



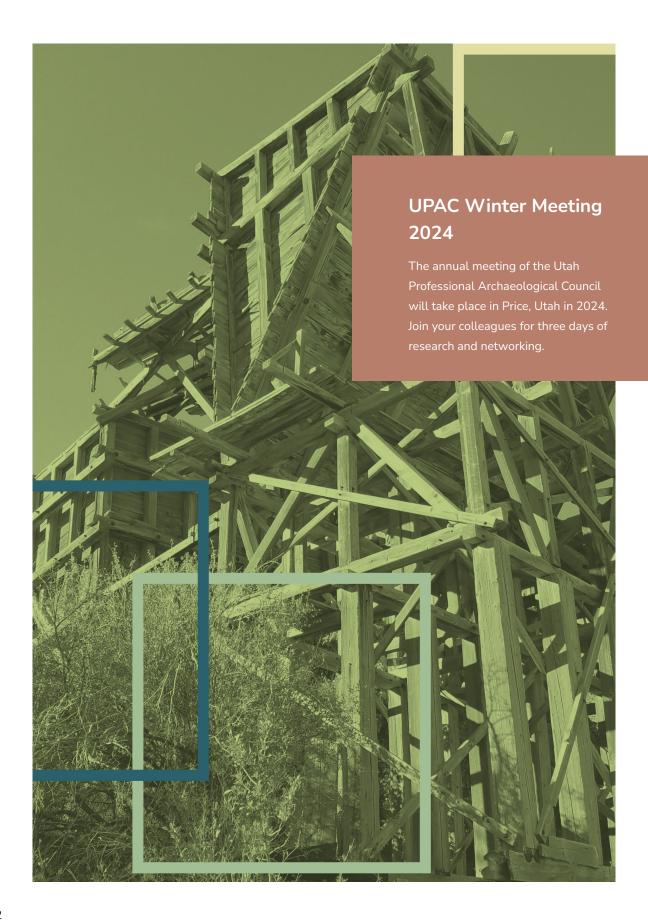
# UPAC Winter Meeting 2024

March,

14 - 16

2024

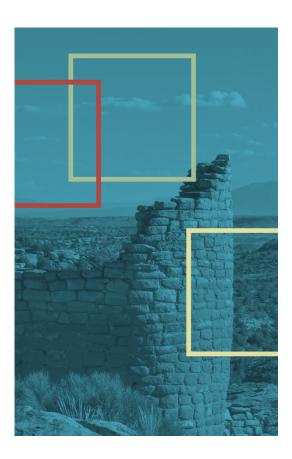
Price, Utah

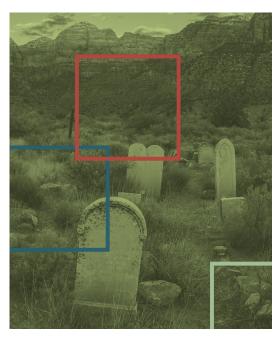


# Land Acknowledgement and Code of Conduct

The Utah Professional Archaeological Council recognizes all Tribes who have called Utah home since time immemorial. We honor their connection to this land, respect their history, and celebrate their living traditions. We appreciate the opportunity to live and work in their ancestral homelands. We strive to create a more collaborative and inclusive space to increase representation of Indigenous interests in professional archaeology

This statement is a work in progress. UPAC is working towards involving Indigenous communities in our organization and we hope to craft guidance in collaboration with these communities.





#### Code of Conduct

- Harassment includes offensive verbal comments related to gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion, technology choices, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention.
- Participants asked to stop any harassing behavior are expected to comply immediately.
- If a participant engages in harassing behavior, the UPAC Executive Committee (EC) may take any action they deem appropriate, including warning the offender or expulsion from the conference with no refund.
- If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact a member of the EC immediately.
- We expect participants to follow these rules at conference and workshop venues and conference-related social events.

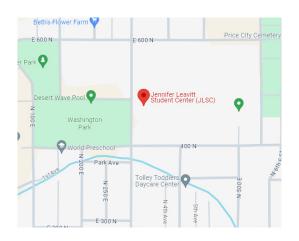
### **About The Meeting**

Each year the UPAC Winter Meeting alternates between locations along the Wasatch Front and other Utah communities, and this year we're headed to Price!

The Winter Meeting and the PLPCO Consultants

Meeting will take place in the Multipurpose Room of
the Jennifer Leavitt Student Center on the campus of
USU Eastern.

Free parking is available across 300 East, north of the tennis courts. (Map below.)





#### Hotel

UPAC has reserved a block of rooms at the Holiday Inn Express at a discount for conference attendees. Please call the Front Desk when you make your reservations to take advantage of this discount.

### **Our Sponsors**







**Natural Resources Conservation Service** 





Eastern

Prehistoric Museum

UtahStateUniversity.













### **How To Attend**

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### Make Sure Your Membership Is Current!

Visit upaconline.org to renew your dues for 2024. Membership needs to be renewed at the beginning of each calendar year.

### Sign Up to Participate

Deadline for paper and poster abstracts, lightening round and job fair participation is February 16, 2024. Individual and organizational sponsorships are warmly welcomed.

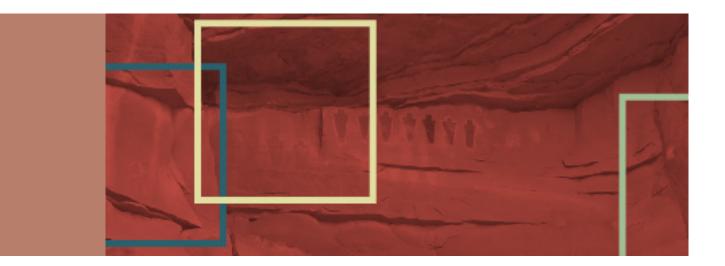
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#### Reserve Your Hotel Room

UPAC has reserved at block of rooms at the Holiday Inn Express at a \$60/nightly discount. Hurry and reserve your room, space is limited.

#### Join Us in Price March 14 - 16

The UPAC Winter Meeting is teaming up with the PLPCO Consultants Meeting once again for an impactful 3-day event. We can't wait to see you there!



### **UPAC** Winter Meeting

Thursday afternoon

#### **PLPCO Consultants Meeting**

In-person at the Jennifer Leavitt Student Center.

Thursday Evening

#### **UPAC Social Event**

Reception at the Prehistoric Museum at 5pm. Dinner and \*more\* at the bar at the SureStay.

Friday morning

#### **Papers and Poster Session**

In-person at the Multipurpose Room of Jennifer Leavitt Student Center.

Friday afternoon

### Job Fair, Lightning Round, and Business Meeting

In-person at the Jeniffer Leavitt Student Center.

Friday evening

#### **UPAC Social Event**

Dinner and \*more\* at Juniper Pizza.

Saturday morning

#### **Paper Session**

In-person at the Jennifer Leavitt Student Center.

Saturday afternoon

Tours

### Thursday, March 14th

1 - 5p

### **PLPCO Consultants Meeting**

In-person at the Jennifer Leavitt Student Center.

5p

#### **UPAC Social Event**

Reception at the USU Eastern Prehistoric Museum.

After the reception we invite you to join us at the bar/lounge at the SureStay by Best Western.



9:30 - 9:45a

9:45 - 10:00a

10:00 - 10:15a

10:15 - 10:30a

### Friday, March 15<sup>th</sup>

9:00-9:15a Welcome
Suzy Eskenazi

9:15 - 9:30a The Hotbed Site: A Basketmaker II Women's Retreat for Birthing or Menarche in Southwestern Utah

Heidi Roberts

The Behunin Figurines: An Archaeological Fraud of Miniature Proportions

David Yoder

What Follows Us to the Grave: A Study of Recent Headstones in Utah Cemeteries

Jake Hubbert

The "Great Not-Quite-North-Arrow" and the Wild West of Early Aviation in Southwest Utah

Utah's Cultural Site Stewardship -The Spear Tip of Public Archaeology

Chase Roberts

10:30 - 10:45a Break

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### Friday, March 15<sup>th</sup>

10:45 - 11:00a

Grizzly Gulch: Recording a Hardrock Mining
 Landscape in the Cottonwoods

Michael Ligman

11:00 - 11:15a

Devil's in the Details – Strawberry Ridge and the value of background research

Jacob Wilks

11:15 - 11:30a

Starch Granule Analysis in the Intermountain West: Best Practices, Protocol, and New Directions in the Field

Stefania Wilks

11:30 - 11:45a

Silver and Porcelains: Understanding the Silver Reef Chinese Experience

Christopher Merrit

11:45a -

Yellowjacket-Monument Knoll Cultural Resources Survey: What's All the Buzz?

Maisie Schwartz

12:00p - 1:30p

Lunch

On your own in beautiful Price.

### Friday, March 15<sup>th</sup>

Job Fair
Visit tables hosted by companies and agencies that are hiring or plan to be hiring soon.

Lightning Round

Break

UPAC Business Meeting
See page 13 for the agenda.

UPAC Social Event
Dinner and \*more\* at Juniper Pizza in Price.

### Saturday, March 16th

9:00-9:15a

**Updating Classic Vernal Style** 

Elizabeth Hora

9:15 - 9:30a

Mitigation of the Carbon County Railway (42CB1008) for the Grassy Trail Creek Abandoned Mine Reclamation Project, Sunnyside, Utah

Tessie Burningham

9:30 - 9:45a

Maritime Archaeology in St. Augustine, Florida. And the West...?

Brandon Austin

9:45 - 10:00a

High-Precision AMS Radiocarbon Dating Informs Fremont Archaeology and Resource Management

Judson Finley

10:00 - 10:15a

2000 Miles of Roads: The Cultural Resource Survey of OHV Routes in the BLM-RFO Henry Mountains and Fremont Gorge Travel Management Areas

Eli Lyon

10:15 - 10:30a

A Context for the Prehistoric Resources of the Great Sage Plain in Southeast Utah and Southwest Colorado 8,000 B.C. to A.D. 1750

Jason Chuipka

10:30 - 10:45a

**Break** 

### Saturday, March 16th

10:45 - 11:00a

On the Edge of the Salt: A Report on Excavations at Site 26EK16689

Paul Santarone

11:00 - 11:15a

Effect of Archaeological Association to Solanum jamesii Occurrence

Izzy Osmundsen

11:15a -

The Fremont Behavioral Continuum: Forager, farmer, or farmer-forager?

Scott Dersam

11:30 - 11:45a

An Introduction to Archaeological Conservation

Katy Corneli

11:45a

**Lunch and Tours** 

Lunch on your own in Price. Meet at the Jennifer Leavitt Student Center at noon for tours.

# **UPAC Business Meet- ing Agenda**

#### Welcome and Call to Order

President Suzanne Eskenazi

#### Motion to Approve 2023 Meeting Minutes

President Suzanne Eskenazi

#### **UPAC Board Updates**

President Suzanne Eskenazi
VP of Membership and Ethics Tina Hart
Treasurer Seth Button
Journal Editor Tim Riley
VP of Government Affairs and Research Peter Steele
Secretary Erin Root
Media Coordinator Maisie Schwartz
Webmaster Elizabeth Hora

#### **Elections**

Thank outgoing officers, announce candidates, open floor to new nominations

#### **Committee Updates**

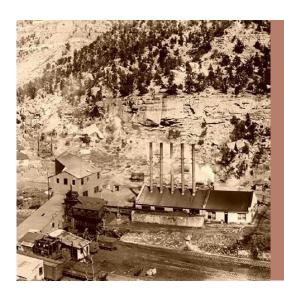
Tribal relations ad-hoc committee update Non-sites ad-hoc committee update

#### **New Business**

#### UPAC Fellow Award

#### Meeting Adjourn

### **Tours**



### **Spring Canyon**

with Ellis Powelson

Take a trip up Spring Canyon (immediately west of Helper), where you can visit ghost towns and rock imagery panels. Any sort of passenger car would be fine driving up the Spring Canyon road. Optional stops on this tour could include a brief tour of Helper, and maybe a quick stop at Helper Beer!

#### Whitmore Park

#### with Tim Rilev

While Nine Mile Canyon may be the "world's longest art gallery," the rest of the Book Cliffs hold their share of indigenous rock imagery as well. Join us as we explore some of the diverse panels found in the upper parklands near Helper, UT. From hidden Barrier Canyon anthropomorphs to highly visible Numic horses, many cultures have left their mark on the landscapes of eastern Utah that enrapture so many visitors today.





### **Poster Session**

The poster session will run concurrently to Friday's presentations in the hallway outside the Multipurpose Room. Authors are encouraged to stand or sit by their posters to answer questions and host discussions about their work. Posters may remain up throughout the morning and afternoon, and authors may choose to bring their posters back for Saturday morning's presentations, if they wish.



Potter's Quarry: Small But Mighty

Suzanne Eskenazi



Intersecting Geomorphic Features Structure the Fremont Agricultural Landscape on Clear Creek, Fremont Indian State Park, Utah

Michael Bianchini, Judson Byrd Finley, Erick Robinson



The Hamlin Valley Trap Site (42IN5102): An Archaeological Investigation of a Post-Contact Southern Paiute Pronghorn Game-Drive in Iron County, Utah

Jessica Del Bozque



Archaeology and Historic Preservation Month in Utah

Elizabeth Hora



Life in the Uintah High Lakes: a discussion of ground stone and prehistoric adaptations at high elevations

Alexandra Williams



Archaeological Collaboration and Cultural Stewardship

Erin Root



Grayware Pottery in the Ruby Mountains of Central Nevada: Expanding

the Fremont Horizon

Sam Miller and Josh Trammel



Conjoined Twins or Alternative Personas: An Analysis of Polycephaly within Southwest Rock Imagery

Mike Terlep



Hunting for Agriculture: Unraveling Ecological Motivations in the Transition to Farming by the Fremont Cultural Complex

Ryan McGrath, David Byers, Judson Byrd Finley, Erick Robinson, and Jacob Freeman.

#### Brandon Austin and Jordan Turner

**SWCA Environmental Consultants** 

### Maritime Archaeology in St. Augustine, Florida. And the West...?

Maritime Archaeology is the study of submerged archaeological resources. While maritime cultural heritage is most commonly studied in coastal and oceanic environments, the same principles are applicable to any resource that has been or is currently submerged. Additionally, the effects of global climate change are causing water levels to change rapidly throughout a variety of environments, and hence, affecting the context and integrity of archaeological resources. The St. Augustine Lighthouse and Maritime Museum and its research department, The Lighthouse Archaeological Maritime Program (LAMP), hosts an annual maritime field school, providing students the opportunity to assist in research of selected sites that are either completely submerged, or are subject to intermittent tidal inundation. The Hurricane Irma Damage Assessment and Mitigation Strategy (HIrmaDAMS) project focuses on the effects of hurricanes on submerged archaeological resources. HIrmaDAMS has been the focus of LAMP's recent research and was the primary focus of study for the 2022 field school. This presentation will briefly discuss the HIrmaDAMS project and provide a summary of the work conducted during the 2022 field school. Additionally, this presentation will briefly touch on the applicability of maritime and underwater archaeological methodologies to potential research in the western United States.

### **Tessie Burningham**

Division of Oil, Gas, and Mining

### Mitigation of the Carbon County Railway (42CB1008) for the Grassy Trail Creek Abandoned Mine Reclamation Project, Sunnyside, Utah

The Abandoned Mine Reclamation Program of the Utah Division of Oil, Gas and Mining is conducting a pipeline project to prevent the loss of water from Grassy Trail Creek into abandoned mine workings of the Historic Sunnyside Mine. This project will result in adverse impacts to the Carbon County Railway (42CB1008) that snakes through Whitmore Canyon outside the town of East Carbon. The railroad was constructed in 1899 to ship coal from the Sunnyside Mine, which was opened in 1896 and operated for approximately 100 years. This paper will present the mitigation work completed thus far, including aerial photography, drone footage, and architectural drawings.

### Michael Ligman and Seth Button

**Logan Simpson** 

Grizzly Gulch: Recording a Hardrock Mining Landscape in the Cottonwoods

More than a century of mining between 1867 and the 1970s left the granite of Big and Little Cottonwood Canyon honeycombed with mine workings and dangerous openings. The Utah Abandoned Mine Reclamation Program (AMRP) addressed many of these in the 1980s and 1990s, and most recently with a maintenance project in 2023. In support of AMRP's most recent effort, Logan Simpson was contracted to record and assess historic mining resources in the bowl of Grizzly Gulch, located at the upper end of Little Cottonwood Canyon. Through the use of a grid survey system, in-depth historic and archival research, digital data collection, and historic photograph recreations, Logan Simpson documented an exceptionally rich and expansive mining landscape: over 2,500 artifacts and 506 historic mining features including mine roads and an aerial tramway. Careful planning and data management allowed the different lines of investigation to inform one another both during and after the inventory effort. The resulting data are useful for a wide range of research questions: the adoption of different mining technologies in an early hard rock district, surface site taphonomy at elevation, and the lives of prospectors and miners. In this paper, particular emphasis will be placed on the methods and results of the survey and rephotography, the landscape dimension to the investigation, taphonomy of mining sites at elevation, and the potential of this and future studies to reshape the history of the Cottonwoods mining district.

### Jason Chuipka

Woods Canyon Archaeological Consultants

A Context for the Prehistoric Resources of the Great Sage Plain in Southeast Utah and Southwest Colorado 8,000 B.C. to A.D. 1750

The Great Sage Plain is a vast expanse of rolling, sage-covered mesa tops mixed with pinyon-juniper woodland that stretches north and west from Mesa Verde in southwestern Colorado to the base of the Abajo Mountains in southeastern Utah. It is an area with a very high density of archaeological sites, including some of the largest sites of the Ancestral Puebloan period (A.D. 500-1300). With funding from the State of Utah, Woods Canyon Archaeological Consultants, Inc. is currently working on a framework for understanding the prehistoric occupation of this significant region on both sides of the Colorado/Utah state line. This context will provide a touchstone to use for making recommendations of National Register of Historic Places eligibility for prehistoric sites of the Great Sage Plain and adjacent borderlands.

### Katy Corneli

USU Eastern Prehistoric Museum

#### An Introduction to Archaeological Conservation

Archaeological excavation serves a noble purpose in the pursuit and preservation of scientific information but is not without consequences to the site or the artifacts within. Ironically, objects that have survived for thousands of years in the ground are often more likely to decay once they are removed. Archaeological conservation, which aims to preserve and protect the integrity of cultural heritage, promote scientific research, and enhance public understanding of the past, is therefore a crucial, though often overlooked, component of the archaeological process. This talk will give an overview of the art, science, and ethics involved in archaeological conservation using case studies relevant to the Colorado Plateau. We will touch on the chemistry of decay, examine treatment solutions for common problems, and discuss when to hire a professional conservator.

### Scott Dersam, Sari B. Dersam, and Kenneth Cannon

Cannon Heritage

### The Fremont Behavioral Continuum: Forager, farmer, or farmer-forager?

Over the 2024 field season, Cannon Heritage Consultants, Inc. (CHC) will begin data recovery excavations on five localities known to host Fremont complex artifacts in Skull Valley, Utah. Defining and interpreting the palimpsest of shared behaviors associated with the Fremont complex of the Great Basin has troubled archaeologists for nearly a century. The malleable suite of technologies, subsistence, and landscape use strategies shared among Fremont mobile foragers and sedentary farming villages have hindered clarifying the relationships between these populations. To better understand Fremont site occupation duration, artifact diversity, and behavioral heterogeneity among sites at either end of the Fremont forager-farmer continuum, CHC will rely on a combination of the Shannon and Simpson diversity indices, discrete variable ANOVA testing, and Chi-Square analyses. CHC will use the indices to assess patterns of artifact and feature (and indicated behavioral) richness, evenness, and heterogeneity in regionally associated Fremont farming villages, transient foraging sites, and sites that display aspects of both behaviors. The resulting analyses will create a set of three behavioral templates along the continuum of Fremont site types and displayed behaviors. This will aid CHC in gaining a clearer perspective of where the five Skull Valley sites reside on the Fremont behavioral spectrum and what their relatedness is to other regional Fremont sites at either end of the forager-farmer continuum. The five Skull Valley localities provide a unique opportunity to clarify multiple facets of the Fremont behavior complex. How the five Skull Valley localities interact or interrelate with the surrounding Fremont village and foraging sites may aid in future interpretations and understanding of the Fremont complex in the Great Basin.

### Judson Finley and Erick Robinson

Utah State University and Desert Research Institute

### High-Precision AMS Radiocarbon Dating Informs Fremont Archaeology and Resource Management

Although the record of early agriculture remains a prominent part of Utah cultural resource management, academic research has not kept pace in providing useful methodological frameworks that can be operationalized in surveys and excavations. Careful analysis of legacy radiocarbon data reveals a range of problems from low accuracy and low precision to a lack of chronologies demonstrating how dryland agricultural systems evolved within individual landscapes across the Fremont millennium. Here we review the development of the Cub Creek chronology in Dinosaur National Monument focusing on the non-village upland occupations. We contrast the Cub Creek result with a new AMS chronology from Snake Rock Village on the western edge of the San Rafael Swell. The new chronology exposes a knowledge gap about how agricultural villages there followed a similar developmental trajectory to Cub Creek yet were unique in response to local hydroclimatic and geomorphic constraints. Filling the knowledge gap requires a landscape-scale perspective that can be provided by CRM surveys and data recovery that develop informed chronological and archaeological data. We propose these methods as one model for CRM research designs that will advance our understanding of early agriculture in the unique environments of the northern Colorado Plateau and eastern Great Basin.

#### Elizabeth Hora

Utah State Historic Preservation Office

### Updating Classic Vernal Style

Classic Vernal Style (CVS) has been a cornerstone of archaeological classification for the last 50 years, and for good reason. The original rock imagery typology designed by Polly Schaafsma clearly defines attributes and elements of the style and has allowed archaeologists and avocationalists alike to discuss, research, and manage this resource. One of the diagnostic features of CVS is the elaborate regalia worn by the human figures, but to date no classification of CVS headgear, necklaces, and body design have been attempted. This study finds geographically patterned variation in the types of regalia worn by CVS figures suggesting meaningful change over time, and identifies avenues for future research.

#### Jake Hubbert

**SWCA Environmental Consultants** 

### What Follows Us to the Grave: A Study of Recent Headstones in Utah Cemeteries

Headstones have a rich archaeological history due to their direct relationship with death and dying. Few archaeologists, however, consider the headstones that have been or are being produced in contemporary society. Contemporary archaeology is a field that seeks to apply archaeological methods and theory to the material of the 20th and 21st centuries. This conceptual approach is well situated to understand developments in modern-day headstones. Specifically, my paper aims to explore headstones via their iconography and materiality to understand how Utahns in the Intermountain West associate the dead with objects in an increasing consumer-culture. My paper presents an analysis of 325 headstones across seven different historic cemeteries within the state of Utah and some of the variety and frequency of objects engraved into headstones that tend to increase over time. These objects range from generic needles and thread to a Pontiac GTO Judge 1969 and they reflect life and cultural interests such as skiing and fishing. While these objects are tied to specific individuals, their increased appearance may possibly reflect a rise in local consumerism and globalization that has recently culminated in the appearance of brands, such as Nike and Conoco, on headstones over the last few years. The way that residents associate the dead with objects in cities and towns throughout Utah may suggest an increased importance on the relationships between people and their things in an increasing consumer culture.

### Joey LaValley

#### Bureau of Land Management

### The "Great Not-Quite-North-Arrow" and the Wild West of Early Aviation in Southwest Utah

Today's aviation standards make flying one of the safest and most efficient modes of transportation. Like many developing industries, however, aeronautics was once a guessing game, ever-evolving to overcome the growing pains of a nascent trade. From basic bearing lists to networks of navigational aids and radar, technologies were invented out of necessity and sometimes abandoned quickly. Scattered across Utah are remnants of these early experiments including concrete arrows, beacon foundations, and abandoned airfields. Isolated in nature and time, rarely will an undertaking intersect one of these early relics, let alone more than one. If found, the lack of contexts can prevent their adequate identification and/or evaluation. This paper provides a brief history of early aviation, reports on recently documented aeronautical-related sites from southwest Utah, and opens a discussion of how to evaluate and manage these rare resources. Takeaways of this study can be extended throughout the state and beyond.

### Eli Lyon

Woods Canyon Archaeological Consultants

2000 Miles of Roads: The Cultural Resource Survey of OHV Routes in the BLM-RFO Henry Mountains and Fremont Gorge Travel Management Ar-

Between February 2022 and August 2023, Woods Canyon Archaeological Consultants conducted a Class III Cultural Resource Inventory of 2088 miles of roads (63,475 acres) within the Richfield Field Office (RFO) Henry Mountains and Fremont Gorge Travel Management Areas, broken into seven phases. The project ranged from the peaks of the Henry Mountains at 11,000 feet, along the borders of Glen Canyon NRA and Capitol Reef and Canyonlands National Parks, down to the depths of canyon country, and across the deserts in between. During this time, 2,086 sites were recorded, 917 of which were new recordings. Cultural affiliation of sites included Paleoindian, Early, Middle, and Late Archaic, Fremont, Ancestral Puebloan, Numic, Navajo, and Euro-American. Sites documented included Paleoindian artifact scatters, Fremont and Ancestral Puebloan habitations, Numic rock art, late 19th century settler cabins, and early 20th century sheepherder arborglyphs, to name a few. This presentation will provide a synopsis of the project's findings, examining the use of this dynamic landscape over millennia of occupation.

### Christopher Merritt

Utah State Historic Preservation Office

### Silver and Porcelains: Understanding the Silver Reef Chinese Experience

Silver Reef, a silver (and later uranium) mining camp in Washington County, Utah possesses some of the classic characteristics of mining boomtowns in the American West. Shootouts, fires, disasters, wealth, and collapse. But what one aspect this community did for Washington County was create a unique blip in the demographics, a few years of having one of the largest Chinese populations in Utah. With the rush of silver miners, Chinese immigrants arrived to start small businesses and create a small nucleated community. In November 2023, the Bureau of Land Management, State Historic Preservation Office, Silver Reef Museum, and volunteers with the Utah Cultural Site Stewardship Program collaborated for the first intensive documentation of this site's Chinese quarter. This presentation will highlight the history of Silver Reef's Chinese population and what was found during the fieldwork.

### Izzy Osmundson

University of Utah

### Effect of Archaeological Association to Solanum jamesii Occurrence

Traditional Cultural Places (Properties) are an underutilized type of significance for nominating Historic Properties to the National Register of Historic Places. Reasons encompass evolving guidance to clarify what evidence is appropriate, e.g., when significance is contingent on sensitive cultural knowledge that cannot be disclosed. To address this gap, this paper presents a pilot study examining a relationship between population occurrences of Solanum jamesii, a member of Solanaceae with nutritious and resilient tubers that have been found on groundstone in Utah dating past 10,000 calendar years BP, to archaeological sites across the Four Corners area through herbarium data. In supplementing the recognition of heritage locations composed of ethnographically significant plant species, archaeologists can alleviate the onus put on communities with overextended resources, such as sovereign Tribes.

#### **Chase Roberts**

Utah State Historic Preservation Office

### Utah's Cultural Site Stewardship -The Spear Tip of Public Archaeology

Come learn how UCSS has successfully built a community of dedicated professionals and public partners committed to safeguarding Utah's cultural heritage. The Utah Cultural Site Stewardship Program (UCSS) mobilizes hundreds of volunteers statewide to monitor cultural heritage resources. UCSS works with all Federal and State Land managing agencies, as well as municipalities, for/nonprofits and private landowners. The program has grown quickly and is now one of the largest Stewardship programs in the nation. UCSS works hand in hand with Land Managers by enlisting the public to get more eyes on threatened cultural resources. Stewards provide Land Managers with real-time site data, which enables them to see adverse effects and heightens the odds of preventing negative impacts. Land Managers are receiving much needed support from a broader network of committed stakeholders within their communities. Through involving local volunteers as partners in ongoing efforts to protect cultural resources, UCSS is on the forefront of public archaeology.

### Heidi Roberts, Lisbeth Louderback, and Keith Hardin

HRA, Inc. and Natural History Museum of Utah

## The Hotbed Site: A Basketmaker II Women's Retreat for Birthing or Menarche in Southwestern Utah

In the sand dunes of southwestern Utah, over 220 thermal features, including roasting pits, hearths, slab-lined hearths, and concentrations of fire-cracked rock (FCR) have been excavated and radiocarbon dated between 8,000 years ago and the historic period. Although most were used to cook wild foods, nine thermal features at a Basketmaker II camp (42WS4001) are unique. First, these features do not resemble roasting pits because they are larger than average and built on the prehistoric surface. Second, although the site was reoccupied periodically, the FCR in the thermal features was never reused. We hypothesize that these thermal features functioned as hotbeds for birthing and menarche. It was a common and widespread practice during the ethnohistoric period for Indigenous women throughout the region to recover from birthing by lying on a bed of hot rocks for up to two weeks. Hotbeds were also used by many groups during menarche ceremonies.

### Paul Santarone, Kenneth Cannon, Kathryn Puseman, William Ecklerle

### Cannon Heritage

### On the Edge of the Salt: A Report on Excavations at Site 26EK16689

Site 26EK16689 is a multiple component open archaeological site near West Wendover, Nevada and Wendover, Utah. Cannon Heritage Consultants conducted data recovery excavations at this site between 2021 and 2022, in advance of development. These investigations revealed extensive, intact, buried cultural deposits despite a history of development and landscape modification. This paper provides a preliminary report on the ongoing analysis of the assemblage. We discuss diagnostic artifacts, botanical remains and component dating, after an orientation to the geologic setting and context. Finally, we discuss plans for additional analysis and preliminary conclusions within the context of the archaeological setting.

#### Maisie Schwartz

Logan Simpson

### Yellowjacket-Monument Knoll Cultural Resources Survey: What's All the Buzz?

In the summer of 2023, Logan Simpson conducted the 3,452-acre Yellowjacket-Monument Knoll Cultural Resources Survey. The survey was part of the Division of Wildlife Resources Watershed Restoration Initiative in conjunction with the Bureau of Land Management Color County District Fuels Program and Kanab Field Office as well as the Utah School and Institutional Trust Lands Administration. The survey resulted in the documentation of 67 sites, 35 of which were recommended eligible for the National Register of Historic Places. The results, however, proved to be only one piece of the fascinating area that is Yellowjacket Canyon. After the dramatic winter of 2023, the canyon was blooming with wildflowers and spotted with vibrant green marshes, shedding light on the lifeways the area—generally considered harsh, hot, and dry—was once able to sustain. The project was also unique in that it was staffed primarily by women at every level, both on the agency and contracting side, which has long been a rarity in the field of archaeology. This presentation briefly discusses the results of the Yellowjacket-Monument Knoll survey, provides details on unique environmental observations of the area, and highlights the project team.

### Jacob Wilks

Logan Simpson

### Devil's in the Details - Strawberry Ridge and the value of background research

Archaeologists often come across fairly nondescript features during the course of our work. Each of these features were made by human hands and sometimes, even as simple as they may be, additional context can help them prove more informative and connect us with the human element of our work. These connections can be seen in a pair of features recorded in 2023 by Logan Simpson for the Wasatch-Uintah-Cache Forest Service in the Strawberry Ridge area. The first feature consists of a set of four arborglyph panels in a 50 meter area, each inscribed with the name "Roy McDonald" and a brief description of an action and date. The second feature was a series of historic linear water control features. Through a discussion of these two features this presentation will demonstrate the importance of careful pre- and post-field work background historical analysis and how this research can help provide better context and illustrate the stories and human connections of the resources we record.

#### Stefania Wilks

Natural History Museum of Utah

# Starch Granule Analysis in the Intermountain West: Best Practices, Protocol, and New Directions in the Field

Starch granule residue analysis is an important microbotanical tool for linking archaeological records to subsistence decisions in the past. It has been instrumental in reconstructing many longstanding human dietary traditions including the domestication of wheat in the Levant region of the Mediterranean, maize in Central America, and rice and millet in China. In the Great Basin, biscuitroot (Lomatium spp.) starch granules extracted from archaeological bedrock features near Warner Valley, Oregon support ethnographic patterns of seasonal geophyte exploitation in upland settings. Archaeological starch residues also reveal novel plant resource use such as the Four-Corners Potato (Solanum jamesii) at North Creek Shelter on the Colorado Plateau. Starch microbotanicals hold obvious potential to illuminate human foraging behavior, yet, rigorous, standardized methodology and protocol remain underdeveloped. Despite its popularity, starch analysis is still considered a fairly "new technique" in the archaeological community. The identification of archaeological starches relies on published reference collections built from modern plant populations with replicable quantitative analyses. The Archaeobotany Lab at the Natural History Museum of Utah is at the forefront of establishing peer-reviewed best practices and protocols in this dynamic field. Join us in this presentation as we discuss our most recent work including a statistical starch reference for seven major North American plant families, peer-reviewed protocol for open-air feature sampling, and the results of starch residue analysis on fire-crack rock.

#### David Yoder

Weber State University

### The Behunin Figurines: An Archaeological Fraud of Miniature Proportions

While most Fremont figurines are quite small, three exceptional sets of large figurines are thought to exist: the Pilling, Evans Mound, and Behunin caches. As the least well known, the Behunin figurines were part of the private collection of Homer Behunin (a resident of central Utah). Behunin's collection was photographed and reported by James Gunnerson in 1962 under the title 'Unusual Artifacts from Castle Valley' in the University of Utah's Anthropological Papers series. In this talk I present an analysis that suggests the Behunin objects are not authentic Fremont figurines, but are instead modern forgeries.

### Michael Bianchini, Judson Byrd Finley, Erick Robin-Utah State University

# Intersecting Geomorphic Features Structure the Fremont Agricultural Landscape on Clear Creek, Fremont Indian State Park, Utah

Early agricultural landscapes on the Colorado Plateau are understood as bundled agricultural niches designed to provide multiple opportunities to spread risk of failure of any single field across landscapes and promote sustainable agriculture in marginal environments. Local geological and geomorphic conditions underwrite these bundled niches, although few systematic studies exist in Utah's archaeological record to reconstruct Fremont agricultural systems. Here we present new geoarchaeological and geochronological data from Clear Creek in Fremont Indian State Park associated with Five Finger Ridge, one of the largest and most completely excavated Fremont villages in the region. Volcanic tuff from the Marysvale Volcanic Field provides the bedrock controls while also supplying abundant sediment for associated landforms. Side-valley alluvial fans originating on the flanks of the Tushar Range to the south began accumulating approximately 7,000 years ago creating a stepwise longitudinal gradient in the perennial Clear Creek. Gradient changes in Clear Creek caused a perched water table and formation of a riparian environment which was the largest agricultural niche in the valley. Low-order perennial and ephemeral tributaries to Clear Creek flow along the margins of side-valley fans accumulating deep, well-watered, fine-grained alluvium that were ideal agricultural niches. We demonstrate that these three distinct geomorphic settings were in a phase of construction during the Fremont occupation of Clear Creek and Five Finger Ridge. Most significantly, two paleosols date to the Fremont period indicating landscape and environmental stability consistent with our hypothesis linking hydroclimate and geomorphic variability to the growth potential of Fremont agricultural communities.

### Jessica Del Bozque

Adams State University

# The Hamlin Valley Trap Site (42IN5102): An Archaeological Investigation of a Post-Contact Southern Paiute Pronghorn Game-Drive in Iron

Game-drives for the communal hunting of artiodactyls, such as pronghorn, are a phenomenon known to the Great Basin extending from the Middle Archaic into the post-contact periods. Yet, extant documented examples are uncommon in the eastern extent of this geographic region, especially in Southern Paiute traditional territories. Such a site (42IN5102), an axe-cut juniper game-drive dating to the post-contact period in Hamlin Valley of western Utah, was investigated to start addressing the data gap for communal hunting architecture sites in the eastern Great Basin of Utah. This study is multifaceted utilizing radiocarbon dating, metal detecting, shovel probes, regional comparisons, archival ethnographic research, and a social theory framework focused on themes of social memory and identity. In addition to contributing to the regional understanding of pronghorn communal hunting, these methods combined aim to garner insights into more localized, Southern Paiute traditional lifeways (and agency) in southwestern Utah during the post-contact period. This poster discusses thesis-level work conducted at site 42IN5102.

### Poster Abstracts

#### Suzanne Eskenazi

**SWCA Environmental Consultants** 

Potter's Quarry: Small But Mighty

In the summer of 2020, SWCA archaeologists surveying for the Gateway South Transmission Line in Carbon County near Kyune encountered a remote sandstone quarry and an abandoned railroad spur. The quarry site contained what looked like a root cellar, a railway switch, and remnants of other structures, along with a small historic artifact scatter. Historical research indicated that this was Potter's Quarry, which was constructed in 1900, and the associated rail line was Potter's Quarry Spur, which was used to transport sandstone out of the quarry until ca. 1917. Even though the quarry was relatively small and short-lived, the Kyune sandstone from Potter's Quarry can be directly linked to the Cathedral of the Madeleine in Salt Lake City.

#### Elizabeth Hora

#### Utah State Historic Preservation Office

### Archaeology and Historic Preservation Month in Utah

May is Archaeology and Historic Preservation Month in Utah and each year has been more successful than the last because of you. Utah's archaeologists donate to the poster fund, engage the public, and support public knowledge and interest in Utah's archaeology. Thank you for all you do! This poster is a review of our success from the last few years and will inspire you to take action to participate in 2024's celebration!

### Ryan McGrath, David Byers, Judson Finley, Erick Robinson, and Jacob Freeman.

Utah State Historic Preservation Office and Utah State University

### Hunting for Agriculture: Unraveling Ecological Motivations in the Transition to Farming by the Fremont Cultural Complex

This study explores the profound shift from foraging to agriculture in human history, focusing on the Fremont cultural complex. Utilizing the Prey-Rank Model, I investigate whether dwindling encounter rates with high-rank prey prompted the Fremont's adoption of agriculture. Analyzing the Utah archaeofaunal database, I quantify past resource trends to discern if ecological conditions influenced this transition. If confirmed, it suggests adaptive responses to a decline in high-ranked game, leading to a more resource-intensive survival strategy. This research provides crucial insights into the motivations behind the Fremont's agricultural adoption, enhancing our understanding of human-environment interactions and adaptations throughout history.

### Poster Abstracts

#### Sam Miller and Josh Trammell

Logan Simpson

### Grayware Pottery in the Ruby Mountains of Central Nevada: Expanding the Fremont Horizon

Recently conducted Class III Inventory in the southern Ruby Mountains of central Nevada identified several archaeological sites with distinctive Fremont Grayware and Intermountain Brownware pottery. The project area is ~350 kilometers west of core Fremont areas along the Wasatch Front. Although chemical and petrographic analyses have not yet been conducted, the Grayware temper appears to be locally acquired biotite shist. This is unlike the Graywares of the western Bonneville Basin and suggests local production in the central Great Basin. These findings add to a growing body of evidence expanding the established distribution of Fremont pottery. The nature of the association of the Ruby Mountains inhabitants with Fremont of the eastern Great Basin/Colorado Plateau is undetermined, but could include: 1) trade/cultural exchange; 2) inter-marriage of Fremont women potters and central Great Basin hunter-gathers; 2) local presence of full-fledged Fremont farming-foraging complex; and, 3) presence of Fremont populations in the central Great Basin practicing forager only subsistence patterns, similar to the "Sevier" variant.

#### **Erin Root**

#### **SWCA Environmental Consultants**

### Archaeological Collaboration and Cultural Stewardship

In June 2023, a dedicated team of archaeologists from SWCA Environmental Consultants (SWCA) volunteered to assist the U.S. Forest Service (USFS) in documenting a previously identified site nestled within the Bears Ears National Monument. Working hand in hand with the Utah Cultural Site Stewards (UCSS), SWCA invested two full days meticulously documenting a large habitation site. This joint effort among SWCA, USFS, and UCSS not only offered SWCA archaeologists the chance to impart their expertise in site documentation methodology but also facilitated an exchange of insights into the extensive history of Bears Ears. Concurrently, the partnership allowed SWCA to glean valuable knowledge from UCSS Stewards, tapping into their unique understanding of the area. The collaborative venture resulted in an enriching learning experience for all involved, transforming the documentation of the site into a comprehensive update for the USFS records. Beyond the tangible documentation, this initiative stands as a testament to the power of partnership, where shared expertise, teaching, and cultural stewardship converge to deepen our understanding of Bears Ears and contribute to its enduring legacy.

### Poster Abstracts

### Mike Terlep

USFS - Arizona Strip

# Conjoined Twins or Alternative Personas: An Analysis of Polycephaly within Southwest Rock Imagery

Researchers, most recently Crown and colleagues (2016), have long highlighted the significance of polydactyly (having more than five digits on a hand or foot) within rock imagery and material culture across Mesoamerica and the American Southwest. Anthropomorphic and zoomorphic figures displaying polycephaly (multiple heads) is another frequent depiction across Mesoamerica and American Southwest rock imagery and material culture. While we currently lack paleopathological cases of polycephaly and/or conjoined twins in North American prehistory, such individuals would have likely held considerable importance and status. Globally, medical reports and artistic renderings of polycephaly/conjoined twins date back at least 2,000 years and were often incorporated into mythology. Alternatively, polycephalic depictions may reflect dual or multiple symbolic or pragmatic roles, genders, or personas of individuals within a community. This presentation explores depictions of polycephaly within Southwest rock imagery and proposes that such imagery reflected actual or allegorical accounts of conjoined twins or alternative personas.

### Alexandra Williams

#### Logan Simpson

# Life in the Uintah High Lakes: a discussion of ground stone and prehistoric adaptations at high elevations

In the high elevation northeastern Uintah Mountains, short- to long-term Indigenous camps — especially those with ground stone — are uncommon. Most sites in these locations are task-specific with limited artifact diversity and lack milling gear. Ground stone tools are not just a marker of changes in subsistence patterns, typically associated with the Early Archaic Period, but also suggestive of longer or repeated occupations of an area. Analysis of ground stone can potentially address research themes regarding paleoecology, human settlement in upland settings, subsistence patterns, and a plethora of other research topics. Recent surveys in the Ashley National Forest yielded a significant increase in ground stone observed at higher elevations than was previously known. One site in particular was observed in a unique location and has additional characteristics that open the door for further research. Analysis of this tool type, especially at high elevations, has potential to change our understanding of Indigenous population's lifeways in the mountain bench and high lake topographic environments.



### Thank You

#### You are the reason the Winter Meeting is a success!

The Utah Professional Archaeological Council is a non-profit organization that was established in May 1982 to maintain and promote the goals of professional archaeology in the State of Utah.

#### UPAC goals are to:

- Establish and promote high standards of archaeological research, reporting, and management.
- Establish and promote a mechanism to represent professional archaeological interests in political and public forums.
- Establish and promote a mechanism for communication within the archaeological community.
- Establish and promote a mechanism for arbitrating disputes within the archaeological community.
- Promote public education and interest in the fields of archaeology and cultural resource management.
- Provide advice to the State, Federal and other regulatory agency archaeologists upon request or as deemed appropriate.
- Promote our concern with the archaeology of Utah.
- Publish and encourage the publication of archaeological research.

