



# 2022 Meeting Program

April 1-2, 2022  
Southern Utah University  
R. Haze Hunting Conference Center  
Whiting Room  
Cedar City, Utah



UTAH PROFESSIONAL  
ARCHAEOLOGICAL COUNCIL

## Land Acknowledgement

The UPAC executive committee would like to acknowledge this meeting is being held on the traditional land of the

Nuwuvi  
(Southern Paiute)

**Whose land are you on? Find out here!**  
<https://native-land.ca/>

# **Utah Professional Archaeological Council**

## **2022 Meeting**

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**Friday April 1 - Saturday April 2, 2022**

### **Schedule Summary**

**Friday 12:00 PM – 3:00 PM: UPAC Annual Business Meeting**

**Friday 3:15 – 4:15 PM: Keynote Address by Dr. Kevin Cromar**

**Utah Air Quality Board: Wildfire Smoke and Crew Field Safety**

**Friday 6:00 – 7:00 PM: Happy Hour at Policy Kings Brewery**

**Saturday 9:00 – 10:00 AM: Coffee bar and Poster Session**

**Saturday 10:00 – 11:30 AM: Vandalism in Archaeology Symposium**

**Saturday 11:45 – 12:45 PM: General Paper Presentations**

**Saturday 2:00 – 3:30 PM: Field Trip to Lion's Mouth Cave**

**Attending in person? UPAC will provide masks if you choose to wear one.**

**The goal of any conference is to share new and exciting research in a community of like-minded individuals.**

## **Utah Professional Archaeological Council's Purpose and Goals:**

**UPAC is a non-profit voluntary association that exists for the purpose of maintaining and promoting the goals of professional archaeology in the State of Utah.**

These goals shall include but are not be limited to:

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

Learn more and become a member here:  
<https://www.upaconline.org/>

# Utah Professional Archaeological Council

## 2022 Meeting

April 1-2, 2022

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#### **Incoming Committee Members to be announced!**

## **UPAC 2022 Meeting Charity Fund Raiser**

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This year UPAC would like to encourage donations to:

### **THE HISTORY UNDERGROUND**

A 501c.3 that seeks to "increase access to archaeological and anthropological education for first-generation, low-income, and students from historically excluded groups through active fundraising for scholarships, internships and workshops."

With a mission "to give voice to the past by diversifying the future."

Two ways to donate:

- 1) Donate via UPAC at <https://www.upaconline.org/membership> with the "Donate" button for the fundraiser at the top of the page
- 2) Donate directly to the History Underground at <https://www.thehistoryunderground.org/>

Make sure to send an email to UPAC Treasurer Michael Ligman at [upactreasurer@gmail.com](mailto:upactreasurer@gmail.com)

We plan to report back to the membership with how much we were able to raise for this great cause.

**THANK YOU!**

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## UPAC 2022 Meeting Sponsors

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**The UPAC Executive Committee  
would like to thank these organizations:**



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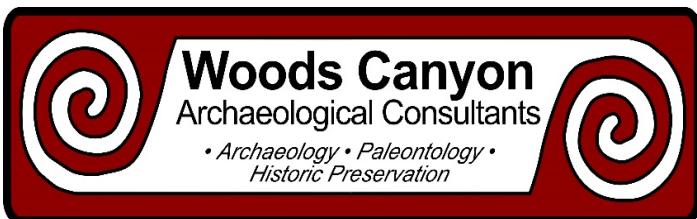
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# Meeting Schedule

## Friday, April 1

12:00 PM – 3:00 PM	<b>UPAC Annual Business Meeting</b>
3:15 – 4:15 PM	<b>Keynote Address by Dr. Kevin Cromar</b> Utah Air Quality Board: Wildfire Smoke and Crew Field Safety
6:00 – 7:00 PM	<b>Happy Hour!</b> Held at Policy Kings Brewery, 223 N 100 W, Cedar City

## Saturday, April 2

9:00 – 10:00 AM	<b>Coffee Bar and Poster Session</b>
10:00 – 11:30 AM	<b>Symposium: Vandalism in Archaeology</b>
10:00 - 10:15	Jason Chuipka: Intentional or Inadvertent: Impacts of Visitation at River House in Southeastern Utah
10:15 - 10:30	Greg Woodall: Recent Investigations and Site Preservation efforts in Washington County
10:30 - 10:45	Matthew Podolinksy: The Effect of Moral and Threat Appeals on Reducing Depreciative Behaviors at Rock Art Sites
10:45 - 11:00	Maisie Schwartz: How can we be better stewards of history in our reporting?
11:00 - 11:15	Brian Storm and Elizabeth Hora-Cook: Protecting the Past: Archaeologist's Edition
11:15 - 11:30	Ian Wright: The Utah Site Stewardship Program
11:30 – 11:45 AM	<b>Break</b>
11:45 AM – 12:45 PM	<b>Paper Presentations</b>
11:45 - 12:00	Carol Patterson: Athapaskan Social Imagery of the Uinta Basin, Interpreted Through Ethnographic Analogy
12:00 - 12:15	Tina Hart: Archaeological Documentation of Rock Imagery Locations in Central Utah
12:15 - 12:30	Brendan Ermish and Shannon Boomgarden: Identifying Water Availability with Maize Phytoliths in Range Creek Canyon, Utah
12:30 - 12:45	Heidi Roberts and Keith Hardin: A Journey-Through Time: Excavations at Late Archaic, Far Western Pueblo, and Post-Puebloan Sites Near Grapevine Gap in Washington City, Southwestern Utah.
2:00 – 3:30 PM	<b>Field Trip to Lion's Mouth Cave</b>

# 2021 UPAC Business Meeting

**Friday, April 1, 2022, 12:00 PM**

## Agenda

1. Welcome (10 minutes)
2. Approval of 2020 UPAC Business Meeting Minutes (10 minutes)
3. Executive Committee Reports (45 minutes)
  - a. President
  - b. Webmaster
  - c. VP of Government Affairs
  - d. VP of Membership and Ethics
  - e. Treasurer
  - f. Secretary
  - g. Social Media Coordinator
  - h. Utah Archaeology Editors
  - i. USAS Liaison
4. Old Business
  - a. UPAC Code of Ethics Update
  - b. 50 Year Rule Ad Hoc Committee Update
  - c. Historic Collections Ad Hoc Committee Update
  - d. Small Business Update
  - e. UPAN Update
5. New Business
  - a. UPAC Awards (10 minutes)
  - b. New UPAC Officers
  - c. Other
6. Adjourn

**Can't attend in person? We've got you covered!  
We will share a virtual link for those who cannot attend in person.**

# 2021 UPAC Meeting

**Friday, April 1, 2022, 3:30 PM**

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## Keynote Speaker

Dr. Kevin Cromar  
Utah Air Quality Board  
Wildfire Smoke and Crew Field Safety

**Friday, April 1, 2022, 6:00 PM**

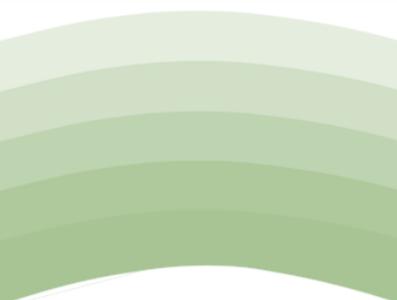
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## Happy Hour

Policy Kings Brewery  
223 N 100 W, Cedar City

“One pint at a time, we are waking up the pallets of our community through creative & innovative sessionable style beers. From our signature tea beers, to our classic Westcoast style IPAs, our main goal is to always deliver a crushable beer.

Those who brew together, stay together!”



## Abstracts

### Saturday Morning: Poster Session

#### Redware Pottery Design

Emily Brown, Brigham Young University

Ceramic production, trade, and ritual use in modern-day Utah, north of the San Juan River, is a prominent topic of debate amongst archaeologists. The Pueblo I period was a time of dramatic cultural shifts, including large-scale population movements and the development of the first large Pueblo villages. The data presented in this article will address those topics of debate surrounding the early Pueblo I period through redware ceramic design analysis. Previous to this research, no methodology for analyzing redware pottery design existed. Redware ceramics developed autonomously, resulting in variable design elements. Nevertheless, it was a highly traded commodity resulting in some cohesion. I used two sites to compare redware types, Alkali Ridge 13 (42SA13) and Coal Bed Village (42SA920). Both Alkali Ridge 13 and Coal Bed Village are in modern-day Utah, north of the San Juan River. Comparing these two sites will provide further insight into these large societies.

#### Historic Radioactive Ores Mining in the Henry Mountains and Marysvale Mining Districts

Julie Kramer, Freeman Stevenson, and Mike Cannon, SWCA

In the 19th century, it was discovered that the unique geology of the Colorado Plateau held vast amounts of radioactive ores. In the first half of the 20th century, the deposits mined in the Colorado Plateau provided the main source of domestic radioactive ores, important not only for domestic use, but for use worldwide, contributing to technological advances in the medical, cosmetic, and industrial fields, and wartime usage. By World War II, strategic ores were considered vitally important to the security and strength of the United States, leading to a government sponsored boom in mining that led in part to the creation of the Atomic Age. Many of these historic mines are in the Henry Mountain and Marysvale areas. Often these ores are found in and around fossilized material, which led to unique exploration tactics and a range of mining types and techniques, highlighted in this presentation.

#### See the Forest for the Trees (or Sometimes Lack of Trees)

Joey LaValley, M.A., RPA, Logan Simpson Design

Logan Simpson conducted a 2,275-acre pedestrian survey on the Ashley National Forest ahead of vegetation management efforts led by the Utah Division of Wildlife Resources and U.S. Forest Service through Utah's Watershed Restoration Initiative. Inventory of the high elevation (above 10,000 feet) project area resulted in the identification and documentation of 27 sites including flaked stone scatters, areas of mineral exploration, logging/milling camps, a memorial to a fallen sheepherder, and aspen carvings. The latter span between 1900 and 1970 and document many episodes of recreation and sheepherding. One such site contains a unique sheepherding scene as well as several illicit scenes common with these types of resources. This site was recommended eligible to the National Register under Criterion C and received Utah SHPO concurrence. It was also determined during the course of this project that historic milling sites can be detected from modern aerial imagery, an observation which may assist future surveyors in similar environments.

#### Detecting Community-Level Ethnic Variation through Classic Vernal Style Rock Art

Victoria Ramirez, Utah State University

Northeastern Utah's Uinta Basin was the scene for the northernmost extension of maize agriculture in western North America. The foraging-farming transition there involved the formation of numerous Fremont farming communities, each of which had unique and impressive rock art galleries collectively referred to as the Classic Vernal style. Recent archaeological studies suggest these Fremont communities were composed of two linguistically and ethnically distinct groups who migrated to the area from the Four-Corners region ca. AD 300, bringing maize agriculture with them. This hypothesis implies that ethnically distinct communities created the Classic Vernal style rock art seen in the Uinta Basin. My graduate thesis research tests whether significant differences in local rock art design supports a hypothesis of community-level ethnic variation among the Uinta Fremont.

## Abstracts

### Saturday Morning: Vandalism in Archaeology Symposium

#### **Intentional or Inadvertent: Impacts of Visitation at River House in Southeastern Utah**

Jason Chuipka, Woods Canyon Archaeological Consultants, Inc.

Vandalism is most simply defined as the deliberate damage to property. There are many examples of activities that meet this definition at archaeological sites in Utah. It may be collecting of artifacts, pushing over walls, or graffiti. The damage caused by increased and haphazard visitation is also a form of vandalism in that it is the choice of visitors to enter fragile cliff dwellings or hike through a midden. Further, many Native Americans consider archaeological sites as monuments that commemorate the lives of their ancestors and damage to sites — whether it is intentional or caused by careless visitation — has a net effect of lasting injury to the site. This paper frames this issue with recent conservation work conducted at River House, an Ancestral Puebloan cliff dwelling along the San Juan River in southeastern Utah.

#### **Recent Investigations and Site Preservation efforts in Washington County**

Greg Woodall, Volunteer Archaeology

This will be a short presentation on recent site preservation efforts in Washington County including a SHPO funded inventory of sites in St George to guide City projects, proposals for educational Archaeology Parks in Hurricane and St George as a way to preserve large sites, a proposed Archaeology Ordinance for St George, and a Hurricane City Ordinance for site protection. Additionally, findings from volunteer excavations on a large hilltop site in St George that show the complexity and re-use of locations in the "Virgin Branch" area will be discussed, along with the results of a recent test case visitation of the site by burial dogs from the Institute for Canine Forensics that showed locations of known and likely 900 year old burials, as well as thoughts on the 45th anniversary of the first "Western Anasazi Workshop" in Cedar City.

#### **The Effect of Moral and Threat Appeals on Reducing Depreciative Behaviors at Rock Art Sites**

Matthew Podolinksy, State Historic Preservation Office/University of Utah PRT Department

Depreciative behaviors are unintentional actions by visitors that damage the resource or impact the experiences of others. Rock art in particular is highly susceptible to these types of behaviors and the damage may be permanent. As visitation to cultural sites, including rock art locations, increases, the opportunity for depreciative behavior likewise increases. This study designed, installed, and assessed the effectiveness of a moral-appeal message using the Norm Activation Theory of Prosocial Behavior (Schwartz, 1977), the current Bureau of Land Management (BLM) threat-appeal message, and a no-message control at reducing depreciative behaviors at rock art sites. This research resulted in a significant decrease in depreciative behavior, specifically touching, when the moral-appeal message was installed. Surprisingly, this study found that the BLM threat-appeal message led to an increase in depreciative behaviors as compared to no-message control suggesting that current land management agencies should reevaluate their indirect management approach to protect remote rock art sites.

#### **How can we be better stewards of history in our reporting?**

Maisie Schwartz, Logan Simpson Design

Stewardship is an important concept in archaeology. We often consider stewardship in the context of archaeological fieldwork, but how can we be better stewards of history in our reporting? Specifically, how can we decolonize language and broaden inclusivity within our cultural resources inventory reports so they accurately reflect history and tell the whole story of the places in which we are working? Here, I discuss 2021 SAA guidance on reporting language, reflect on my own past and present reporting research, and put forth ideas as to how to better our stewardship of history in future reporting efforts.

## Abstracts

### Saturday Morning: Vandalism in Archaeology Symposium

#### Protecting the Past: Archaeologist's Edition

Brian Storm, Bureau of Land Management (Kanab Field Office), and Elizabeth Hora-Cook, Utah State Historic Preservation Office

Two archaeologists working for different agencies with different missions at different ends of the state discuss what they've been doing over the past few years as it relates to public archaeology and vandalism. Specifically, how to protect archaeological sites both at the local and statewide levels from the hazards posed by increased visitation and interest in Utah's backcountry. We want to take a moment to show some examples of the challenges we face and how we are overcoming them and offer a "toolkit" we can use moving forward to Stop Archaeological Vandalism.

#### The Utah Site Stewardship Program

Ian Wright, Utah State Historic Preservation Office

### Saturday Morning: General Paper Session

#### Athapaskan Social Imagery of the Uinta Basin, Interpreted Through Ethnographic Analogy

Carol Patterson, Urraca Archaeology

This presentation demonstrates the continuity of Athapaskan culture, through their iconography depicted in petroglyphs of the Uintah Basin. Archaeologists have debated the Avonlea II projectiles (A.D.0-750), Fremont grey ware pottery and pit house design as supporting evidence of Athapaskan presence but have never compared the rock art with Athabaskan ethnography. Karl Schlesier, ed. 1994. Plains Indians, A.D. 500-1500; postulated the Uinta Fremont were antecedent to the Jicarilla Apache. So, following up on his suggestion I spent two years studying Apache ethnography and the petroglyphs of the Uinta Basin. Indeed, they do represent images specific only to the Jicarilla Apache, ruling out other Apachean bands, and non-Athabaskan language groups. This presentation is the first of a 3 part series, and only covers the Creation Beings (Hactcin) and spirit dancers (Gaans), Ancestral Man and Woman, and the Hero Twins portrayed on the walls in Cub Creek, and surrounding drainages. Historic photographs of dress attire, basketry, headdresses and Gaan ceremonies show identical iconography with images found at the sample sites.

#### Archaeological Documentation of Rock Imagery Locations in Central Utah

Tina Hart, Logan Simpson Design, Inc.

In 2020, the Utah Rock Art Research Association, submitted to the Utah State Historic Preservation Office, GPS point data obtained by their membership of rock imagery locations across Utah. Many of these locations have not been documented to modern standards by professional archaeologists. With increasing visibility due to social media and increased visitation to public and State lands, there is a need to document these important cultural resources so that they may be managed for the benefit of the public. The Utah SHPO contracted with Logan Simpson to conduct targeted archaeological site documentation at rock imagery locations on various land jurisdictions in central Utah. The project goals were to obtain baseline information of rock imagery sites to assist with management and interpretive efforts, prepare public products to increase awareness about fragile rock imagery, and incorporate volunteers into the project. This presentation summarizes the results of this project.

## Abstracts

### Saturday Morning: General Paper Session

#### **Identifying Water Availability with Maize Phytoliths in Range Creek Canyon, Utah**

Brendan Ermish and Shannon Boomgarden, Logan Simpson Design, Inc.

In arid and semi-arid regions, systems of water management and irrigation are crucial for successful crop production, and therefore provide valuable information regarding human behavior and the environmental constraints under which they operated. Unfortunately, structural evidence of irrigation can be difficult to locate, prompting various studies to evaluate the utility of phytolith analysis as a means of identifying past water availability. Evidence suggests the ratio of long-cell to short-cell phytoliths is an effective measure of relative water availability in some important economic crops such as wheat, barley, and sorghum.

Expanding on this, the present research applies a similar method of analysis to determine the utility of maize (*Zea mays*) phytoliths for understanding past water availability. Results suggest the ratio of long-cell to short-cell phytoliths in maize increases as a function of increased water availability. The statistical models indicate maize phytoliths are an effective tool for inferring past water availability.

#### **A Journey-Through Time: Excavations at Late Archaic, Far Western Pueblo, and Post-Puebloan Sites Near Grapevine Gap in Washington City, Southwestern Utah.**

Heidi Roberts and Keith Hardin, HRA Inc., Conservation Archaeology

In the fall of 2018 HRA Inc., Conservation Archaeology excavated four archaeological sites located just east of I-15 in Washington City, Utah. The research was funded by the State of Utah, School and Institutional Trust Lands Administration to mitigate impacts related to a residential development. This paper contrasts four habitations that were occupied during the Late Archaic, Basketmaker II, Pueblo I, and Late Historic periods. The shift from a hunting/gathering economy to one based on agricultural is particularly pronounced in architectural styles and artifact assemblages. One important finding is that OSL dates processed on three styles of decorated Tusayan White Ware, Virgin Series, including Mesquite, Washington, and St. George Black-on-Gray pottery all collected from the floor of a single room returned similar dates. These ranges are consistent with the stratigraphic evidence and radiocarbon dates that indicate the structure was occupied between AD 766 and 898 (2-sigma calib., 89% probability).

## UPAC 2022 Field Trip Lion's Mouth Cave

~1.5 Hours Round trip

1/4 mile hike

Located west of Cedar City, Lion's Mouth Cave is reached by taking Highway 56 west to Pinto road. Travel about 1.2 miles on Pinto road until there is a pullout on the right hand side of the road. A trail with signs goes up to the cave.

"Lion's Mouth pictographs consist of several long painted panels within an overhanging cave. The figures are painted with reddish and yellow ochre hues. There is a small anthropomorphic figure, a snake like figure, and other simple drawings. According to one of the Cedar City residents, the figures were not originally colored as they are now. The color was the result of someone deciding to "improve" the looks, which we would call vandalism. Unfortunately, the coloring masked out intricate tick marks carved into the rock along the long rope like structure. The marks were probably counting marks prevalent at nearby locations such as those as Parowan Gap." – ScienceViews.com