

# Shades of Complexity: Defining & Linking the Umm an-Nar Monuments & Settlement at Bat, Sultanate of Oman

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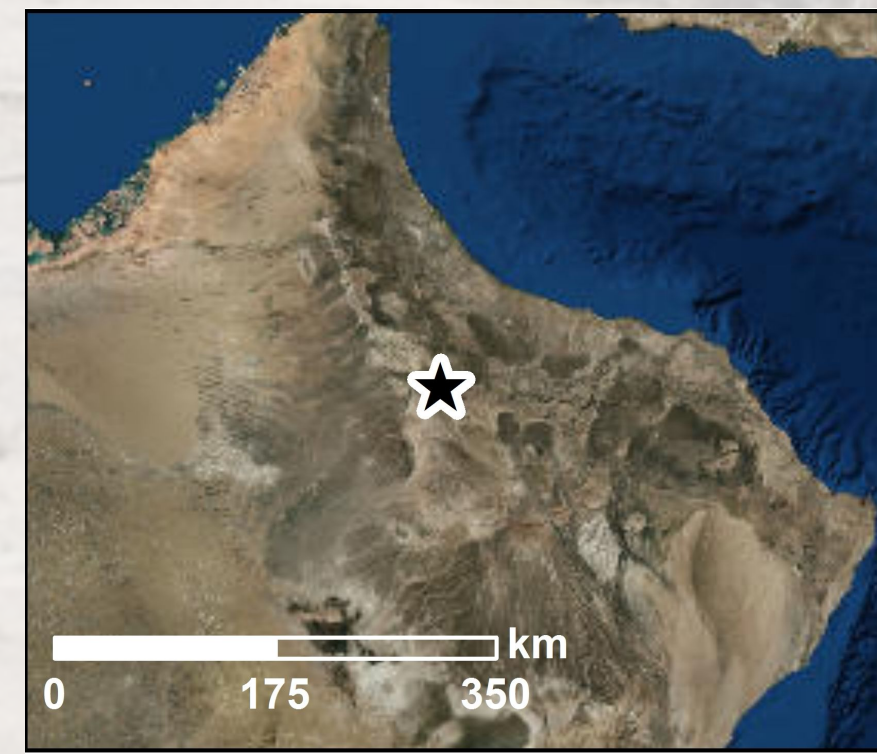


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## INTRODUCTION

The Umm an-Nar (ca. 2700-2000 BCE) period of southeastern Arabia is defined by its monumental towers and tombs—but also by its dramatic increase in the number and scale of permanent settlements across the Oman Peninsula. Archaeological studies of the Umm an-Nar characterize it as a period of increasing sociopolitical and economic complexity. However, the nature and characteristics of that complexity are clouded by research that has traditionally studied Umm an-Nar monuments and settlements in isolation from one another. This poster introduces the newest phase of the Bat Archaeological Project, which aims to produce, for the first time, a coherent picture of an Umm an-Nar site and its society—incorporating data from monuments, settlements, and the spaces between them. Targeting a key area of the UNESCO World Heritage site of Bat, this project will use trends in spatial organization, material culture, architectural variation, and land use to study sociopolitical organization and as well as systems of exchange and production. These patterns will inform theories of ‘alternative’ complexity that, in turn, will nuance our understanding of Umm an-Nar society.

## THE UNESCO WHS OF BAT



- The site of Bat, located in the arid interior of the Oman Peninsula, is the largest known Umm an-Nar period center (Thornton *et al.* 2016).
- It includes at least seven tower monuments, a necropolis of hundreds of tombs, and multiple known areas of domestic occupation.

- Occupied throughout the Umm an-Nar period, Bat likely served as a regional social and economic center.

### Contexts Examined In This Research



- Umm an-Nar Tombs**  
5-10m diameter, white ashlar facing stones, internal linear support walls, 100+ primary / secondary interments; many artifacts
- Umm an-Nar Settlements**  
rectilinear floor plans, stone wall foundations, superstructures of mudbrick or perishable material
- Umm an-Nar Towers**  
ca. 20m diameter, 2-m tall solid foundation, internal well, external ringwalls, ditches, and platforms, few artifacts

## CONCEPTS OF COMPLEXITY

- Complexity**
- ‘Complexity’ is a shorthand for descriptors of societies with developed systems of organization
  - State-level societies are widely recognized as the high water mark of sociopolitical and economic complexity
  - Complex non-state societies have also developed elaborate internal organizational systems and have played significant roles in interactions with other societies (Cleuziou 2009; Yoffee 2005)
  - In the Greater Ancient Near East, complex non-states are known to have existed alongside and interacted with state-level societies

- Classic Indicators of State-Level Complexity**
- Social stratification
  - Economic diversification and specialization
  - Administrative structures
  - Cities and surrounding settlement hierarchies
  - Written traditions
  - Art and monumental architecture

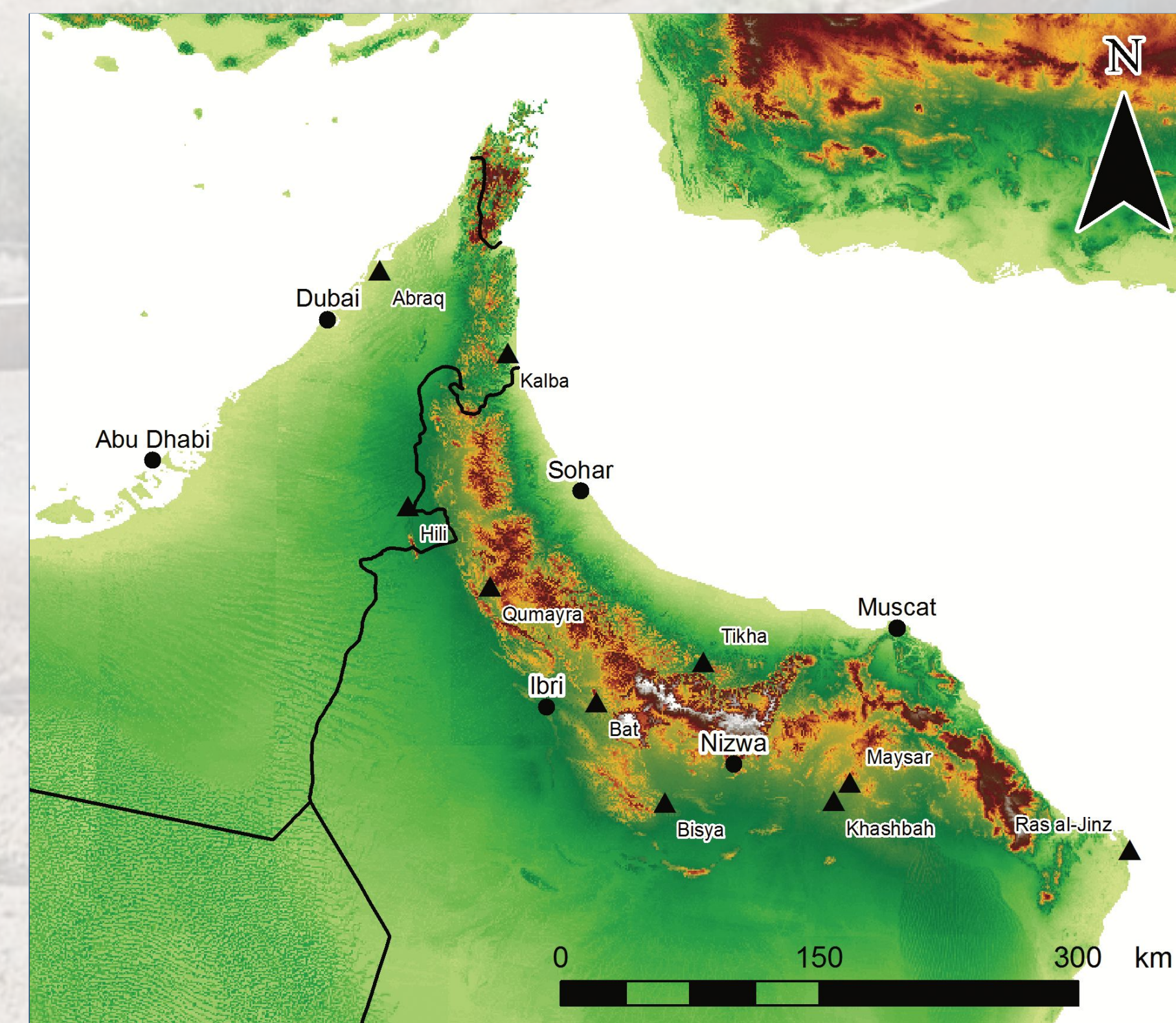
- Alternative Forms of Complexity**
- Large scale organization of labor and resources
  - Intricate systems of social organization, of economic production and exchange, and/or of monumental architecture
  - Strategic interaction with other complex societies for internal or mutual benefit
  - Little or no social stratification or admin. institutions

## THE BAT ARCHAEOLOGICAL PROJECT

### The Umm an-Nar as a Complex Non-State

Though lacking state-level institutions, urban centers, and recording systems, the Umm an-Nar people constructed monumental architecture, supported irrigated agriculture and specialized craft production, and traded with states and non-states throughout the Greater Ancient Near East.

Previous interpretations have loosely characterized the Umm an-Nar as having a tribal or clan-based social organization (Cleuziou & Tosi 2007). However, when taken together there is increasing evidence that Umm an-Nar complexity was greater than initially thought.



Known centers of Umm an-Nar occupation, production, and exchange are located across the Oman Peninsula.

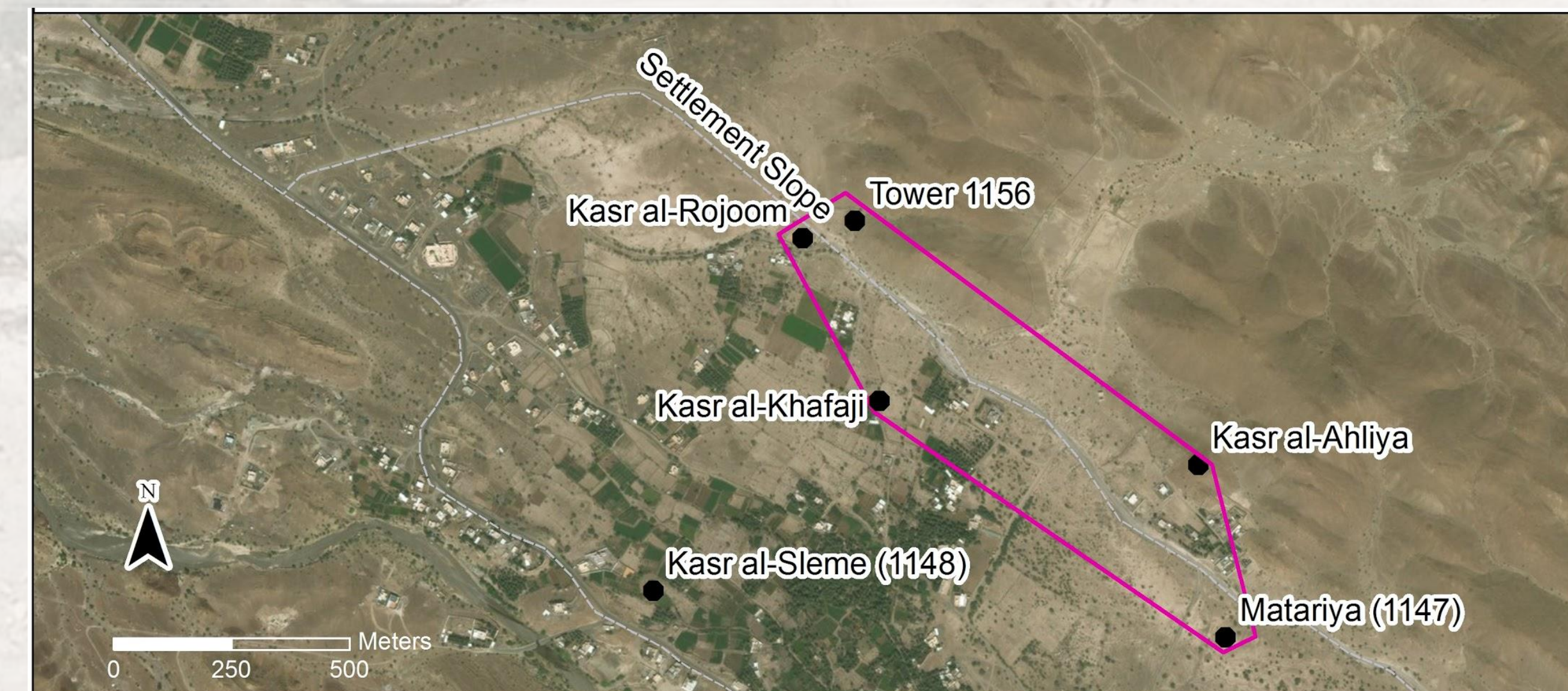
### Bat: an Umm an-Nar regional center

Bat is one of several contemporary sites located along the inner piedmont of the al-Hajar Mountains. However, Bat is unique in several ways that make it the ideal site with which to examine Umm an-Nar complexity, including:

- An Umm an-Nar cemetery (space reserved for burials) and Umm an-Nar tombs distributed outside the cemetery, alongside non-mortuary features
- Clear spatial and structural connections between tower (and other) monuments and areas of domestic occupation/economic production
- A continuous history of occupation throughout the Umm an-Nar period
- A long tradition of archaeological research

### THE TARGET RESEARCH AREA

The target research area consists of a 0.35km<sup>2</sup> (35 hectares) space created by 5 Umm an-Nar towers (Kasr al-Rojoom, Kasr al-Khafaji, Matariya, al-Ahliya, and 1156) and the Bat Settlement Slope (below). The area is divided into four quadrants (7-9 hectares each) by a modern road and a cross-cutting wadi (valley).



## DATA SETS



**SURVEY**  
Multi-scalar stratified non-random survey will be used to (1) document surface features and assemblages and (2) identify potential locations of test trenches.



**EXCAVATIONS**  
Test trenches will (1) expose structural relationships between monument and settlement spaces, (2) clarify site chronology, and (3) probe the potential of promising locations identified in survey for further excavation.

### ARCHIVAL RESEARCH

The Ministry of Heritage & Culture archives include numerous detailed survey and excavation reports focusing on the central part of Bat. Results of this unpublished research will be integrated into project interpretations.



### MATERIALS ANALYSIS

Macroscopic analysis of ceramics, metallurgical materials, stone and/or mudbrick architecture, etc. will (1) refine chronological sequences and (2) clarify building/area function. Post-season petrographic studies will examine production techniques and inter-regional trade.



## DISCUSSION POINTS

- Previous discussions of Umm an-Nar complexity focus on the tower and tomb monuments—citing an apparent lack of social stratification in mortuary contexts and the organization of labor resources for monumental construction (Cleuziou & Tosi 2007).
- Umm an-Nar towers appear to be “islands” with few contemporary structures beyond. How accurate is this image? What can this tell us of their function/meaning?
- Bat’s Umm an-Nar domestic contexts suggest increasing economic independence of household groups over the course of the period (Swerida 2017).
- Researchers (e.g., Frifelt 2002) have suggested that settlement and tower locations should be understood in relation to agricultural land. What might the layout of the Bat site (tower, tomb, and settlement locations) mean for Umm an-Nar social organization?
- Unlike many Umm an-Nar sites, Bat has a cemetery in addition to tombs interspersed in the landscape. What social meanings may have been communicated through these distributions?

### Bat in the Umm an-Nar Period: Integrative Discussion

- Bat’s Umm an-Nar palimpsest indicates continuous occupation of the site as a whole but there appears to be spatial and chronological shifts within the Target Research Area.
- There are strong regional trends among Umm an-Nar sites, but differences between interior sites are still coming into focus, and the degree of integration with the coast is still highly debated.
- The Umm an-Nar is an understudied example of complexity in the Ancient Near East. That complexity is collectively represented through Umm an-Nar monuments, settlements, and evidence of land use.

## FUTURE DIRECTIONS

- Expand excavations near Khafaji and Matariya towers to target relationships between occupational and monumental (tower and tomb) contexts
- Integrate multiple data sets, focusing on:
  - materials analyses (petrographic ceramic studies, copper-based artifact sourcing) to reconstruct production, sources, and trade networks
  - geophysical analysis to determine land use
  - micromorphological and archaeobotanical assessments of possible agricultural fields
- Model the ancient natural and built landscape
- Collaborate with international research groups to better understand Bat in its local and regional context
- Work with the Omani Ministry of Heritage & Culture to protect, interpret, and communicate local cultural heritage

## ACKNOWLEDGEMENTS

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