the transition to high input crops is fueled by cash cropping and ties people into unstable market economies. These economic transitions commonly reshape economic strategies from recruitment of diverse resources to intensification of a narrow suite of foods. These historical food transitions parallel, in many ways, modern shifts from small-scale family farms to large agrobusiness ventures. In this workshop, we seek to develop methods to document if and how people maintained food production under rapidly changing political, ecological, and economic systems.

Thursday, May 2

10:00-11:00am **Registration and Coffee** (MPI-SHH Library)

11:00-11:15am **Welcome remarks** (Elissa Bullion and Robert Spengler) (V14)

11:15am-1:55pm **Food Security in Urban Settings** (Moderator: Elissa Bullion)

11:15-11:40am Patrick Roberts (MPI-SHH)

Extensive agrarian urbanism in the tropics: Pasts and futures of sustainability

11:40-12:05am Bethany Walker (University of Bonn)

Orchard cultivation and cereal diversification: Lessons learned about sustainability from Early Ottoman Palestine

12:05-12:30am Ayushi Nayak (MPI-SHH)

Feeding urbanism: Transitions to wet rice cultivation in ancient India

12:30-1:30 pm **Lunch (Library)**

1:30-1:55pm Susanne Reichert (University of Bonn)

Feeding a city in the steppe: The case of the first capital of the Mongol Empire Karakorum

1:55-4:15pm **Food Security and Mobility** (Moderator: Shevan Wilkin)

1:55-2:20pm Fiona Marshall (Washington University in St. Louis)

Food security, mobility and ancient East African herders

2:20-2:45pm Sabine Reinhold (German Archaeological Institute)

Innovate or leave: Strategies of resilience in sedentary pastoral societies

2:45-3:00 **Coffee Break** (Library)

3:00-3:25pm Anneke Janzen (MPI-SHH)

Herder networks in the Pastoral Neolithic: Mobility and maintaining livestock

3:25-3:50pm Elissa Bullion (MPI-SHH)

Weathering Change in the Highlands: Navigating food security in early Islamic Central Asia

3:50-5:45pm **Methodological Advancements in Food Security Studies** (Moderator: Robert Spengler)

3:50-4:15 Jed Kaplan (University of Hong Kong)

Seven thousand years of food security and insecurity in the Peloponnese

4:15-4:30pm **Coffee Break** (Library)

4:30-4:55pm Ricardo Fernandes (MPI-SHH)

Methodological improvements to isotope-based reconstructions of ancient diets and nutritional status: A Roman case study

4:55-5:20pm Eva Rosenstock (Freie University Berlin)

Scanty or plenty? Human stature as a proxy for food supply in prehistory

5:20-5:45pm Amy Styring (University of Frankfurt)

Archaeological evidence for changing agricultural practices: An interregional comparison

5:45-6:45pm **Dinner (Downtown Jena, Zur Noll)**

6:45-8:00pm **Discussion** – The evolution and current state of food security studies in archaeology

Friday, May 3

9:00-11:20am **Climate, Environment, and Food Security** (Moderator: Ricardo Fernandes)

9:00-9:25am Maria Ivanova (University of Heidelberg)

Growing societies: An ecological perspective on the spread of crop cultivation and animal herding in southeast Europe

9:25-9:50am Tim Denham (Australian National University)

Lessons from the Past: Agricultural resilience in the highlands of New Guinea

9:50-10:15am Pavel Tarasov (Freie University Berlin)

Paleobotanical and archaeological evidences for human-environment interactions and changing subsistence strategies in SE China during the past 10,000 years

10:15-10:30am **Coffee Break** (Library)

10:30-10:55am Shevan Wilkin (MPI-SHH)

Dairy Pastoralism on the Ancient Eurasian Steppe

10:55-11:20am Robert Spengler (MPI-SHH)

Agricultural transitions in prehistory: Exploring the exceptions

11:20am-3:30pm **Using the Past to Inform Current and Future Food Security** (Moderator: Ayushi Nayak)

11:20-11:45am Steven Goldstein (MPI-SHH)

Building crop histories for the Iron Age of southwestern Kenya: Implications for food security and food sovereignty

11:45-12:10am Ashleigh Haruda (Martin Luther University)

Human directed evolutionary pressure via intensive breeding associated with the development of industrialised pork production in twentieth-century Germany

12:10am-1:10pm **Lunch** (Library)

1:30-2:30pm **Distinguished Lecture Series Talk (V14) - Fiona Marshall**

Ancient herders enriched and restructured African grasslands

2:30-2:45pm **Coffee Break** (Library)

10:50am-3:30pm **Using the Past to Inform Current and Future Food Security** (Cont.)

2:45-3:10am Jeremy Farr (University of Queensland)

A way out of the Maize: Ancient foodways to food security solutions

3:10pm-3:35pm Alicia Ventresca Miller (MPI-SHH)

Pastoralists as ecosystem engineers in ancient Central Asia

3:35-4:00pm Philippa Ryan (Royal Botanic Gardens, Kew)

Changing agriculture practices and foodways in Nubia, ethnobotanical and archaeobotanical perspectives

4:00-4:45pm Mayke Wagner (German Archaeological Institute)

The Invention of Trousers – A Documentary

4:45-5:45pm **Closing remarks** (Nicole Boivin)

5:45-6:45pm **Dinner (Downtown Jena, L'Osteria)**

6:45-8:00pm **Discussion** – Future directions, collaborations, results of the workshop (Discussant: Steven Goldstein)

*Note to Participants: Presentations will consist of a 20-minute talk, followed by five minutes for questions and answers. Time limits will be strictly enforced.

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