

# 71<sup>st</sup> Northwest Anthropological Conference



March 28-31, 2018 | Boise, Idaho | Riverside Hotel



## 2018 Northwest Anthropological Conference Sponsors

Applied Archaeological Research, Inc.  
 Archaeological and Historical Services  
 Archaeological Investigations Northwest, Inc.  
 Architectural History and Archaeology!, LLC  
 ARH Archaeology and History  
 Association of Oregon Archaeologists  
 Bionomics Environmental, Inc.  
 Boise State University  
 Cannon Heritage Consultants, Inc.  
 Cardno, Inc.  
 Central Washington University  
 Cultural Resource Consultants, LLC  
 DirectAMS  
 Environmental Science Associates  
 Eppard Vision  
 Equinox Research and Consulting International, Inc.  
 Harris Environmental Group, Inc.  
 Idaho Archaeological Society  
 Idaho State Historical Society  
 Journal of Northwest Anthropology  
 Lower Columbia Research and Archaeology, LLC  
 North Wind Resource Consulting, LLC  
 Perteet, Inc.  
 SFU Archaeology - Heritage Resource Management  
 Transect Films  
 Willamette Cultural Resources Associates, LTD



# ***Program***

71<sup>st</sup> Annual Meeting  
Northwest Anthropological Association  
March 28-31, 2018

The Riverside Hotel  
2900 W. Chinden Blvd., Boise Idaho 83714

## **Hosts**

Boise State University Department of Anthropology  
Idaho State Historical Society

## **Local Arrangements Committee**

Pei-Lin Yu, Mark Plew and Mary Ann Davis, Co-Chairs; Christopher Noll,  
Beth Burgess, Jenifer Huang, Alex Kroll, Susanna Osgood

## **Northwest Anthropological Association Officers**

Lee Sappington, President  
James Bard, Vice-President  
Jessica Curteman, Secretary  
Laura Putsche, Treasurer

## **Conference Sponsors**

Applied Archaeological Research, Archaeological and Historical Services, Archaeological Investigations Northwest, Inc., Architectural History and Archaeology, Association of Oregon Archaeology, Bionomics Environmental, Inc., Cannon Heritage Consultants, Inc. Cardno, Inc., Cultural Resource Consultants, LLC, Environmental Science Associates, Eppard Vision Equinox Research and Consulting, Harris Environmental Group, Inc., Idaho Archaeological Society Idaho State Historical Society, Lower Columbia Research and Archaeology LLC, North Wind Research Consulting LLC, Perteet, Inc., SFU Archaeology-Heritage Resource Management, Transect Films, Willamette Cultural Resources, LTD, Journal of Northwest Anthropology, Boise State University.

## **Volunteers**

The organizing committee wish to thank the numerous volunteers who provided invaluable assistance in helping arrange and support conferences activities. Without your support we would be unable to host NWAC. We deeply appreciate your efforts!

# Conference Events and Meetings

**Conference Registration** (Conference registration is required for all conference events)

Wednesday – March 28, 2018	5:00 p.m. – 8:00 p.m.
Thursday – March 29, 2018	7:30 a.m. – continues throughout the day
Friday – March 30, 2018	7:30 a.m. – continues throughout the day

(The registration desk is also the information desk, the lost and found and the message center).

**Exhibits Room** is located in the Aspen Room, First Floor. Exhibitors can access it beginning Weds. at 5 p.m. and again Thursday morning at 7:30 a.m.

---

## Meetings:

Association of Oregon Archaeologists (AOA), Laurel Room  
Thursday, March 29, 2018 5:00 – 6:30 p.m.

NWAC Business Meeting Lunch Clearwater Room  
Friday, March 30, 2018 12:00 – 1:15 p.m.

Association of Washington Archaeologists (AWA), Juniper Room  
Friday, March 30, 2018 5:00 – 6:30 p.m.



# Schedule At A Glance

## Wednesday – March 28, 2018

Opening Reception      5:00 – 8:00 p.m. Snacks provided, cash bar  
Riverside Hotel Lobby

## Thursday – March 29, 2018

Plenary Welcoming Ceremony with Ted Howard, Shoshone-Paiute Tribes  
8:30 a.m., Ponderosa Room

Sessions Begin 9:00 a.m. – see program for specific room assignments

NWAC Ice Cream Social      5:00 – 6:00 p.m., Fireside Foyer

Walking Tour of Historic Downtown Boise 5:30 p.m.- 7:00 p.m.

Meets at hotel lobby, details to follow.

AWA Pub Crawl      6:00 p.m. – ?

This is a ticketed event and fundraiser for the AWA. Meets in lobby, details to follow.

## Friday – March 30, 2018

Sessions Begin 8:30 a.m. (NOTE earlier time)

Banquet Reception      6:00 – 7:00 p.m. Snacks provided and cash bar

NWAC Banquet      7:00 – 9:00 p.m. --Featuring AWA Student Awards, Student Paper  
Hotel Ballroom      Competition Awards, Special Banquet Presentation  
on Yellowstone, Dance Lessons, and a Generally  
Great Time!

## Saturday – March 31, 2018

Field Trip to Celebration Park. Meet in hotel lobby at 8:15 a.m. See Field Trips page for details.



To Whitewater Park,  
Esther Simplot Park  
Veterans Park  
0.5 - 1.0 ml.



# THE RIVERSIDE HOTEL

MEET • FEAST • PLAY • DREAM



To Albertsons Park,  
Ann Morrison Park,  
Museums, Zoo,  
Boise State  
1.0 - 1.5 ml.

### GUEST ROOMS

- Main Level**
- 102 - 127
- 301 - 385
- 500 - 529
- Second Floor**
- 202 - 230
- 401 - 485
- 601 - 629
- 705 - 726

- Elevator
- Restrooms
- Ice & Soda Machines
- Pet Area





# 71<sup>st</sup> Northwest Anthropological Conference

## *About those Field Trips*

➤ **Downtown Walking Trip, Thursday March 29<sup>th</sup>: 5:30 p.m.**

Meets at hotel lobby and proceeds downtown. Transportation arrangements to be announced.

➤ **Celebration Park Trip, Saturday March 31<sup>st</sup>: 8:30 a.m.-approx. 1:00 p.m., meet in hotel lobby at 8:15 a.m. NOTE NEW TIME!**

Participants in the Saturday, March 31 field trip to Celebration Park should meet outside the front of the host hotel by 8:15 a.m. for a scheduled 8:30 a.m. departure. If you missed the cut-off for signing up online for this field visit, you are welcome to ‘caravan’ out with the main group.

For those who registered online for this trip: transportation is being provided by Boise State University in several 12-person passenger vans and a large SUV (drivers are also provided by BSU). *If you change your mind about going on this trip please inform Mark Plew, [mplew@boisestate.edu](mailto:mplew@boisestate.edu), so we can adjust transportation.*

The drive to this unique archaeological park is approximately one hour. Participants will be on-site at the park for several hours, with return to the hotel by 1 p.m. Water is available at the site, and the park recommends you bring a bottle of your own to refill. Because the Idaho weather may be variable, participants are encouraged to come prepared with clothing appropriate for rain or shine, hot or cold, as well as hiking boots, snacks, sunscreen, and a hat that provides sun protection. Hiking sticks and cameras are also recommended.

Park staff will be show-casing “DStretch”, a tool for the digital enhancement of rock art, and will have a limited number of devices on-site for visitors to use. The Park encourages people with great interest in DStretch to visit their cell phone app store to purchase the DStretch app for personal use on your cellphone (\$20). Please purchase and download the app prior to field trip departure as the Park has very limited wifi.

Please join us for a  
Special Banquet Presentation

# Before Yellowstone: A Journey

Dr Douglas MacDonald

Since 1872, Euro-American visitors have flocked to Yellowstone National Park to gaze in awe at its dramatic geysers, stunning mountains, and impressive wildlife. Yet more than a century of archaeological research shows that that this beautiful landscape has a long history of Native American cultural use and value. Here, people have hunted bison and bighorn sheep, fished for cutthroat trout, and gathered bitterroot and camas bulbs here for at least 11,000 years. In this special NWAC event, Dr. MacDonald tells the story of new archaeological discoveries from nearly 2,000 sites, and describes and explains what we can learn from these ancient cultural places.

Please sign up to the Friday Night Banquet to join us for this presentation.



Art by Eric Carlson

## SESSIONS

Please Note: Sessions are given in chronological order, not by session type.

### Wednesday evening, March 28, 2018

5-8 pm. **Registration and Reception**, Riverside Hotel Lobby

### Thursday morning, March 29, 2018

**Session T-1. The Mowitch Project- Traditional and Contemporary Methods of Hunting and Use Confederated Tribes of the Colville Reservation** (Symposium and Panel).

Room: **Ponderosa**

Organizers: **Roderick Donald, Adam N. Rorabaugh, and Arrow Coyote**

Chair: **Arrow Coyote**

#### **Session Abstract:**

Mowitch means “deer” in the Sanpoil language, and this project entails documenting through film, the steps involved in deer procurement and processing: hunting, gutting, skinning, butchering, and tanning. This symposium/panel is part of the production process whereby the Mowitch film makers will present portions of the film and have a panel discussion with the audience. The results will help focus the narration portion of the project that will be integrated into the final production of the film. This video will serve to educate and preserve the traditional/contemporary methods of deer procurement and hide processing.

Meets 9:00-10:15 a.m.

- 9:00 The Mowitch Project – Traditional/Contemporary Methods of Hunting and Use: Introduction and Film Editing.  
Travis Adams
- 9:15 The Mowitch Project – Traditional/Contemporary Methods of Hunting and Use: Hunting and Processing Changes Through Time.  
Mitchell Peone
- 9:30 The Mowitch Project – Traditional/Contemporary Methods of Hunting and Use: The Use of Deer Meat Within Our Teachings.  
Sylvia Tatshama Peasley
- 9:45 The Mowitch Project- Traditional/Contemporary Methods of Hunting and Use: Showing You how to Brain Tan a Deer Hide.  
Brian Monaghan
- 10:00 The Mowitch Project- Panel Discussion.  
Panelists: Arrow Coyote, Travis Adams, Sylvia Tatshama Peasley, Brian Monaghan



**Session T-2. Association for Washington Archaeology (AWA) Advocacy Workshop-Get Informed and Get Involved: How To Communicate With Your Elected/Appointed Officials About Cultural Resources**  
(Workshop)

Room: **Laurel**

Moderator/Presenter: **Mary Rossi.**

**Session Abstract:**

Between bidding for contracts, conducting surveys and excavations, analyzing collections, and writing reports, who has time for advocacy? Many among us may have hoped that someone else would take care of this task. However, long-simmering and now more recent, new attacks on the current system of cultural resource protections have elevated the critical need for all of us to communicate effectively and often to our elected/appointed officials at all levels of government (federal, state, local) about cultural resources and the benefits of their protection.

Given the current climate, are you ready to advocate? Do you need some guidance or some refreshers? Are you attending the SAA meetings in DC and need help preparing to storm Capitol Hill? If you answered “yes” to any of these, then this AWA Workshop is for you!

Join our experienced and enthusiastic panel for the following discussion:

- 1) What’s happening? - tips for learning about/tracking the latest news about policies/legislation that will impact cultural resources;
- 2) What do I do about it? - tips for communicating to elected/appointed officials (i.e. the decision makers) in person, via telephone, or in writing;
- 3) What else can I do? - strategies for individual engagement in other types of advocacy efforts;
- 4) An open discussion with attendees about issues and ideas for more effective advocacy.

We would also like to compile a list of those attending the SAA meetings in DC in April who would be interested in visiting their elected officials on Capitol Hill. If you love working to protect cultural resources, you can’t put advocacy off any longer. Let’s all get informed and get involved!

Meets 9:00-10:30 a.m.

**Workshop panelists:**

Mary Rossi-Program Director for APT-Applied Preservation Technologies, a program of the nonprofit Eppard Vision, moderator/panelist

Allyson Brooks-Washington State Historic Preservation Officer (SHPO) and Director of the WA State Dept. of Archaeology and Historic Preservation (DAHP), panelist

Brian Durkin-President of the Archaeological Law & Policy (ALP) Center, panelist

Kathryn Harris-Society for American Archaeology (SAA) Washington State Government Affairs Network State Representative (GANSR), panelist

Anna Neuzil, Society for American Archaeology (SAA) Oregon State Government Affairs Network State Representative (GANSR), panelist

**Session T-3. The Context of a Holocene Thermal Climactic Native American Skeleton Discovered in the Upland Yakima Basalt Folds Area of South-Central Washington State.** (Symposium)

Room: **Clearwater**

Chair: **David G. Rice**

**Session Abstract:**

In early May 1982 a pre-NAGPRA inadvertent discovery of a deeply buried Native American skeleton was discovered during the Golden Blade Exercise training maneuver by the U.S. Army near the Yakima Training Center, Washington. Army personnel consulted the Wanapum Indian Community regarding the circumstances of the discovery, and agreed to an Army effort to recover the grave and document its contents within two days, and arrange for reburial of the remains. On August 10, 1982, the remains were reburied by Yakama and Wanapum Indian tribes at an agreed upon location. No report of these finds, their age, setting or environmental context was ever written. The purpose of this session is intended to organize this material for a technical report to share our surprising findings.

The burial was protected by a rock cairn. It covered an extended adult male skeleton with a number of age-related anomalies. Nearly all bones were represented and in good condition, due in part to the depth of the subsequent geological deposits. The body was originally dug into a natural bed of Mt. Mazama volcanic tephra, which also covered and encapsulated the burial fill and rock cairn, suggesting a date from soon after its eruption, 6850 calendar years B.P. – at the climax of the Holocene Thermal Maximum. The 2.5 meter depth of this grave deposit, and its stratigraphy may provide supporting new information about Columbia Basin paleo-climate during and after soon after the Holocene Thermal Optimum.

Meets 9:00-9:45 a.m.

- 9:00 The Curious Old Man (Cold Creek Man) and his Early Stone Beads in the upland Yakima Basalt Folds  
Dave Munsell
- 9:15 The Environmental Setting and Geochronology of a Curious Old Man buried in the upland Yakima Basalt Folds.  
David G. Rice
- 9:30 Some comments regarding the Osteological Remains of the Curious Old Man buried in the upland Yakima Basalt Folds.  
Lourdes Henebry-DeLeon, Discussant

**Session T-4. Pacific Northwest Consortium for Geophysics in Archaeology and CRM: “Where are we? Where are we headed?”** (Panel).

Room: **Liberty**

Organizers: **Rory Becker, Colin Grier, Steven Hackenberger, Lee Liberty, Lew Somers**

**Session Abstract:**

An informal and open discussion will be led by five practitioners regarding applications of geophysical survey methods in archaeology as they serve three purposes: research, teaching and/or applications. Research objectives include technological innovation, investigating site formation, feature definition. Teaching reaches students, managers, and experts. Applications include developers, agencies, and tribal programs with interest in cost-

effective discovery, sampling for evaluation and data recovery, and non-intrusive survey methods. Interested attendees will be asked to share perspectives and experiences. The discussion is part of a call for greater collaboration in the development and training in geophysical methods for archaeological practice in the Pacific Northwest.

Meets 9:00-10:00 a.m.

**Discussion Leaders:**

Rory Becker – Eastern Washington U.; Colin Grier – Washington State U.; Steven Hackenberger – Central Washington U.; Lee Liberty, Boise State U.; Lew Somers, Geomagnetism and Archaeophysics.

**Session T-5. General Poster Session: Archaeological Management and Settlement**

Room: **Cinnabar**

Meets 9:00-11:00 a.m.

**Posters:**

1. Who Controls the Narrative? A Critical Evaluation of Occupational Affiliation and Gender in North American Archaeology Publishing.  
Tiffany J. Fulkerson and Shannon Tushingham
2. Modeling Shoreline Site Survival under Predicted Climate Change in the Puget Sound  
Stephanie Jolivette and Sarah R. Hibdon
3. Cultivation of the Backwater: Weirs as a Window into Historical Ecology and Ecosystem Engineering in the Lower Columbia  
Michelle North and Virginia L. Butler
4. Making Better Guesses: Archaeological Modeling for Adaptive Land Management in the Teanaway  
Sara Palmer and Thomas Laxson
5. Distribution Analyses at the Late Paleoindian Sentinel Gap Site: Toward an Understanding of Site Patterning and Social Structure  
Julia Furlong, Jerry Galm, and Stan Gough
6. Spatial Analysis of Prehistoric Land Use Practices at Village Site 45YA153, Middle Columbia River  
Julia Furlong and Sean Stcherbinine
7. Early to Middle Holocene Occupations of Long Valley, Idaho: A Synthesis of Private Collections and Surface Finds from an Erosional Context  
Lucille Harris and Joe Bergstrom
8. LiDAR Predictive Modeling of Kalapuya Mound Sites in the Calapooia Watershed, Oregon  
Tia Cody and Shelby Anderson
9. 10-OE-2256; The Shoofly Rock Alignment Complex  
Joseph Hall-Holton



**Session T-6. General Session: Bioanthropology and Lithics. (Symposium)**

Room: **Opal**

Session Chairs: **Akiko Nosaka, Scott Thomas**

Meets 10:00 a.m.-12:00 p.m.

- 10:00 No Wizardry in These Bones: tips and tricks for working with, and as, an osteologist  
Tom Ostrander
- 10:15 Fertility Trends among First-generation Japanese Immigrant Women in Seattle  
Akiko Nosaka and Donna L. Leonetti
- 10:30 Male care and life history traits among primates: a comparative analysis  
Alexander Sheldon and Kermyt G. Anderson
- 10:45 Reflections in Stone Tools: A Life Story of Don E. Crabtree  
Yuumi Danner
- 11:00 Student Flintknappers: New Tool Makers Help Reveal Old Technology  
Marci Monaco
- 11:15 Percussion Blade Cores and Blades: A Late Prehistoric Lithic Tradition in Southeastern Oregon  
Scott Thomas
- 11:30 Dating the Western Stemmed Tradition in the Northern Great Basin  
Dennis Jenkins and Thomas J. Connolly

**Session T-7a. Nevertheless, She Persisted: Women's Contributions to Pacific Northwest Anthropology. (Symposium)**

Room: **Tamarack**

Organizers: **Alexander Stevenson and Stephenie Kramer**

**Session Abstract:**

Our combined academic and professional histories in Pacific Northwest anthropology are dominated by endeavors (research and compliance) led by women. While the work of women like Erna Gunther, Marian Smith, and Vi Hilbert serve as foundations for research, other women's contributions have often gone unrecognized or undervalued. To our knowledge, there has never been an explicit examination of women's contributions to Pacific Northwest anthropology in the history of practice in the region. This is curious, considering many of the earliest CRM firms in the northwest were started by women, and women hold many influential academic positions at major universities in the region. This session will include papers inspired by, in honor of, about, for, and/or by women and will recognize these contributions to the professional and scientific discipline of Pacific Northwest anthropology as a whole.

Meets 1:30-noon and again in afternoon.

- 10:30 Women in our Midst: Role Models, Mentors, and Leaders in Our Past, Present, and Future.  
Alexander Stevenson
- 10:45 Roar: A Brief History of Feminist Archaeology in Pacific Northwest CRM  
Kelly Bush
- 11:00 I been in the right place (and it must have been the right time).  
Sarah Campbell
- 11:15 Standing on Their Shoulders: Persistent Takeaways from Female Role Models.  
Paula Johnson
- 11:30 Considering Women's Contributions to NW Anthropology in Light of the Jungian Anima Archetype within  
a Man's Mind.  
David G. Rice
- 11:45 Taking On Dominant Narratives: A Paper in Honor of the Work of Dr. Julie Stein.  
Amanda Taylor and Stephanie Jolivette

*This session breaks for lunch; reconvenes in Tamarack Room at 1 pm.*

### Thursday afternoon, March 29, 2018

#### **Session T-7b. Nevertheless, She Persisted: Women's Contributions to Pacific Northwest Anthropology.** (Symposium)

Room: **Tamarack**

Organizers: **Alexander Stevenson and Stephenie Kramer**

*This session continues from the morning.*

- 1:00 Do Not Walk the Path Alone: Navigating a Complex Professional Hierarchy with a Strong Mentor.  
Stacy L. Bumback and Michelle Yellin
- 1:15 Kia Slawdee (Grandmother and Woman).  
Rhonda Foster
- 1:30 Roar - A Brief History of Feminist Archaeology in Pacific Northwest CRM  
Kelly Bush
- 1:45 Discussion.  
Discussants: Virginia Butler, Lorelea Hudson, and Michelle North.

**Session T-8. Colville Confederated Tribes History/Archaeology Program General Session: Perspectives on Traditions and Resources.** (Symposium)

Room: **Ponderosa**

Organizers: **A Roderick Donald and Adam N. Rorabaugh**

**Session Abstract:**

For members of the Confederated Tribes of the Colville Reservation Colville Confederated Tribes (CCT)] there is continuity between past and present. The presenters in this symposium demonstrate the efforts of the CCT History/Archaeology (CCT H/A) program in preserving the traditional practices of the constituent tribes of the CCT. CCT H/A works cooperatively with federal, state, other tribal and local agencies to ensure our history is not forgotten or diminished. This session also depicts the importance of protecting tribal rights and sovereignty within the context of professional cultural resource management.

Meets 1:00-2:15 p.m.

- 1:00 A Brief Introduction to the Confederated Tribes of the Colville Reservation's History and Archaeology Program.  
Roderick Donald
- 1:15 Hunting Traditions in the Upper Columbia River.  
Arrow Coyote
- 1:30 Plants, People and Places: Mapping Historic Cultural Plants and Populations.  
Pendleton Moses
- 1:45 Results of the 2016-2017 Net Pens (45OK247) Excavations.  
Adam N. Rorabaugh,
- 2:00 Colville Tribes Engaged in the Basin: FY2017 in retrospect.  
Robert Sloma

**Session T-9. Poster Session: Pacific Northwest Consortium for Geophysics in Archaeology and CRM: "Where are we? Where are we headed?"** (Posters).

Room: **Cinnabar**

**Session Abstract:**

Posters will feature several case studies that represent applications of geophysical survey methods in archaeology as they serve three purposes: research, teaching and/or applications. Case studies involve combinations of these purposes. Research objectives include technological innovation, investigating site formation, feature definition. Teaching reaches students, managers, and experts. Applications include developers, agencies, and tribal programs with interest in cost-effective discovery, sampling for evaluation and data recovery, and non-intrusive survey methods. The posters are part of a call for greater collaboration in the development and training in geophysical methods for archaeological practice in the Pacific Northwest.

Meets 1:00-3:00 p.m.



**Posters:**

1. Monochrome Ultraviolet Imaging in Archaeological Analysis  
Rory Becker
2. Identifying Plankhouse Architecture with Geophysics: What are our prospects?  
Colin Grier
3. GPR and Cadaver Dogs to Close a Nampa P.D. Cold Case  
Matthew R Von Lintig, Tate Meehan, Thomas D Mikesell, Gabriel Gribler, Zongbo Xu, Thomas Harper, Megan Mason
4. Archaeogeophysics in WA - What is it Good For?  
Kendra Maroney
5. Ground Penetrating Radar Archaeological Demonstration: Imaging Buried Features Exposed in Construction Trenches.  
Steven Hackenberger, James McLean, and Jon Shellenberger
6. Feature Driven Archaeological Interpretation of Multi Method Geophysical Surveys  
Lew Somers

**Session T-10. Ethnographic Research with Pacific Northwest Tribes. (Panel)**

Room: **Clearwater**

Organizer: **Donald Shannon**

**Session Abstract:**

This session will highlight the importance of ethnographic research with Tribes in the Pacific Northwest, and to show how the Federal compliance process can generate ethnographic work. Panelists will include Federal Agencies who fund ethnographic research, academicians who work with regional Tribes, and representatives from Tribal cultural resource programs. We will discuss some of the differences between academically driven ethnography and compliance ethnography, both through consultants and research done by Tribes. Compliance ethnographic work highlights the living culture of Tribes in the Pacific Northwest, exemplified by issues such as: cultural adaptation to a new riverine ecology; restricted use of traditional homelands to hunt and gather culturally significant plants; the complex dynamics of access to salmon and salmon fishing; and many more. The importance of ethnographic research, specifically related to Traditional Cultural Properties, is increasingly acknowledged in management documents generated by land-managing agencies.

Meets 1:30-2:30 p.m.

Panelists: John Pouley, OR State Historic Preservation Office, Shawn Steinmetz, Breice Edwards, Grand Ronde Tribes, Christina Phillips, University of Idaho, Scott Williams from Washington State DOT, and Kristen Martine and Dave Johnson, Bureau of Land Management.

**Session T-11. Shifting Perspectives and Future Directions for Northwest Coast Archaeology: A Symposium by Washington State University Graduate Students.** (Symposium)

Room: **Juniper**

Organizer: **James Brown**

**Session Abstract:**

It is useful to ongoing archaeological inquiry that different trajectories of thought and research be used to interpret and understand the past. The drift between humanistic and scientific approaches in of itself generates new data, research questions and tools useful to archaeology. This session presents the views of a new generation of scholars emerging in the context of a sea of changing theory and working to define new questions and directions. These papers discuss a diverse array of subjects pertaining to the Northwest Coast region, including: modern cultural resources, settlement patterns, sociopolitical organization, labor, subsistence, and seasonal land-use. Further, these papers build upon new and previously published datasets. The research presented in this symposium provide additional insights to the pre-contact history of the Northwest Coast. Through the papers presented in this session we contribute to the archaeology of the Northwest Coast and the rethinking of topics that have been the subject of archaeological inquiry for the last 30-40 years.

Meets 2:30 -5:00 p.m.

- 2:00 Searching for Diversity: A Detailed Zooarchaeological Analysis of Birds from San Juan Islands sites  
Emily L. Whistler
- 2:15 Re-Evaluating Bulb Size as a Proxy for Camas (*Camassia* ssp.) Management in the Willamette Valley of Oregon.  
Molly Carney and Stephenie Kramer
- 2:30 Investigating Feasting in a Precontact Coast Salish House: Zooarchaeological and Paleobotanical Analysis of a Potential Feasting Feature at DgRv-006, Galiano Island, BC  
Samantha Lee Fulgham and Colin Grier
- 2:45 Washed Away  
Robert H. Gargett and Kate A. Shantry
- 3:00 Seasonal Sociopolitical Reversals and the Reinforcement of Autonomy and Fluidity among the Coast Salish  
Emily Helmer
- 3:15 Settlement Change and Political Organization of the San Juan Islands for the Past 3000 Years.  
James W. Brown and Galen Miller-Atkins
- 3:30 Politics on the Landscape: Evaluating Settlement Organization in the San Juan Islands  
Galen Miller-Atkins and James W. Brown
- 3:45 The Role of Labor in the Creation of Northwest Coast Landscapes.  
Nathaniel James
- 4:00 Discussion.  
Colin Grier, Discussant

**Session T-12: General Session: Culture and Society (Symposium)**

Room: **Laurel**

Session Chairs: **Shareena Parks, Thomas J. Connolly**

Meets 1:30-5:00 p.m.

- 1:30 Re-Awakening Ancient Salish Sea Basketry: Applying Generationally-Linked Archaeology  
Dale Croes and Ed Carriere
- 2:00 Re-Awakening Salish Sea Basketry: Continuing Research of the Biderbost Wet-Site Basketry Materials  
Elizabeth Hawes
- 2:15 Refusing to dwell on the past: The story of An Afghan Refugee  
Logan Amstadter
- 2:30 Inadvertent Discovery of Human Remains on the Siletz Bayfront, Lincoln City, Oregon: A Case Study on  
Siletz Tribal History  
Thomas J Connolly, Robert Kentta, and Jeanne McLaughlin
- 2:45 Critical Review of Imagery of NWC Coast Salish Past Lifeways  
Bea Franke
- 3:00 Paddling as methodology  
Danielle Gendron
- 3:15 Debunking the “sh\*\*hole” Epithet: The Conditions and Contributions of African Immigrants in the United  
States.  
Kassahun Kebede
- 3:30 Cultural and Social Biases in Educational Access  
Hannah MacIntyre
- 3:45 Imagining Truth, History and Reality of the Vestige  
Kelsey Maloy
- 4:00 Cultural Relativism and Moral Absolutism: Philosophers and Anthropology  
Shareena Parks
- 4:15 Finding Common Ground: Navigating Ideological Diversity and Coexistence in Northern Idaho’s  
Alternative Food Movement  
Alleah Schweitzer
- 4:30 Coffee Talk: High-End Coffee in the Modern World  
Julia Smith
- 4:45 Origins of the Modern Concept of Race  
Donald E. Tyler

**Session T-13: Oregon Archaeology and the Legacy of Dr. Richard (Dick) Ross.** (Symposium)

Room: **North Star**

Organizer: **Dennis Griffin**

**Session Abstract:**

For over three decades, Dick Ross served as a professor of anthropology/archaeology at Oregon State University where he helped to teach his students about human diversity and the role of anthropology and archaeological excavation skills and analysis, while not losing sight of the people and cultures one works with. Dick was one of the founders of the Association of Oregon Archaeologists and served as its first President. Dick's early years at OSU focused on investigating sites along Oregon's coast before expanding his areas of interest inland along some of the state's major rivers to the Willamette Valley. With the rise of CRM and the expansion of archaeology programs throughout the Northwest, Dick recognized early the importance of archaeologists consulting and collaborating with Native American Tribes and he helped to establish a series of Cultural Resource Conferences that provided a forum for archaeologists and tribes to learn to work together. This session features presentations by a small sample of his colleagues that highlight topics that were important to Dick; be it research in areas of the state where Dick spent many years investigating, the broadening in recognition of archaeology beyond artifacts to include the importance of traditional knowledge, efforts leading to legislative changes in the protection of archaeological sites and burials, as well as the continued importance of tribal consultation.

Meets 2:00-3:45 p.m.

- 2:00 Dr. Richard (Dick) Ross – Reflections on Forty Years in Oregon Archaeology  
Dennis Griffin
- 2:15 The Legacy of Indiana Ross.  
Esther Stutzman
- 2:30 Dick Ross and the Oregon Native American Burial Law  
David Brauner
- 2:45 Variations in Late Prehistoric/Proto-Historic Cultural Adaptations between the Na-So-Mah And Miluk Residents of the Coquille River Estuary and the Hanis of the Coos Bay Estuary On The Southern Oregon Coast  
Reg Pullen
- 3:00 Flashback: Pirate Cove – A Reflection on Time at 35LNC7, Depoe Bay, Oregon  
Thomas E. Churchill
- 3:15 45 Years, What a Long Strange Trip  
Ann Bennett Rogers
- 3:30 A History of Consultation between Archaeologists and Native Americans – Communication, Consultation and Collaboration: An Oregon Perspective  
Dennis Griffin

## **Session T-14. General Poster Session: Subsistence and Technological Approaches**

Room: **Cinnabar**

Meets 3:00-5:00 p.m.

### **Posters:**

1. Faunal Analysis of a Sample Unit at the Grissom Site, 45KT301, Central Washington  
Steven Spencer and Patrick Lubinski
2. Faunal Heterogeneity in the Middens of Prince Rupert Harbour  
Raini Johnson
3. What's Cooking in the Late Archaic Kitchen? Features and Subsistence Remains from a Klamath River Village, Siskiyou County, Northern California  
Vickie Clay and William D. Hildebrandt
4. Archaeological Expectations Based Upon Resident Fisheries in the Owyhee River  
Wes Wardle
5. What We Gain When We Document Potential NAGPRA Collections  
Elizabeth Armstrong and Patrick T. McCutcheon
6. The Bertelson Artifact Collection from Old Man House (45KP2): A Central Puget Sound Type Collection  
Dennis Lewarch and Stephanie E. Trudel
7. An Analysis of Lithic Debitage at Site 45WH004  
Sean Fey, Natalie Bankuti, Annalise Muscari
8. Investigating least cost path from raw material sources to Bridge River site (EeR14)  
Emma Vance and Liz Dolinar
9. Data Potential of Archaeological Deposits at Chelan Station (45CH782/783).  
Matt Breidenthal
10. Let's Speed This Up: Testing the Applicability of Machine Learning in Ceramic Trademark Identification  
Ellen Hallingstad and Mitchell Overdick
11. Women's Food Sharing in Siberia: Social Network Analyses by Frequencies of Transfers versus Values and Amounts Given.  
Karen S. Fulk and John P. Ziker



Friday morning, March 30, 2018

**Session F-1. Idaho Archeology Gone MAD: Papers in Honor of Mary Anne Davis.** (Symposium)

Room: **Tamarack**

Organizers: **Susie Osgood, Jorie Clark, Chris Shaver**

**Session abstract:**

Throughout her tenure with the Idaho SHPO, Mary Anne Davis has been a close colleague, supporter, and friend to all who have had anything to do with Idaho archeology, whether it be state or federal agencies, Tribes, or the public. This session is a tribute to Mary Anne's contributions to the field and the memories that we will remember her by.

Meets 8:30 a.m.-12:15 p.m.

- 8:30 Opening Remarks  
Jorie Clark
- 8:45 Givens Hot Springs and Mud Springs: Two Old and Moldy Projects That Should See the Light of Day in an Uncertain Future  
Tom Green
- 9:00 Bone as Fuel: Implications for Hunter-Gatherer Mobility  
Mark Plew and James Eschenbrenner
- 9:15 Recognizing Redundant Data: Preventing Preservation and Saving the Significant  
Kelli Barnes
- 9:30 Work on Historic Fire Lookouts in the Frank Church River of No Return Wilderness  
John Rose
- 9:45 Kerosene Trade on the West Coast  
Steve Lucas
- 10:00 Historical Analysis of Household Goods  
Lilian Bodley
- 10:15 Chemical Analysis of Historical Personal Products  
Meagann Davenport and Ray Von Wandruszka
- 10:30 Chinese Signatures in The Boise Basin: Ongoing Research on Site 10BO357  
Rena Campbell
- 10:45 From Bones to Behavior: Zooarchaeology and Chinese Meat Consumption Patterns in the late 19th Century of an Idaho City Mining Camp  
Chelsea Codling
- 11:00 The Pigments of James Castle  
Lily Loucks

- 11:15 Top Shot: Recreational and Military Firearms of Fort Boise, Idaho  
Nathan May
- 11:30 Archaeological Testing at an 1866 North Idaho Site and Subsequent Potential Activities of Blacksmithing, Hunting, Logging, Cement Making, Homesteading, WWII Training, and Recreation  
Idah Whisenant
- 11:45 MAD Then and MAD Now  
Jorie Clark and Susie Osgood
- 12:00 Closing Remarks from Friends and Colleagues; Awards Presentation.

**Session F-2. Food Culture and Narrative Session. (Symposium)**

Room: **Liberty**

Organizer: **Maureen Battistella**

**Session Abstract:**

Back by popular demand, the NWAC Food Culture and Narrative session brings together four papers showcasing new and important field research in the anthropology of food. Historian Richard Engeman opens the session with a broad overview of Oregon's eating preferences from 1880-1980. Research anthropologist Maureen Flanagan Battistella tells of her part-historical, part-genealogical research surrounding Boise, Idaho community cook books published at the turn of the last century. Family historian Annice Olena Black follows with a case study about preparing food on a wood burning stove, and how a rural Jackson County family's food choices in the 1930s reflected status. To close, linguist Edwin Battistella brings food studies forward to examine ambiguity in food labeling practice and regulation.

Meets 8:30-10:00 a.m.

- 8:30 Opening Remarks
- 8:45 My Grandmother's Cook Book  
Richard H. Engeman
- 9:00 The Baptist Cook Book, Boise, Idaho, 1906  
Maureen Flanagan Battistella
- 9:15 Making Food for a Farm Family in the 1930s: A Case Study.  
Annice Olena Black
- 9:30 Fresh, Free and Natural  
Edwin Battistella
- 9:45 Audience Discussion

**Session F-3. The FCRPS Cultural Resource Program: Impacts from Reservoir Processes and Innovative Approaches to Cultural Resource Preservation in the Columbia River Basin (Symposium)**

Room: **Delamar**

Organizer: **Celia Moret-Ferguson**

**Session Abstract:**

The Federal Columbia River Power System (FCRPS) Cultural Resource Program was formed in 1997 to ensure NHPA Section 106 compliance for the operation and maintenance of 14 federally managed hydropower dam projects. Bonneville Power Administration, the US Army Corps of Engineers, and the Bureau of Reclamation cooperate with 10 federally recognized tribes, four SHPOs, and seven Federal land managers in a massive effort to manage reservoir impacts to over 4,500 archaeological and traditional sites within this 775,000-acre area of the Columbia River Basin. This session explores how ongoing site condition monitoring and modern analysis of previous and recently collected assemblages has successfully documented and assessed vast changes to archaeological resources impacted by reservoir processes. Papers highlight some of the recent innovative approaches Program participants and contractors have employed in order to research, document, and preserve traces of our history.

Meets 8:30-9:45 a.m.

- 8:30 The Archaeology of Hungry Horse Reservoir, Northwestern Montana  
D. Alex Schwab, Timothy Ryan, David C. Schwab
- 8:45 Early Archaic Lithics, Ongoing Reservoir Impacts, and Evaluation Potential at 45LI224, Grand Coulee Dam Lake Roosevelt  
Brenda Covington
- 9:00 The Lack of Tucannon Components on the LSR: The view from 45WT2.  
Paul S. Solimano and Todd B. Ogle
- 9:15 Salvage Data Recovery at the Mill Creek Site (45LI6) in Lake Roosevelt  
Christopher M. Casserino
- 9:30 Comparing the Accuracy of Two GPS Receivers within the Federal Columbia River Power System.  
Kaylie Bass and Allie Taylor

**Session F-4. Postclassic Flaked Stone Technology in the Coatlan del Rio Valley, Mexico: Evaluating Evidence for Production and Consumption in an Aztec Provincial Context (Symposium)**

Room: **Garnet**

Organizer: **Bradford Andrews**

**Session Abstract:**

This symposium presents the preliminary results of a technological analysis of flaked stone artifacts from the Aztec period regional center of Coatlan Viejo in Western Morelos, Mexico. These data were recovered as part of the Instituto Nacional de Antropología e Historia (I.N.A.H.)'s Proyecto Coatlan initiated in 1975. They were recovered from 4 x 4 m surface collections conducted at the sites of Coatlan Viejo (CDR22) and a nearby residential area referred to as CDR27. The Coatlan Viejo regional center appears to have been incorporated into the Aztec Triple Alliance sometime around A.D. 1350. Hence, the artifacts treated here represent a valuable dataset with which to

evaluate flaked stone technology and provisioning in a provincial context. Of particular interest is an assessment of the types and proportions of the different technologies represented at the sites (e.g. prismatic blade, biface, etc.) and whether there is evidence for the onsite production and/or maintenance of flaked stone implements. Moreover, the issue of tool function has also been assessed. Ultimately, these data can be used to make initial inferences about the dynamics of Late Postclassic production, trade, and exchange in southwestern Morelos. These data contribute to a growing body of data on the production and consumption of flaked stone tools in provincial Aztec-period households in Morelos and the Valley of Toluca.

Meets 8:30-9:45 a.m.

8:30 Aztec Period Archaeology in the Coatlan del Rio Valley, Western Morelos, Mexico  
Dennis Lewarch

8:45 A Technological Analysis of Obsidian Flaked Stone Tools from Two Aztec Sites in the Coatlan del Rio Valley  
Paris Franklin

9:00 Late Postclassic Formed Tools of Coatlan Del Rio: A Comparative Analysis.  
Ian Farrell

9:15 The Cutting Edge: What Obsidian Use-wear Analysis Can Say About Function  
Mitch McElwain

9:30 Assessing the Coatlan del Rio Flaked Stone Collections: A Comparative Perspective.  
Bradford Andrews

**Session F-5. General Session: Archaeology, Methods, and Settlement.** (Symposium)

Room: **North Star**

Session Chairs: **Noelle Wyatt, William Schroeder**

Meets 8:30-11:00 a.m.

8:30 Rethinking "Anthropogenism" and Discerning Anthropogenic Site Vegetation.  
John Harris

8:45 Monte-Carlo Summed Probability Distributions as a Demographic Proxy: A Case Study from the Ruby Pipeline Excavations.  
Mark E. Hall

9:00 Talking Talus  
Maurice Major

9:15 Unmanned Aircraft Systems and Machine Learning for Archaeological Prospection.  
Ryan Pacheco and Dale Hamilton

9:30 Of Ruptures and Raptures: Locating Ideology with LiDAR Imagery  
William Schroeder

9:45 Errors Across Lithic Analysts: How much is Enough Training? A Comparison Analysis of the Neely

Collection.

Noella Wyatt, Breann Stoner, Elizabeth Armstrong, and Patrick T. McCutcheon

- 10:00 Finding Bia Ogoi: The Application of Historic Documents and Geomorphology to the Understanding of 19th Century Landscape Change of the Bear River Valley, Franklin County, Idaho.  
Kenneth P. Cannon, Kenneth Reid, Joel Pederson, and Molly Boeka Cannon
- 10:15 Paleoindians in Yellowstone National Park: Implications for the Rockies, Snake River Headwaters, Great Basin, and Great Plains Research.  
Douglas MacDonald
- 10:30 Patterns of mobility among the Evenki of Eastern Siberia.  
Karl Mertens
- 10:45 An Examination of Early Sites on the Oregon Coast.  
Kathryn Fujiye Nuss
- 11:00 Climate change, landslides, and the palaeodemography of the northern Columbia Basin in the late Holocene: the view from Kettle Falls.  
Ian Hutchinson

**Session F-6. Undergraduate Research in the Northwest and Environs using the Binford Hunter-Gatherer Database (Poster Session)**

Room: **Cinnabar**

Organizer: **Pei-Lin Yu and Royce Johnson**

Meets 9:00-11:00 a.m.

**Session Abstract:**

Lewis R. Binford's database of environmental data and ethnographically derived hunting and gathering projections (Binford and Johnson 2014) has been used in North America and across the globe to conceptualize research questions and refine hypotheses. Boise State University undergraduates are working with the Binford database to help develop and refine original research problems. In this session, undergraduate researchers from Boise State University present original projects using data from the Pacific Northwest and environs. This is the first-ever session featuring undergraduate research with the Binford database at the NWAC.

**Posters:**

1. Social Stratification and Resources Processing, Case #1: A Northwest Case Study of Acorns and Salmon Using the Binford Hunter-Gatherer Database  
Ollie Shannon
2. Social Stratification and Resources Processing, Case #2: A Northwest Case Study of Camas and Salmon Using the Binford Hunter-Gatherer Database  
Jennifer Pennell
3. The Development of Warfare in Native British Columbia: An Evolutionary Approach Using the Binford Hunter-Gatherer Database.  
Sonja Smith

4. Indigenous Landscape Modification in the Pacific Northwest Coast: A Case Study Using the Binford Hunter-Gatherer Database  
Royce Johnson

**Session F-7. Design Anthropology in the Pacific Northwest** (Papers, Panel, Demonstration)

Room: **Delamar**

Organizers: **Kendall House and Aaron Thornburg**

Meets: 10:30 a.m.-12:00 p.m.

**Session Abstract:**

For over fifty years, anthropologists have been quietly finding a niche in the business world. Over the last decade, the number of anthropologists working in business has increased greatly. The intersection of design, anthropology, and ethnography has proven particularly inviting. This panel will explore four questions: What does design anthropology look like? What does anthropology bring to the design process? How does design change anthropology? What opportunities does design offer to students of anthropology, from bachelor's to graduate degrees? This round table panel will discuss these questions in relation to student and faculty design ethnography projects. The panel will conclude with a rapid demonstration of the collaborative nature of design.

10:30 Open Prosthetics Design Anthropology Project: Visual Methods in Design Ethnography.  
Aaron Thornburg

10:45 Design Anthropology at Boise State: Lessons from the First Year.  
Kendall House

11:00 Panel and Q&A

11:30 Demonstration and Q&A

**Session F-8. Beyond Membership: Professional Service to the Society** (Panel)

Room: **Garnet**

Moderator/Presenter: **Chris Noll**

**Session Abstract:**

Archaeological societies depend on individuals to volunteer countless hours to manage the business of the organization, recruit members, and lead activities that engage those members. Society service is invaluable to the success of the organization but also provides benefits to those to serve. For many archaeologists society and committee service is a key part of the profession with personal and career rewards. This panel assembles officers from the Idaho Archaeological Society (IAS), Association of Oregon Archaeologists (AOA), Association for Washington Archaeology (AWA), Maritime Archaeological Society (MAS), and Northwest Anthropological Association (NWAA) to talk about professional service, archaeological careers, and their experiences as officers. This open discussion will provide students and young professionals with critical insights into archaeology as a profession and opportunities for engaging with the professional community.

Meets 10:30 a.m. – 12:00 p.m.

## SPEAKERS

Noelle Shaver (IAS President)  
Bob Kopperl (AWA President)  
Matthew Diederich (AOA Vice President)  
Scott Williams (MAS Director)  
Lee Sappington (NWAA President)

Friday afternoon, March 30, 2018

### **Session F-9: Annual Transportation Symposium and Panel** (Symposium)

Room: **Laurel**

Session Chairs: **Scott Williams, Carolyn Holthoff**

#### **Session Abstract:**

A Joint Symposium and Panel Discussion on Highlights and Issues of the Past Year's Cultural Resources Management Activities by the Regional Transportation Agencies of Idaho, Oregon, and Washington. 2 hours run time.

Meets 1:00-3:15 p.m.

- 1:00 The Transportation Year in Review: Introduction to the Symposium and Challenges, Issues, and Developments  
Scott Williams and Carolyn Holthoff)
- 1:30 The Stockhoff Quarry Revisited: Results from Recent Highway Project  
Andrew Boehm
- 2:00 The Old Highway 30 Project, Caldwell, Idaho  
Jillian Martin
- 2:15 Spanning Time: The History of the Broadway Bridge: A Mitigation Project  
Barbara Perry Bauer
- 2:30 Collaboration for Christ Chapel's Sake: The Broadway Bridge Replacement and Stabilization of Christ Chapel  
Tracy Schwartz
- 2:45 Collaboration for Christ Chapel's Sake: The Broadway Bridge Replacement and Stabilization of Christ Chapel  
Tracy Schwartz
- 3:00 Panel Discussion:  
Larissa Rudnicki (ODOT), Tracy Schwartz (IDT) and Scott Williams (WSDOT)  
Paula Johnson



**Session F-10: A Plateau House Party:” Reconsidering the Record of Columbia-Fraser Plateau Household Archaeology** (Symposium/Lightning Presentations)

Room: **Ponderosa**

Organizers: **Molly Carney, James Brown, and Dakota Wallen**

**Session Abstract:** Archaeologists seek the remnants of houses, residences, and domiciles as these places are often considered to be microcosms of the greater social and cultural past. In the highly varied physiographic region of the Columbia-Fraser Plateau, archaeological examinations of houses have been ongoing for over 70 years. While the Plateau Handbook (Walker 1998) summarized much of that research, in the intervening 20 years considerable archaeological work has been undertaken in both the compliance and academic sectors. This forum brings together archaeologists from all backgrounds and generations to discuss Columbia-Fraser Plateau houses and identify patterns and hypotheses. Participants are asked to present a brief, five minutes or less talk on a topic of interest and engage in discussion. This session is a first attempt at synthesizing much of the household data and aims to re-vitalize conversations on houses and settlement pattern studies within the Interior Northwest.

Deward E. Walker, Jr. (ed.)

1998 *Handbook of North American Indians: Plateau*. William C. Sturtevant, general editor, volume 12, Smithsonian Institution, Washington, D.C.

Meets 1:00-3:30 p.m.- NOTE these are very short presentations.

1:00-1:10 Opening Remarks.

Molly Carney, James Brown, and Dakota Wallen

1:10-1:30 Homescapes: The Once and Future Archaeozillow.com

Steven Hackenberger

Synchronic Plateau Housepit Sub-Regional Size Variation and the Potentials of Meta-Data Synthesis

Kevin J. Lyons

It's a Lot of Work

Paul Solimano -

1:30-1:50 Fire and Flood: A Look at Pithouse Taphonomy

Adam Rorabaugh

A New Look at Pre-Contact Houses at Three Sites near Ahsahka in the Clearwater River Region, North Central Idaho

Lee Sappington

The Houses of Alpowai: 1971-1975

David Brauner

- 1:50-2:10      Transforming a Housepit into a Home: Examining the Intersection of Identity and Space-Use Within Housepit 54  
Ashley Hampton
- Subsistence Intensification, Storage, and the Emergence of Pithouse Villages in Western North America.  
Shannon Tushingham
- Households on the Middle Columbia Residing in Collections at the Wanapum Heritage Center  
Angela J. Neller, Matthew Johnson, and Steven Hackenberger
- 2:10-2:30      Why not Pithouses?  
James C. Chatters
- Dwelling in the Inland Northwest  
Melissa Goodman-Elgar
- Community Space and Household Activity at Moses Lake: Re-examination and Radiometric Dating of HP-A, a Large House at the Long Beach Village Site (45GR30)  
William Damitio and Shannon Tushingham
- 2:30-2:50      Observations on Contemporaneous Individual and Group Structures in the Late Prehistoric  
Molly Carney and Kevin Lyons
- The Big Cougar Creek Lodge Depression in Hells Canyon: Thoughts Concerning a Protohistoric Longhouse  
Ken Reid
- Engendering Households on the North American Plateau: Past Approaches, Feminist Frameworks, and Future Directions  
Tiffany Fulkerson
- 2:50-3:15      Temporal Patterning of Houses of the Northwest Plateau and its Margins: Early Lessons on Database Construction and Data Availability  
Thomas Brown
- Closing/Discussion  
Molly Carney, James Brown, and Dakota Wallen

**Session F-11. General Poster Session: Biological Anthropology and Cultural Resources Research**

Room: **Cinnabar**

Meets 1:00-3:00 p.m.

**Posters:**

1. Chimpanzees Modulate Signs in Requests  
Kailie Dombrowsky, Grace Coffman, and E. Chadwick de Bree

2. Masticatory Stress and the Human Chin  
Chelsea Pfeiffer
3. The Impact of Web Based Visitor Education on Human-Tibetan Macaque (*Macaca thibetana*) Interactions at Mt. Huangshan, China  
KiriLi Stauch, Lori K. Sheeran, Jessica A. Mayhew
4. Do lemurs at the Duke Lemur Center Socially Learn?  
Carly H. Batist and Jessica A. Mayhew
5. Washington State University Archaeological Research at the Hart Mountain National Antelope Refuge, Lake County, Oregon  
Dakota Wallen, Andrew Frierson, and Tiffany Fulkerson
6. Lakeview Ranch: Mitigating the Loss of Historic Buildings  
Anne Boyd and Jamie Litzkow
7. Urban Co-design How Oaks Offer Opportunities for Collaboration  
Haley Dunham
8. A Quarter Century of Archaeological Collections at the Wanapum Heritage Center  
Matt Johnson
9. Archaeological Excavations at the Swenson Site (10-EL-1417), Southwest Idaho  
Anne Van Wassenhove, Connor Neal, Weston Wardle, Keana Winninger and Mark Plew
10. Shoe Analysis of a Boise Basin Chinese Mining Camp  
Kristina Cockerille and Renae Campbell
11. More than Just a Bone to Pick: Deciphering Walla Walla's Cultural Consumption Patterns at the Turn of the Century.  
Stephanie O'Brien and Lindsay Costigan
12. Early Placer Gold Discoveries in Washington Territory (ca.1853 – ca.1868).  
Jamie M. Litzkow
13. NAGPRA Human Remains Inventory: Making Our Work More Visible.  
Lourdes Henebry-DeLeon

**Session F-12. General Session: Cultural Heritage Resources (Symposium)**

Room: **Liberty**

Meets 3:30-4:45 p.m.

Session Chairs: **Molly Boeka Cannon, Juli McCoy**

- 3:30 Preservation or Perseveration: The Cost of Trying to Save Everything  
Kelli Barnes
- 3:15 Exploring Spatial Patterns of Ethnic Chinese Artifacts along the Central Pacific Railroad, Box Elder County, Utah  
Molly Boeka Cannon, Kenneth P. Cannon, Michelle Platt, Houston Martin, and Jonathan Peart
- 3:30 Erasing History? Analyzing Modern Monument Destruction in an Archaeological Context  
Stephanie Holton
- 3:45 What's Going on Out There? An Investigation of Historic Land Use Patterns at the Orchard Combat Training Center  
Juli McCoy
- 4:00 Mid-Nineteenth Century Clay Smoking Pipes from Fort Hoskins and Fort Yamhill, Oregon  
Diane Zentgraf
- 4:15 Management of Unanticipated Washover Deposits at 45IS298 in Oak Harbor, Washington  
Kelly Bush

**Session F-13: Yama Village, 45-KP-105, a late 19th and Early 20th Century Japanese village on Bainbridge Island, WA. (Symposium)**

Room: **North Star**

Meets 3:00-4:15 p.m.

Organizers: **Floyd Aranyosa**

**Session Abstract:**

The Japanese Village of Yama (45KP105), located on Bainbridge Island, Washington, U.S.A., was occupied from the 1880s-1920s. Yama contained approximately 250 people throughout that period, and many residents worked as migrant workers at the Port Blakely Lumber Mill. Using transnational constructs of local identities, I present a historical and archaeological analysis and interpretation of medical and health care of the Japanese community of Yama.

- 3:00 Yama Village: A Late 19th and Early 20th Century Japanese Immigrant Village on Bainbridge Island, Washington.  
Floyd Aranyosi
- 3:15 Ceramics Analysis from Yama Village, 45-KP-105.  
Dave Davis
- 3:30 Hydrology and Geomorphology of Yama Village, 45-KP-105.  
Jean Hannah
- 3:45 Analysis of Faunal Materials from Yama Village, 45-KP-105.  
Neal Endacott

4:00 The Buddhist Temple at Yama: Religious and Cultural Identity of a Late 19th- Early 20th Century Japanese-American Community  
Bridget Grim

**Session F-14: Lightning Round: Short Papers on Varied Topics of Note.** (Lightning Presentations/Symposium)

Room: **Garnet**

Meets 3:00-4:45 p.m. NOTE these are very short presentations.

Organizer: **Paula Johnson.**

**Session Abstract:**

Working on cultural resources projects often leads to notable discoveries—minor mysteries unraveled, reflections on popular culture, curious bits of history, patterns seen over multiple projects in the same area. While these topics do not merit a full 15 minute paper, they are worth sharing. This series of 3-5 minute talks shares what we've learned along the way.

3:00 Early 20th Century Fly Field in Snohomish County, Washington.  
Jason B. Cooper

3:15 The Golden Idol: Archaeology and Archaeologists in Popular Media.  
Gretchen Kaehler

3:30 Consequences of Incomplete and Conflicting Site Histories.  
Michael Chidley

3:45 Goofy Stories, Fun Facts, and Brushes with Destiny: Revelations During Research on Airports.  
Paula Johnson

4:00 Don't Believe Everything You Read: A Lesson in Historical Sources and the Power of the Internet for Good  
Scott Williams

4:15 Synthesis of Recent Archaeological Work at King County's Marymoor Park  
Philippe D. LeTourneau

4:30 Urban Contamination: How to Archaeology Safely  
Jennifer Gilpin and Alexander Stevenson

## ABSTRACTS

**Adams, Travis**

***Editing the Mowitch Film***

The word “mowitch” means deer in the language of the San Poil people. To some people it may be just an animal but to the 12 tribes that occupy the Colville Reservation it means a lot more. This introduction video takes a quick look into the Mowitch Project, a film that will be completed later on this year that will document the full process of harvesting a deer from beginning to end. The goal of this project is to educate people on how to process a deer by using both traditional and contemporary methods of hunting and tanning the hide. I was given the video footage not knowing how much work goes into properly taking care of a deer after the kill. After hours of editing and asking questions about the process I have learned more about the uses of the mowitch than I had learned my entire life prior to working on this film. This proves that the use of modern technology can be instrumental to passing on the traditions of our people.

**Anderson, Kimberly**

***A Historical and Archaeological Evaluation of Medical and Healthcare at Yama (45KP105), a late 19<sup>th</sup>-early 20<sup>th</sup> Japanese American Community***

The Japanese Village of Yama (45KP105), located on Bainbridge Island, Washington, U.S.A., was occupied from the 1880s-1920s. Yama contained approximately 250 people throughout that period, and many residents worked as migrant workers at the Port Blakely Lumber Mill. Using transnational constructs of local identities, I present a historical and archaeological analysis and interpretation of medical and health care of the Japanese community of Yama.

**Andrews, Bradford W.**

***Assessing the Coatlan del Rio Flaked Stone Collections: A Comparative Perspective***

Addressing the contents of the symposium papers, this paper not only comments on what the Proyecto Coatlan data indicate about production and provisioning in the southwestern corner of the modern state of Morelos, but also how these data compare to similar, recent studies carried out in Morelos and the Valley of Toluca. For years, systematic analyses of flaked stone assemblages from Aztec period sites have largely been confined to contexts in the Basin of Mexico. That is problematic if our goal is to understand the dynamics of the Aztec Triple Alliance from a holistic perspective; we need to understand what happened in both the core and the periphery. Although we do not have as tight a chronological control over the Coatlan surface material as we would like, one thing that seems apparent is that this area was relatively impoverished in terms of access to, and ubiquity of flaked stone obsidian implements. This mirrors to some extent the patterns evident in both Morelos and the Valley of Toluca. Collectively, these data have important implications for understanding how the complex Mesoamerican Postclassic world system was affected by the socio-political changes associated with Aztec imperialism.

**Aranyosi, E. Floyd**

***Yama Village: A Late 19<sup>th</sup> and Early 20<sup>th</sup> Century Japanese Immigrant Village on Bainbridge Island, Washington***

Overview of the three-year survey and excavation of 45-KP-105, the history of the site, and the Olympic College field school.

**Armstrong, Elizabeth, Patrick T. McCutcheon**

***What We Gain When We Document Potential NAGPRA Collections***

Recent efforts to generate a comparable set of data on ground stone tools has led to a revitalization of a classification used by Robert Greengo on the mid-stem Columbia River pit house villages. Our original interests were to compare ground stone tools from the upper Yakima River Valley to those from domestic locations on the Columbia River. While that data is in the process of being analyzed, another opportunity presented itself where we could apply the classification to a set of ground stone artifacts that will soon be repatriated. This provided an opportunity to work closely with the interested parties to capture a set of data that would be informative on the question of what exactly is represented in ground stone tools from burial contexts vs. domestic contexts. In this poster, we present the process by which we have begun to analyze these artifacts using non-repatriated ground stone tools as examples. There are many challenges working with these artifacts that range from the conditions of the artifacts themselves to generating comparable measurements. It is clear thus far that close consultation with interested parties is vital to cooperation between generating data and respecting cultural traditional practices.

**Bankuti, Natalie, Sean Fey, Annalise Muscari**

***A Lithic Analysis from Site 45-WH-004***

Our study explores variation in material type, reduction strategy, and the range of tools utilized and produced at 45-WH-004, a site in Sumas, Washington near the Canadian border estimated to be utilized during the Marpole Phase of the Salish Sea region. We analyzed a total of 144 artifacts from three test pits excavated in 10cm levels by Keith Montgomery in 1979. The artifacts were mostly lithic flakes but also several slate knives, abraders, and bifaces were identified which allowed us to speculate on the purpose of the site. This research complements Montgomery's analysis of an extensive cataloged lithic assemblage, 2,135 artifacts, that were surface collected with point provenience in a plowed field. Artifacts from the test pits, which Montgomery did not include in his research, represent intact cultural deposits below the plow zone in which a hearth feature was identified. Attributes selected to document bipolar reduction, which we initially identified to be utilized at the site, were separated into three distinct material types and include the presence and absence of linear flake scars and the number of crushing platforms.

**Barnes, Kelli**

***Preservation or Perseveration: The Cost of Trying To Save Everything***

Our study explores variation in material type, reduction strategy, and the range of tools utilized and produced at 45-WH-004, a site in Sumas, Washington near the Canadian border estimated to be utilized during the Marpole Phase of the Salish Sea region. We analyzed a total of 144 artifacts from three test pits excavated in 10cm levels by Keith Montgomery in 1979. The artifacts identified were mostly lithic flakes but also included several slate knives, abraders, and bifaces, which allowed us to speculate on the purpose of the site. This research complements Montgomery's analysis of an extensive cataloged lithic assemblage, 2,135 artifacts, that were surface collected with point provenience in a plowed field. Artifacts from the test pits, which Montgomery did not include in his research, represent intact cultural deposits below the plow zone in which a hearth feature was identified. Attributes selected to document bipolar reduction, which we initially identified to be utilized at the site, were separated into three distinct material types and include the presence and absence of linear flake scars and the number of crushing platforms.



**Bass, Kayley, Allie Taylor**

***Comparing the Accuracy of Two GPS Receivers within the Spokane Arm of the Federal Columbia Power System***

Global Positioning System (GPS) units are consistently used in archaeological settings in public, private, and tribal sectors. With the increase of GPS unit types on the market, questions arise for which unit is leading in accuracy, time efficiency, and cost effectiveness with respect to archaeology. This study assesses the pros and cons of recording geographic points with each the Bad Elf GNSS Surveyor and Trimble GeoXT 6000. Evaluations of the units occurred in three different types of landscapes and under different weather conditions frequently encountered within the FCRPS Spokane Arm Area of Potential Effects. Receiver accuracy was evaluated considering the average repeated measurements that include up to 100 measurements. The accuracy of the devices in each landscape and weather condition were assessed, as well as time and cost efficiency, and ease of use. The results including precision, accuracy, and overall ease of use are discussed.

**Batist, Carly H., Jessica A. Mayhew**

***Do lemurs at the Duke LeMur Center socially learn?***

Recent years have seen a rapid increase in primate cognition studies, however, lemurs have been largely overlooked. As the most ancestral primate lineage, lemurs occupy a unique phylogenetic role; therefore, studying their cognitive abilities can help elucidate the evolution of complex cognition in primates. We studied learning abilities in 59 lemurs using a two-action apparatus that required an individual to push or pull open a door to obtain a food reward. Experimental groups had a previously trained push model and control groups had no model. Latency to success positively correlated with proficiency rate. There was a positive correlation between average number of times an individual observed another group member's successes and that individual's proficiency rate, suggesting that watching other individuals succeed helped to improve a lemur's own proficiency rate. Latency to touch the apparatus was shorter in push/pull groups than in control groups. This suggests that having a trained model in the group reduced neophobia in other group members, likely through an underlying social facilitation mechanism. These results provide some evidence for social learning in lemurs. This study adds to evidence of lemur learning abilities and provides evidence for potential species-specific cognitive differences. Additional studies are required to fully understand the cognitive underpinnings of these learning differences and how they reflect species-specific ecological niches.

**Battistella, Edwin**

***Fresh, free and natural***

Part of what we do in understanding language is filling in the blanks—we take words and phrases that have potential meaning and make them more explicit. When there is more than one way to do this, the possibility for ambiguity and misreading arises. Even a simple five-word supermarket sign like “Buy two—get one free” has multiple opportunities for misreadings. This paper considers the potential for misreading in food labeling, signage and advertising. Looking especially at the polysemy and vagueness in the usage of such words as “fresh,” “natural,” “organic,” “super,” and more. The focus of the talk on the potential for both confusion and deception that arise at the intersection of prescribed language and colloquial usage and the role of common interpretive strategies in causing misinterpretation. Time permitting some in-depth examples of contested language will be illustrated.

**Battistella, Maureen Flanagan**

***The Baptist Cookbook, Published Boise, Idaho in 1910***

Discovered in Ashland, Oregon in 2018, the Baptist Cook Book is worn and stained from decades of use. Its pages are sewn together in signatures, four loose stitches holding the work together. The Baptist Cook Book is a classic example of the community cook book, this one a compilation of tested recipes published by the Ladies and Society of the First Baptist Church of Boise, Idaho. Part genealogy, part history, part gender studies, this paper will consider how the Baptist Cook Book, printed by Joseph Collins of Boise, Idaho in 1910 reflects the women who contributed recipes, how the recipes reflect the lives of these Boise, Idaho women and their world. Further, this paper will examine how a community cook book reveals the economics, politics and demographics of place and the larger feminine ideals of western culture.

**Becker, Rory, Berenice Chavez**

***Monochrome Ultraviolet Imaging in Archaeological Analysis***

Monochrome ultraviolet (UV) photography provides a new method in the analysis across several archaeological data types. In this study, the technique is used to enhance the interpretation of figures on a collection of finely incised catlinite tablets from the Red River Valley of Minnesota and North Dakota and sediment samples from a rockshelter site in southwest Texas. A comparison of traditional methods with the monochrome UV imagery shows a high level of detail in the imagery that is not readily discernible using traditional methods. Marks and incised lines visible in the UV imagery but not visible in the illustrations, color photography, or to the aided/unaided eye, inform the sedimentary processes, manufacture processes, and interpretation of data collected from these sites.

**Bennett-Rogers, Ann**

***45 Years, What a Long Strange Trip***

Forty-five years ago, I completed my first archaeology course from Richard Ross. The curves in the road have lead in many directions. This paper will follow that road and demonstrate how a discussion of Traditional Ecological Knowledge (TEK) is an important part of cultural resource management.

**Black, Annice Olena**

***Making Food for a Farm Family in the 1930s. A diary case study.***

Marguerite Watson Black kept a diary from the late 1920's till her death in 2007. She was the local school teacher and married John Black in 1933, a Jackson Co rancher/farmer. She moved into the home of a second generation Oregon wagon train pioneer family. Marguerite's diary provides a unique and very personal insight detailing how meals, food choices and food preparation reveal the reality of daily life and social aspirations. Using Home Extension cookbooks, Ziegelman's A Square Meal and other sources, this case study will examine how Marguerite's diary reflects 1930s subsistence farm life.

**Bodley, Lilian, Ray von Wandruszka**

***Historical Analysis of Household Goods***

Household goods are, and always have been, items that are discarded on a daily basis in our homes. Trash piles near historical settlements are therefore often treasure troves of artifacts that tell stories about the lives of the people who used them. It is interesting to both analytical chemists and historical archaeologists to analyze the many unknown substances that are found in association with household containers. Not only are paper labels usually long gone, but bottles and jars may have been reused and contain remnants of materials that have no relation to the original contents. There are many examples of historical household goods that require chemistry for identification – ranging from glue, to cough relief

salves, to traditional Chinese medicines.

**Boehm, Andrew**

***The Stockhoff Quarry Revisited: Results from Recent Highway Project***

The Stockhoff Quarry site is an extensive raw material source area that has been utilized since the terminal Pleistocene. Previous research demonstrated the quarry was primarily a bifacial reduction area composed of numerous discrete quarrying and knapping areas. This study presents the results of an ODOT highway expansion project where 1,204 artifacts and three discrete lithic reduction areas were identified. Results of the lithic analyses indicate very similar patterns compared to previous research, supporting the hypothesis that a near uniform reduction strategy was used throughout the site. Results of obsidian sourcing indicate that artifacts from each of the three areas came from sources to the southwest of Stockhoff Quarry, potentially reflecting seasonal human mobility patterns. Finally, LIDAR data are compared to recorded quarrying locations in an attempt to identify unrecorded quarries.

**Boyd, Anne, Jamie Littzkow**

***Lakeview Ranch: Mitigating the Loss of Historic Buildings***

Visitors to Bureau of Land Management (BLM) recreation areas often associate historic buildings with their overall experience. Sometimes these buildings need to be removed – for various reasons – and the public may feel a sense of loss, or even anger. One way to help mitigate this loss is to provide interpretive information illustrating the history behind former buildings. This spring, the BLM will be removing four buildings at Lakeview Ranch, an historic cattle ranch in Lincoln County, Washington. An interpretive kiosk will then be built to display historic photographs of the buildings, and to discuss the history of the people who once lived there. This poster shows the kiosk display, and discusses the need for providing historic mitigation in public recreation areas where buildings have been lost.

**Breidenthal, Matt**

***Data Potential of Archaeological Deposits at Chelan Station (45CH782/783)***

Early Holocene archaeological deposits at Chelan Station (45CH782/783), inadvertently discovered during construction of a waterline to the Beebe Springs Fish Hatchery in 2010, consist of sparsely distributed lithic and faunal artifacts buried beneath volcanic ash from Mt. Mazama. Limited archaeological testing suggests that people bearing tools related to the Old Cordilleran Tradition (cobble tools and leaf-shaped points) occupied a productive floodplain environment as early as  $9,160 \pm 50$  BP, exploiting salmon and large game. Located within an alluvial terrace along the Rocky Reach of the Columbia River in North Central Washington, the study area includes an approximately 1,200 m-long transect exposed during waterline excavation. A stratigraphic model used to characterize site formation processes was constructed based on field observations of sediments and soils in the study area. To provide a lower limiting date on the cultural deposits, possible volcanic ash samples (n=2) collected during archaeological testing were submitted to the Washington State University Geanalytic Laboratory for identification. Results demonstrate these samples do not represent volcanic ash deposits, but rather a feldspar and quartz-rich alluvium that may derive from the Wenatchee River Basin. Magnetic susceptibility measurements confirm the presence of buried organic layers and the influence of fire. The record of early Holocene floodplain accretion and paleoenvironmental change expressed in buried soils, suggests that the Chelan Station deposits are unique to the Rocky Reach. Columbia River floodplain landforms in the study area may have been influenced by Cascade Range alpine glacial advances.

**Brown, James W., Miller-Atkins, Galen**

***Settlement Change and Political Organization of the San Juan Islands for the Past 3000 Years***

The archaeology of the Salish Sea is dominated by coastal shell middens. These middens have been thought of as the result of food refuse, however, recent research has shifted this view. Shell middens can be thought of as the remains of villages, cemeteries, food production and processing locations, and monumental constructions that comprise a diverse anthropogenic landscape. In the San Juan Islands, shell middens comprise a large part of the archaeological record. Even though there is an extensive record of shell middens there is limited evidence for the settlement pattern of the past inhabitants. Using previously published data this study utilizes shell midden area as a proxy for large and small villages as well as resource procurement locations. This analysis compares these settlement types temporally and spatially to test theoretical expectations of political organization. Spatial and temporal analyses indicate that prior to Euro-American contact Coast Salish settlements were politically decentralized.

**Brown, Thomas J.**

***Temporal patterning of houses of the Northwest Plateau and its Margins: Early lessons on database construction and data availability***

As part of my dissertation, I have proposed a project that compares temporal patterning of houses between the Plateau, and the Fraser Valley/Northern Great Basin, from ~ 7,000-3000 calBP using a combination of Summed Probability Distributions (SPDs) of radiocarbon data and Bayesian chronological modelling. Here, I discuss my experiences, so far, in trying to collate the necessary data to highlight what I feel are significant issues in data availability and presentation.

**Bumback, Stacy L., Michelle Yellin**

***Do Not Walk the Path Alone: Navigating a Complex Professional Hierarchy with a Strong Mentor***

Women are gaining an increasingly influential role as mentors in the field of archaeology in the Pacific Northwest, as marked by the growing number of women in leadership roles in both the public and private sectors. Personally, I attribute a great deal of my success in the industry to a handful of female mentors. I have come to realize, however, that the guidance and direction given by many women in our industry is framed within a social construct based on our experiences within a traditionally male-dominated field. Throughout my career, I have been advised to choose between beauty or smarts because I could not be both; I was encouraged to color my hair grey so that colleagues would listen to the sage advice of an older woman; and I was urged to not take a long maternity leave because it could derail my career. The role of a mentor is powerful and influences the path we may take in the field. This kind of advice can greatly impact a woman's sense of professional identity and self-worth within her industry – especially if it comes from another woman. This paper examines some of the ways in which female mentorship has evolved within the traditionally male-dominated field of archaeology. It is intended to daylight some of these experiences, discuss the power and influence we have as mentors, and create a platform for encouraging all people to help each other become better mentors.

**Bush, Kelly**

***Roar-A Brief History of Feminist Archaeology in Pacific Northwest CRM***

This paper explores the effect of feminist thought on the rise of CRM in the 1980's and gives some specific anecdotal herstorical contingencies for how we do what we do today. Incredible characters in the story of Feminist Archaeology in the northwest are highlighted. A critique is provided of how modern sexist thought has infected our analysis and interpretation of the archaeological record. Also included is a brief feminist evaluation of the modern state of CRM.

**Bush, Kelly*****Management of Unanticipated Washover Deposits at 45IS298 in Oak Harbor, Washington***

This paper describes the strategies and field tactics used to manage deposits encountered during monitoring of deep excavations for a wastewater treatment plant in Oak Harbor Washington. The work on this site is regulated by an MOA and associated archaeological work plan (AWP); the AWP was reviewed / approved by six tribes, two agencies and the Washington State Department of Archaeology and Historic Preservation. However, the overwash deposits were not considered when crafting the contingencies for the AWP. When encountered, the driving strategy was to coordinate thoroughly and work efficiently to interpret the deposits for the interested parties and gain consensus. Then we had to implement this while tracking sediments on a complex construction site. The solution involved compromises and the implementation required constant fine tuning. Encountering this deposit has changed the way we will approach monitoring projects on or near a spit lagoon complex in the future.

**Campbell, Renae*****Chinese Signatures in The Boise Basin: Ongoing Research on Site 10BO357***

Site 10BO357 (FS No. BS-780) is an historical placer mining site located along Grimes Creek in the Boise National Forest. This site is part of a larger legacy of Chinese mining and entrepreneurship in Southern Idaho's Boise Basin, which was home to over 1,500 Chinese men, women, and children who accounted for as much as 49.9 percent of the local population in the late nineteenth century. Site 10BO357 was one of several Chinese-occupied sites recorded and excavated in the 1980s as part of a land exchange. A summary report was prepared at the time, but a comprehensive catalog and analysis of the recovered materials have only recently been completed. This presentation provides a summary of ongoing research into site 10BO357 and the preliminary results of artifact analysis. The archaeological collection, which includes nearly 5,000 artifacts, attests to the diversity of products available to Boise Basin residents in the late nineteenth century and to the enduring signatures that the Chinese community left on the landscape of the Boise Basin.

**Campbell, Sarah*****I been in the right place (and it must have been the right time)***

My perspective on women in archaeology and other field sciences starts in the early 70s. New social movements made less traditional fields attractive to young women, but we faced educational and work place barriers upon entering those careers. I landed in a good place when I came to the Pacific Northwest, and my experience at University of Washington was more positive than women I knew in other graduate programs. Over the subsequent decades I witnessed many changes including the effects of affirmative action on employment in education, agencies, and consulting firms. The positive effects and progress are not universal, and we have not achieved gender equality today. I was fortunate to experience little gender discrimination but acknowledge how easily my passion for archaeology could have been extinguished if I had not had positive support from mentors and colleagues.

**Cannon, Kenneth P., Kenneth Reid, Joel Pederson, Molly Boeka Cannon*****Finding Bia Ogoi: The Application of Historic Documents and Geomorphology to the Understanding of 19<sup>th</sup> Century Landscape Change of the Bear River Valley, Franklin County, Idaho***

On the frigid morning of 29 January 1863, the California Volunteers under the command of Patrick Connor attacked the Shoshone village at Bia Ogoi in response to ongoing hostilities between whites and Native groups. The result was the death of at least 250 Shoshone, many of them women and children, and 21 soldiers. Over the course of the past 150 years extensive landscape modification has occurred from both natural and human agents obscuring the events of this fateful day. A major focus of a recent NPS-

funded study was the reconstruction of the 1863 landscape. This effort employed not only traditional on-the-ground geomorphic studies, but also a series of historic documents and maps based upon first hand experiences. We will present the methods employed in this study to describe a changing landscape and its implications for the archaeological study of the Bear River Massacre events.

**Cannon, Molly Boeka, Kenneth P. Cannon, Michelle Platt, Houston Martin, Jonathan Peart**  
*Exploring Spatial Patterns of Ethnic Chinese Artifacts along the Central Pacific Railroad, Box Elder County, Utah*

In 2015 USU Archeological Services, now Cannon Heritage Consultants, in partnership with Utah State University's Museum of Anthropology, received a pass-through grant from the Utah Division of State History from the National Park Service's Underrepresented Community Initiative. The purpose of the project was to conduct a pedestrian survey centered on the Section Stations of Bovine and Omby and the railroad town of Terrace in Box Elder County. As part of the survey protocol, artifacts were piece-plotted using a high resolution RTK mapping unit, photographed, and described. One of the research interests of the project was to see if our methodology provided usable data for detecting temporal and spatial patterning of the ethnic Chinese artifacts that may provide information on the social dynamics of these work camps. ArcGIS spatial statistical tools were employed in these analyses. In this paper, we report on the results of our analyses from two Section Stations, Bovine and Omby.

**Carney, Molly, Kevin J. Lyons**

*Observations on Contemporaneous Individual and Group Structures in the Late Prehistoric*

Why did late prehistoric Plateau communities choose to live concurrently in both long mat lodges and individual mat lodges? While ethnographic work describes both the smaller circular and longer elliptical mat structures, archaeological data recovery tends to focus on the larger long lodges. In this paper we draw on this rich body of ethnographic literature and oral histories to create expectations for inter- and intra- structure archaeological investigations. We briefly compare these expectations with unpublished paleobotanical and geoarchaeological data from two structures in the Pend Oreille Valley, WA before concluding with initial impressions on the rhythm of past social life as seen through architectural form.

**Carney, Molly, Stephenie Kramer**

*Re-Evaluating Bulb Size as a Proxy for Camas (*Camassia* spp.) Management in the Willamette Valley of Oregon*

Previously overlooked, it is now commonly accepted that Northwest Coast peoples in the ethnographic past and present used and managed a variety of plant foods, many of which likely contributed a substantial number of calories to the diet. Establishing the time depth associated with these ethnographic behaviors, however, has been less clear. This paper addresses the antiquity of plant management practices in the Willamette Valley through the re-analysis of paleobotanical assemblages from six earth oven sites located in traditional Kalapuyan lands. We specifically focus on camas (*Camassia* spp.) bulb size to show that selective harvesting and tending of camas is visible in the archaeological record. We contextualize this analysis within Northwest Coast discourse on plant intensification, cultivation, domestication, and management, before briefly discussing the implications of plant selective harvesting and management for Northwest archaeology as a whole.

**Chidley, Michael**

*Consequences of Incomplete and Conflicting Site Histories*

Incomplete and conflicting site histories for archaeological sites generate some interesting consequences for future archaeological surveys, excavation and permitting requirements, and regulatory compliance and



consultation. This is a brief overview of such circumstances that have recently been encountered at different sites, in different states, and through different archaeologists that have had similar complicating issues.

**Churchill, Thomas E.**

***Flashback: Pirate Cove-A Reflection on Time at 35LNC7, Depoe Bay, Oregon***

With thoughts of those who have walked on before us this presentation focuses on a past investigation conducted on a shell midden site (35LNC7) by Archaeological Frontiers.

**Clark, Jorie**

***MAD Then and Now: Closing Remarks from Her Friends and Colleagues***

Throughout her tenure with the Idaho SHPO, Mary Anne Davis has been a close colleague, supporter, and friend to all who have had anything to do with Idaho archeology, whether it be state or federal agencies, Tribes, or the public. This paper is a tribute to Mary Anne's contributions to the field and the memories that we will remember her by.

**Clay, Vickie L., William D. Hildebrandt**

***What's Cooking in the Late Archaic Kitchen? Features and Subsistence Remains from a Klamath River Village, Siskiyou County, Northern California***

Recent testing and mitigation for Caltrans at the Randolph C. Collier Roadside Rest Area (CA-SIS-329) on Interstate-5 in the Klamath River Canyon revealed long buried evidence of a Late Archaic/Canyon Period I (2250-1000 cal BP) riverine village. Located on a broad terrace east of the river, and buried by up to one meter of construction fill and natural sediment, two large communal cooking features provide a glimpse into prehistoric times on the Klamath River. The features, located five meters apart, are nearly two meters in diameter and 30-70 cm deep. Radiocarbon dates indicate occupational intensity and feature use between 1244 and 1120 cal BP. Projectile points are primarily Tuluwat Series small contracting stem arrow tips made of Grasshopper Flat/Lost Iron Well obsidian, the source of which is located some 60 miles to the southeast. Well preserved bone implements include awls, a needle, pressure flakers, a bead, and leister pieces from a three-pronged fishing spear. Faunal remains show deer, pond turtle, birds, rodents, rabbits, and fish were targeted resources, and some were likely post-depositional trespassers. Fish remains are primarily sucker with fewer salmon, sculpin, and sturgeon. Shellfish remains show freshwater mussel was preferred. Plant remains included nutshells from fall ripening acorns, manzanita, and juniper, and summer ripening small seeded plants like goosefoot. This Late Archaic snapshot of abundance and variety in the resource base mirrors, in many respects, ethnographic accounts of the native Shasta people recorded by Roland Dixon and Catharine Holt over one thousand years later.

**Cobb, Adrienne, Lindsey Holdener**

***Cobble reconstruction using cortex remnants on flake fragments (45WH004)***

We present results of a test of the effectiveness of two different methods of reconstructing source cobbles from cortex present on flakes, cores, and shatter. The 300 lithics used in our study were collected in 1979 by Keith R. Montgomery from 45-WH-004, estimated to be 2400-1200 years old. The lithics were separated into fine-grained volcanic (FGV) material - comprising rhyolite, andesite, and dacite - and non-fine-grained volcanic (non-FGV) material, and cortex attributes were recorded. We applied two methods - graphical and mathematical reconstruction. The graphical reconstruction involved tracing the angle of the cortex remnant on each lithic artifact and using Adobe Illustrator to overlay the images, recreating the shape of a hypothetical original cobble. The mathematical reconstruction, inspired by Dibble (2005), involved using the cortex attributes of length and width to extrapolate the shape of the cobble using

various 3-dimensional surface area formulas. The results of both methods for each material type were compared and conclusions drawn.

**Cockerille, Kristina, Rylee Robertson, Renae Campbell**

***Shoe Analysis of a Boise Basin Chinese Mining Camp***

Currently there is not a lot of information regarding utilitarian shoes in the archaeological record, not only because of their fragile and easily perishable state, but also because they are not always seen as the most insightful reflection of our past. This poster discusses an archaeological analysis of shoe fragments found at site 10BO357 in Southern Idaho's Boise Basin. This is a late nineteenth-century mining site located along Grimes Creek in the Boise National Forest that was occupied by Chinese miners. Among the nearly 5,000 artifacts recovered from the site in 1985 were 124 shoe fragments and shoe nails, as well as one complete shoe sole. In this analysis, we will be looking at the manufacture dates, nail type, makers' marks, and shoe size and gender of the fragments in this collection. These details demonstrate the value of information that can be gathered from the analysis of utilitarian footwear, including date ranges, shoe types, and manufacturing techniques. The goal of this analysis is to contribute more information towards future research on utilitarian shoes and the people they belonged to.

**Codling, Chelsea**

***From Bones to Behavior: Zooarchaeology and Chinese Meat Consumption Patterns in the late 19<sup>th</sup> Century of an Idaho City Mining Camp***

Near Placerville along Grimes Creek in Southern Idaho's Boise Basin, is a Chinese-occupied placer mining site, BS-780. As the site where gold was first discovered in the Boise Basin in 1862, Grimes Creek was subject to intensive placer mining in the late nineteenth and early twentieth centuries. Chinese miners began arriving in the Boise Basin in the mid-1860s. Between 1870 and 1890, mining camps in places like Idaho City, Placerville, Centerville, and Pioneerville were home to nearly 2,000 Chinese individuals. The focus of this research is on the faunal remains and the insight they can provide on meat consumption habits and food culture of Chinese in Idaho. Evidence from the assemblage shows that the Chinese miners of Boise Basin consumed a variety of meats, and seemed to have a strong preference for pork, but due to the low cost of the beef, consumed sizable amounts of both meats.

**Cody, Tia R., Dr. Shelby Anderson**

***LiDAR Predictive Modeling of Kalapuya Mound Sites in the Calapooia Watershed, Oregon***

The focus of this poster is the development and testing of a LiDAR (Light Detection and Ranging) and remote sensing predictive model to identify precontact mound sites in the Calapooia Watershed in the Willamette Valley, Oregon. Mound sites are low-lying, generally ovoid, earthen features, which the Grand Ronde Tribe consider culturally sensitive locations. Various tribal sources, ethnographic accounts, and limited archaeological investigation suggest that some are burial sites. Very little is known, however, about why and how people created these mound sites, how old the sites are, and how common mound sites are across northwest Oregon. There are hundreds of unrecorded mounds in the Calapooia watershed, extending from Albany to Eugene, Oregon. Investigating and protecting these mound sites is a priority but traditional archaeological survey of the watershed is impractical given that it covers roughly 234,000 acres and is 94% privately owned. To address this problem, I use LiDAR data and aerial photography to develop a model that identifies probable mound locations in the Calapooia watershed. This model takes advantage of the unique analytical properties of a geographic information system (GIS) as well as the malleability of a LiDAR dataset. Development of the model revolves around the initial filtering of the LiDAR dataset so as to remove "noise" or non-mound features. From here the LiDAR dataset can be inverted and digitally flooded to identify "sinks" (e.g. inverted mounds) or areas in which the digital

water is trapped. After the model is created, I will test the model by carrying out a pedestrian survey in the project area to assess the positive identification rate.

**Connolly, Thomas J., Robert Kentta, Jeanne McLaughlin, Julia Knowles, Chris Ruiz, Peter Hatch**  
***Inadvertent Discovery of Human Remains on the Siletz Bayfront, Lincoln City, Oregon: A Case Study on Siletz Tribal History*** In 2016, human remains and associated funerary items were identified beneath a home on the Siletz Bay front in Lincoln City, Oregon. Limited archaeological work was approved to be conducted in 2017 to assess the level of disturbance and to determine whether intact burials were present, as well as to remove enough additional sand from under the house using controlled excavation methods to allow access for home structural maintenance. The discovery, within the original Siletz Reservation, provided an opportunity to assess the condition and explore the history of a Native village and cemetery, occupied most notably during the early reservation years (ca. 1856-1892) and allotment era (1892-1922). The history of this village and cemetery serves as a case study of the all too common tragic fate of cultural resources within the original Siletz Reservation.

**Cooper, Jason B.**

***Early 20<sup>th</sup> Century Fly Field in Snohomish County, Washington***

The *Golden Age of Flight* in western Washington is inexorably linked with early aviation pioneer, William Boeing. The development and construction of King County International Airport (Boeing Field) in Seattle (c. 1928) and Paine Field near Everett, Washington (c. 1936) helped propel Seattle, aka “Jet City,” and the Boeing Company to be first in flight during the 1950s. The modern airports of Boeing and Paine fields brought about the end of small flying fields across Puget Sound, including one built on a small island located within the Snohomish River estuary between Steamboat Slough and Union Slough. Gordon E. Mounce, a local car salesman and reserve flyer, built a flying field, along with a seaplane base, in 1927. The airport was dedicated with an air field day in 1928 in front of thousands of spectators. Aerial photographs show the flying field still in use into the 1950s, but abruptly ends with construction of the Interstate 5 corridor across the estuary.

**Covington, Brenda**

***Early Archaic Lithics, Ongoing Reservoir Impacts, and Evaluation Potential at 45LI224, Grand Coulee Dam Lake Roosevelt***

Cultural resources along the mainstem Grand Coulee Dam Project Area are jointly managed by the Bureau of Reclamation, Bonneville Power Administration, the National Park Service, the Confederated Tribes of the Colville Reservation, and other land owners/managers, as appropriate. This presentation will provide a preliminary overview of a pre-contact lithic scatter site (45LI224) located on a high ridge above the pre-dam Columbia River in Lincoln County, Washington. The artifact assemblage observed on the ground surface and the preliminary results of small scale testing conducted in 2017 indicate 45LI224 has an early archaic lithic workshop component. Site updates conducted over the past 20 years have documented vast changes in the distribution of cultural materials and exposure of features, which provides insight as to how quickly reservoir processes can impact sites. While these processes can cause immense and sometimes unfamiliar impacts, recent studies have found potential for pre-dam intact deposits that can be tested and used to evaluate sites such as 45LI224.

### **Coyote, Arrow**

#### ***The Mowitch Project-Traditional and Contemporary Methods of Hunting and Use***

Mowitch means “deer” in the Sanpoil language, and this project entails documenting through film, the steps involved in deer procurement and processing: hunting, gutting, skinning, butchering, and tanning. This symposium/panel is part of the production process whereby the Mowitch film makers will present portions of the film and have a panel discussion with the audience. The results will help focus the narration portion of the project that will be integrated into the final production of the film. This video will serve to educate and preserve the traditional/contemporary methods of deer procurement and hide processing.

### **Coyote, Arrow**

#### ***Hunting Traditions in the Upper Columbia River***

Hunting has a long tradition in the Upper Columbia River. Place names describe good hunting areas, early explorers describe hunting techniques, and ethnographers along with oral history describe hunting excursions and their cultural significance. In addition, there are numerous archaeological sites, artifacts, and features within the region associated with hunting. This presentation discusses hunting traditions of the upper Columbia River, particularly in the Sanpoil (snpəʕʷilx), Colville (sʰʷiyiʔlp), and Lakes (sinʕickstx) territories.

### **Croes, Dale, Ed Carriere**

#### ***Re-Awakening Ancient Salish Sea Basketry: Applying Generationally-Linked Archaeology***

Ed Carriere, Suquamish Elder and Master Basketmaker, and I have been working with the U.W. Burke Museum to replicate 2,000-year-old waterlogged archaeological basketry found in the early 1960s from the Biderbost site (45SN100), along the Snoqualmie River in Snoqualmie Tribe traditional territory. Ed learned old style split cedar limb/root clam basket making from his Great Grandmother, Julia Jacobs, who raised him. Ed’s goal has always been to go back as many generations in his family to master their work. As a wet site archaeologist specializing in ancient basketry on the Northwest Coast, I work from the other direction, deep-time, statistically linking ancient basketry styles from throughout the region to the present. I had a career-changing idea while re-assessing the 2,000-year-old basketry collection from the Snoqualmie River site, asking Ed to try replicating these baskets that statistically linked through 100 generations from this site through 1,200, 750, and 500-year old Salish Sea wet site basketry to his Great Grandmother’s old style in an approach we call Generationally-Linked Archaeology. Generationally-Linked Archaeology attempts to link the current cultural Artisans back through the generations and with the archaeological evidence through a process of cultural/ideational transmission. The approach goes from the present back and deep archaeological time forward, meeting from both directions. We believe this approach could be used for study other artifact categories.

### **Damitio, William J., Shannon Tushingam**

#### ***Community Space and Household Activity at Moses Lake: Re-examination and Radiometric Dating of HP-A, a Large House at the Long Beach Village Site (45GR30)***

The Long Beach Village Site (45GR30), located along the eastern shore of Moses Lake, is comprised of 21 house pits and dates to the Late Precontact. The site was first identified archaeologically in 1947. Three years later, R. D. Daugherty led the excavation of three pit features: a large ovular house (HP-A), an adjacent circular house (HP-B), and a shallow ovular pit (Depression-C) that Daugherty suggested was a mat lodge rather than a house. Daugherty presented a brief summary of the results of the excavation in a 1952 American Antiquity paper, in which he also discusses the nearby Ridge Bottom Village Site (45GR27). Later researchers have reexamined the latter site, but 45GR30 has received little additional

attention. This brief paper is focused on HP-A which, given its size (12.25 m × 8.23 m [40.2 ft × 27 ft]) and distinctive shape among other features at the site, may have served as a gathering space for the community residing at the site. Two new radiocarbon dates obtained from the HP-A floor confirm that it was occupied during the last few centuries before contact and give new insight into the site's temporal relationship with 45GR27, which was assumed by Daugherty to be contemporaneous with 45GR30. Fragments from 11 stone smoking pipes were collected from the floor of HP-A, supporting our interpretation of the structure as a place of community interaction.

**Danner, Yuumi**

***Reflections in Stone Tools: A Life Story of Don E. Crabtree***

Dr. Don E. Crabtree, as one of the pioneers of academic flintknapping, developed an experimental approach in lithic studies during 1960s and 1970s. His diverse replication studies left a great impact on the field of archaeology not only in the Pacific Northwest, but also throughout the United States, Canada, and other countries. His story outside of publications, however, has been known by a very few people. Since his life had always been intertwined with academic flintknapping, learning his life stories allows us to better understand the importance and potential of experimental approach in archaeology. With his numerous professional and personal data collection at the Alfred W. Bowers Laboratory of Anthropology, this paper revisits the life of Crabtree and explores the contributions and influences he left in the field. It intends to help lithic students and scholars appreciate what Crabtree and his hands-on method really mean to us.

**Davenport, Meaghann, Ray Von Wandruszka**

***Chemical Analysis of Historical Person Products***

Bottles and jars with unknown contents can be an interesting challenge for historical archaeologists. Identification of the recovered materials often requires in-depth chemical analysis, which can itself be problematic because of changes that occur in many chemicals upon prolonged environmental exposure. Yet, a combination of chemical and cultural sleuthing often provides satisfactory identifications, leading to a better understanding of the historical use of materials.

Bottles with products for personal use, including medicines and grooming aids, are often discarded with small amounts of the original contents left in them. When these are identified, they can provide fascinating insights into the daily lives of the people used them – decades to centuries ago. In the present case, artifacts from around the Northwest were investigated, and the results provided the hoped-for chemical answers. Peripheral analysis brought to light some remarkable goods that were available to the people of this region in the 19th and early 20th century.

**Davis, David R.**

***Teacups, Terracotta and Transnationalism: A Analysis of Ceramics Recovered at Yama Village (45Kp105), Bainbridge Island, WA***

Yama Village (45KP105) on Bainbridge Island, Washington was initially established to quarter Japanese bachelor migrant laborers by and for the large local Port Blakely sawmill. Families soon followed, and at its zenith, Yama Village (1883-1929) contained roughly 300 residents, 50 homes, and boasted of such amenities as a restaurant and hotel, general store, tea garden, and a Buddhist temple. Surface survey and subsurface excavation were conducted at Yama Village for three seasons by the students and staff of Olympic College (2015-2017). These efforts resulted in the recovery of a large ceramic assemblage (n = 2,611). This research presents results derived from the initial analysis of these artifacts, focused through the interpretive theoretical lens of transnationalism and utilizing a typology specific to historic Japanese ceramics. This new information contributes to a more accurate understanding of both daily life at Yama

Village and of Japanese-American transnationalism and social-identity formation generally, while simultaneously adding to the archaeological record of Issei and Nisei in late nineteenth and early twentieth century Washington.

**Dombrausky, Kailie, Grace Coffman, E. Chadwick de Bree**

***Chimpanzees modulate signs in requests***

To make requests in American Sign Language (ASL), native Deaf signers modulate their signs by raising the eyebrows, maintaining eye gaze with the recipient, and holding the sign in place for an extended duration (Covington 1973). Five signing chimpanzees lived at the Chimpanzee and Human Communication Institute (CHCI). Reliable caregivers recorded systematic detailed observations of the chimpanzees' signing and the situational context in sign logs. The chimpanzees use the signs in a variety of communicative functions, such as statements, responses, descriptions, conversational devices, performatives, and requests. In a 2-year sample of sign logs requests appeared 12.5% of the time and 8.2% contained modulations (Leeds and Jensvold 2013). This study queried sign logs from 2000 - 2007 for requests and accompanying modulations by searching for keywords "raised brow", "eye gaze", "held sign", and "request." The most frequent type of modulation was raised brow (38.10%) followed by eye gaze (28.92%). The keyword "request" co-occurred with the queried modulations in 85.14% of the sign logs. Conversely the keyword "request" appeared alone in 14.86% of sign logs. This highlights the role of modulation in signaling requests. This study adds to our understanding of the patterns of sign modulation in chimpanzees, including those human signers use.

**Donald, Roderick Kevin**

***A Brief Introduction to the Confederated Tribes of the Colville Reservation's History and Archaeology Program***

The History and Archaeology Program at the Confederated Tribes of the Colville Reservation [Colville Confederated Tribes (CCT)] began in 1976 as one of the first groups of Tribal Historic Preservation Offices (THPOs) in Indian Country. There are now over 150 THPOs throughout the US. The program has grown to more than 40 employees and participates in more than 50 projects per year. A major aim of the History/Archaeology program is to promote tribal sovereignty through the identification and preservation of cultural resources within the reservation as well as tribal traditional lands.

**Dunham, Haley**

***Urban Co-design How Oaks Offer Opportunities for Collaboration***

Urban green spaces often face problems of "overuse" issues because they can serve so many functions. In their conception, designers are challenged to create spaces citizens can both connect with and use in a practical way. The interests of certain groups may sometimes be over-represented, such as public parks that offer extensive work out equipment, and these functions may not be equally appreciated by different stakeholders in the area. Co-design is a method that attempts to mitigate this issue by inviting non-technical experts to participate in the design process and collaboratively decide what the finished space will be built to resemble. This study uses the co-creation of an Oak Savanna on the campus of Portland State University as a case study for the process of co-design and examines how the co-design of the urban Oak Savanna at PSU reflects various stakeholder's interests. Using qualitative methods such as focus groups and interviews; stakeholder's interests were assessed both independently and in the context of the renovated Oak Savanna. This study is set to begin in April of 2018.

**Elder, J. Tait*****Design-Build in the Rearview Mirror: Lessons Learned from Transportation Projects in Washington and California***

The conventional cultural resources review process assumes that a project design is complete, or at least complete enough, to have sufficient design information to adequately assess impacts to cultural resources. However, as an increasing percentage of infrastructure improvement projects transition to the design-build delivery method, this assumption may not always be appropriate. Compared to the traditional design-bid-build delivery, the design-build approach delegates a larger percentage of design work to the construction contractor, meaning that a larger percentage of the design work could occur during construction – after cultural resources review is complete. As a result, while alternative contracting mechanisms can transfer design, cost, and schedule risks to the contractor, they can increase environmental review and compliance complexity and therefore risk to the project owner. Using examples from the State Route 520, Alaskan Way Viaduct, and California High Speed Rail projects, this presentation examines how design-build affects the cultural resources review process, discusses potential approaches to accommodating for design-build, and presents observations and lessons learned.

**Endacott, Neal*****Where is the Beef? Inferences on Japanese Transnationalism through Cow Remains from the Yama Site, Bainbridge Island, WA***

The Yama Site (45KP105), on Bainbridge Island, WA was a village occupied mostly by Japanese immigrants, and their first generation descendants, from about 1887 to 1929. Extensive surface survey and limited test excavations, by the Yama Archaeology Project, from 2015 to 2017 recovered a sizable zooarchaeological assemblage. Most of these faunal specimens are domestic cattle (*Bos taurus*), despite the fact that traditional Japanese diet included little beef. These data provide insights on transnationalism through food consumption and preparation techniques from a significant, but as yet insufficiently examined, period in the history of the U.S. Pacific Northwest.

**Engeman, Richard H.*****My Grandmother's Cookbook***

A century of change in the growing, storing, preparing and eating of food can be viewed through Oregon's community cook books between 1885 and 1985. Chicken? Cheap today, but dear then. Oysters? Ample and delightful, then! Now? Vanished. This overview of what we ate is supplemented by information from restaurant menus, homemakers' advice from newspapers, advertising leaflets, and the scrapbooks and recipe cards of home cooks.

**Farrell, Ian Lars*****Late Postclassic Formed Tools of Coatlan Del Rio: A Comparative Analysis***

This paper provides a brief overview of the formed flaked stone tools found at the surface collected Proyecto Coatlan sites of CDR 22 and CDR 27. In this study, formed tools are defined as those created by further reducing flakes, spalls, blades, and bifacial cores into implements made for specific uses (e.g. ritual, military, economic, etc.). In examining this collection, I attempt to identify the behaviors and activities associated with the use of these tools. While there are difficulties in ascribing specific uses to tools on a case by case basis, it is widely agreed by archaeologists that there is useful information to be gained by such an analysis. In addition to the analysis of the Coatlan tools themselves, I also consult Aztec period comparative information from the sites of Cuexcomate and Capilco in Western Morelos, Yautepec in Eastern Morelos, and the site of Calixtlahuaca in the Valley of Toluca.



In a larger context, this study complements existing data on Aztec period flaked stone tool from the Basin of Mexico by offering new insights on artifacts from an Aztec provincial context.

**Franke, Bea**

***Critical Review of Imagery of NWC Coast Salish Past Lifeways***

Images are important for the dissemination of archaeological information in a way that is easily understandable by multiple audiences, including scholars and the general public, but they can be biased in ways that misrepresent the past. Archaeologists often rely on photographs and illustrations that are object-focused, which leave out the people behind the artifacts and potentially ignore the complexity of the technology. In addition, many of these images reflect a colonial lens. I am presenting a content analysis of existing images from books and other types of displays that convey information about past lifeways of NWC Coast Salish people. The focus of the critical review is on illustrations, but I include photographs as well to look at the ratio of the types of images chosen. The critical review of imagery incorporates visual anthropology methods such as content, discourse, and semiotic analyses, where I consider a range of questions that consider the people being displayed, how they are presented, and who is displaying them. The purpose of my critical review is to understand how colonization has affected how Coast Salish people have been visually represented. From my perspective as a non-native archaeologist and illustrator, I suggest that there is a need to create new, culturally mindful illustrations that incorporate multiple perspectives on past lifeways of Coast Salish people.

**Franklin, Paris M.**

***A Technological Analysis of Obsidian Flaked Stone Tools from Two Aztec Sites in the Coatlan del Rio valley***

This paper presents the results of the technological analysis of obsidian artifacts from two sites subjected to archaeological surface collections as part of the Proyecto Coatlan. The primary objective of this analysis is to determine whether or not obsidian tools were produced on the residential terraces of these sites. I begin with a general overview of blade core, biface, and bipolar technologies, the most common ways in which Mesoamerican flaked stone tools were produced. If blades were produced in residential contexts, we would expect to find prismatic blade cores and other byproducts of blade production in relatively high frequencies; if bifaces were produced, we would expect to find a respectable amount of thinning debitage. I then present the artifact densities from the sites and discuss whether these data are consistent with on-site flaked stone tool production. Next, I present the technological breakdown of the collections. I close my discussion by concluding that, based on the artifactual breakdowns, it is improbable that blades were made at these sites, but limited bifacial and bipolar processing may have taken place. At this point, it appears as though most of the Coatlan del Rio consumers acquired their flaked stone tools in a market setting.

**Fulgham, Samantha Lee, Colin Grier**

***Investigating Feasting in a Precontact Coast Salish House: Zooarchaeological and Paleobotanical Analysis of a Potential Feasting Feature at DgRv-006, Galiano Island, BC***

In the anthropological literature, feasting has been connected to the emergence of social inequality and entrenchment of social hierarchies. Here, we consider faunal and botanical remains from a Late-period Coast Salish plankhouse to illuminate the potential role of feasting on the precontact Northwest Coast. Results are presented of zooarchaeological and paleobotanical analyses of 12 floated samples from a 40 x 10-meter plankhouse located within site DgRv-006 on Galiano Island, British Columbia. Several of these samples derive from a potential feasting feature, as indicated by an unusually high frequency of sea urchin remains. Paleobotanical analysis focuses on wood charcoal identification, which provides an indication of

wood use in the feature and across the house floor. Zooarchaeological analysis provides an indication of the degree to which remains from the posited feasting feature differ from typical domestic production and consumption. Based on these and other lines of evidence, we argue that differential use of wood and the prevalence of prestige food resources indicate feasting beyond the needs of the household. This study adds to the body of research directed towards understanding the mechanisms behind the creation and maintenance of social inequality in Northwest Coast societies.

**Fulk, Karen S., John P. Ziker**

***Women's Food Sharing in Siberia: Social Network Analyses by Frequencies of Transfers versus Values and Amounts Given***

This paper considers informal household networks by which tundra foods are distributed in Ust'-Avam, Taimyr Region, Russia. The majority of families in Ust'-Avam rely upon subsistence hunting, fishing, and trapping for their livelihood. Variation in hunting ability and interest in hunting create inequalities in local food production. Interhousehold food sharing is widespread and helps buffer consumption risk in particularly vulnerable households. This paper will compare results of analysis of previously unpublished data on the interhousehold food sharing by a sample of women in the community. The food transfers involved are portions of meat and fish transferred to the women from producers or intermediaries. This paper will compare the results of social network analysis of frequencies of transfers versus amounts of food transferred, and considers the nutritional values of food transfers (total calories, protein and fat content values) and calculated monetary valuations. This research provides another opportunity to examine the effects of variables that relate back to the widely debated explanatory hypotheses of food sharing.

**Fulkerson, Tiffany J., Shannon Tushingham**

***Who Controls the Narrative? A Critical Evaluation of Occupational Affiliation and Gender in North American Archaeology Publishing***

The vast majority (approximately 90%) of archaeological practitioners in the USA work for private sector CRM firms and federal and state agencies, and half or more are women. These professionals produce a great deal of writing output that is typically published in technical reports and classified as "grey literature." Despite the considerable amount of writing produced by these professionals, much of their research is not published in peer-reviewed journals which are widely regarded as more accessible and prestigious than grey literature. Studies have shown that women remain markedly underrepresented in peer-reviewed journal publications, but as of yet, no studies have considered the relationship between occupational affiliation and gender in archaeology publishing. In order to address these issues, we tracked the occupational affiliation and gender of authors in peer review and non-refereed archaeology journals. Our results suggest that a great deal of peer-reviewed literature—which is often heralded as the gold standard of academic achievement and confers greater professional capital—is dominated by male archaeologists in academic settings. Conversely, there is a noticeably higher representation of both women and men from CRM and agency settings, as well as women in general, in the non-refereed journals. We attribute these differences to variations in the costs and benefits of publication for people working in different professional roles. Our results suggest that non-refereed journals may provide an important means of bridging the peer review gap and give voice to individuals from diverse backgrounds and perspectives.

**Furlong, Julia, Sean Stcherbinine**

***Spatial Analysis of Prehistoric Land Use Practices at Village Site 45YA153, Middle Columbia River***

Site 45YA153 is a prehistoric village located on the mainstem Columbia River in central Washington. Recent subsurface investigations encompassing over 100 acres, within the site boundary and on the surrounding landform, resulted in the recovery of over 5,800 artifacts and ecofacts, including projectile points/knives, chipped stone and cobble tools, debitage, faunal remains, and both marine and freshwater mussel shells. Preliminary analysis of projectile point styles suggests occupation spanned the Holocene, from ca. 13,000 cal BP to 150 BP. Sediment data from nearly 3,000 shovel test excavations, observations of surface disturbances, and a 3 percent sample of hand augured shovel tests reaching a depth of up to 4 meters, are used to characterize stratigraphy and interpret landscape geomorphology. Additionally, identification of two tephra samples collected near the site will aid geomorphology and landform age interpretation. ArcGIS spatial analysis tools are used to show relationships between landform type and artifact density/location, which allow the mapping and description of site activity areas. These analyses are used to further investigate how the site fits into regional models of prehistoric land use strategies.

**Furlong, Julia, Jerry R. Galm, Stan Gough**

***Distribution Analyses at the Late Paleoindian Sentinel Gap Site: Toward an Understanding of Site Patterning and Social Structure***

The single episode of occupation at the Late Paleoindian Sentinel Gap site is represented by a highly organized distribution of artifacts and features across a bounded occupation surface. ArcGIS spatial analysis tools reveal details of this patterned distribution and in turn, provide a better understanding of the parameters and specific details of the occupation. Of particular interest in this distribution study is better definition of two features that may have served as dwellings during the site occupation. Exploring how the site occupants used and abandoned the Sentinel Gap site also facilitates a first approximation of the underlying dynamics and organization of group social structure.

**Gargett, Robert H., Kate A. Shantry**

***Washed Away***

Redeposited cultural resources were found in the tidal zone of natural backshore deposits associated with the now-reclaimed barrier beach and lagoon at Windjammer Park, in Oak Harbor, Washington. The cultural resources were found landward of intact and disturbed deposits of National Register-eligible precontact archaeological site 45IS298. While monitoring machine excavations well away from the present seashore between 1.5 m above mean sea level and 1.25 m below, we observed isolated, sensitive cultural resources, including basketry fragments, in thickly bedded, very dark gray, poorly to very poorly sorted deposits with particle sizes ranging from sand- to very coarse pebbles, whole and fragmentary marine shell, and larger particles of organic material, such as driftwood. While it seemed obvious that these were not cultural deposits, per se, it was not immediately clear how these cultural materials could have been naturally displaced from the midden, which is at least 100 m closer to the present shoreline. We conclude that these deposits are the result of 'overwash' events that are known to occur on barrier beaches during times of extremely high tides. At such times, storm-driven, high-energy wind waves burst over and through the beach ridge, entraining everything in their paths, and creating a moving mass of material analogous to a debris flow. As the flow loses energy it forms a 'washover sheet' on the back shore; if it passes into the lagoon, it forms a 'washover delta.'

**Gendron, Danielle**

***Paddling as methodology***

Using the canoe as my research vessel, I will paddle the 250-mile Trent-Severn waterway with my father to trace personal as well as national narratives to interrogate the construction of Canadian heritage. Through this waterscape I will look at ‘historic’ sites, plaques, stories, legends, survey records, HBC records, oral histories, and treaties to reveal the palimpsest of realities existent on the waterway as well as detail the ways in which French, British, and eventually Canada have stamped stories and heritage squashing out Indigenous landscapes and presence. I ask how these marks of heritage spark imaginations for understanding what was, what is, and what is possible (Atleo 2007) for Canada. The canoe will be our guide and mediator to the waterscape, and I interrogate the role will the canoe play throughout my research. Combining theorizations on temporality and place (Basso 1996; Bennett 2009; Lefebvre 1991; Simpson 2016); multi-sensorial methods and understandings of being in place (Concha-Holmes 2015; Ingold 2004; Whetung 2016); and utilizing experimental approaches (Elliott and Culhane 2016; Madison 2005), in this paper I discuss using an iconic symbol of Canada, the canoe and paddling as methodology.

**Gilpin, Jennifer, Alexander Stevenson**

***Urban Contamination: How to Archaeology Safely***

With increasing development in urban environments comes increased opportunity for archaeological investigation in settings that have been obscured for decades. The more of these projects we work on, the more we recognize that contamination is everywhere. In the past archaeologists have been naïve about them chemicals in the dirt that holds our data. The HRA health and safety program has helped our staff understand health issues, what questions to ask our clients, how to recognize contamination, and how to work within accepted standards to meet our clients’ needs and keep our staff safe. In this short presentation we will share some of the lessons we’ve learned on how to ‘archaeology safely’ where there is urban contamination.

**Goodman Elger, Melissa**

***Dwelling in the Inland Northwest***

Prevailing archaeological models of settlements are based on the notion of a functionally discrete "house" at the center of domestic life for a replicable household group. This assumption enables us to create sampling and analytical strategies that aim to deduce household activities, and to compare houses. However, Inland Northwest (INW) ethnography presents a picture of fluid domestic relations in terms of the composition of households, and therefore also of villages. In this discussion, I raise concerns about how to accommodate fluid domestic relations into our research designs and provide some directions for how to address these concerns. For instance, reliance on the culturally loaded term “house” may be inappropriate and I suggest we use the term "dwelling" and seek to define culturally-specific attributes. Another concern is that if households are fluid, then larger domestic structures may simply relate to occupancy and not indicate largess. My aim with these talking points is not critique, but to support building approaches specific to ancestral INW lifeways.

**Green, Thomas J.**

***Givens Hot Springs and Mud Springs: Two old and moldy projects***

Givens Hot Springs and Mud Springs are two projects sponsored in the 1980s by the Idaho State Historical Society with major support from the Idaho Archaeological Society. Both sites are on private land and were threatened with destruction – these were salvage excavations. The sites are located at large hot springs on south side of the Snake River between Marsing and Walters Ferry, Idaho. Papers and articles were presented and published on these projects, but final technical reports were never completed.

Serious work towards this end is ongoing for Givens Hot Springs and near completion. Mud Springs waits offstage at the moment. The excavations at Givens found houses and middens ranging from cal BP 5400 to cal BP 957. These are evidence of late fall and winter occupations. Mud Springs was heavily looted in the 1950s. We had access to some of the collections from the site and excavations in 1984 were aimed at discovering the context of these collections.

**Grier, Colin**

***Identifying Plankhouse Architecture with Geophysics: What are our prospects?***

A dearth of plankhouse floor plans and village maps for Salish Sea communities presents significant obstacles for archaeology to address some key research questions concerning household and community organization, integration, and inequality. This poster illustrates recent attempts to generate such plans with geophysical methods, primarily ground penetrating radar, at several known village sites in the southern Gulf Islands of British Columbia. Methodological approaches and strategies are highlighted, including the role of sampling, ground truthing, and algorithms for relating GPR anomalies to specific archaeological features. Research goals are also defined, focusing on the resolution of data required for tackling key research questions in Salish Sea history. The overarching goal is to foster discussion concerning the implementation of geophysical methods to address some key and persistent archaeological objectives related to household and village organization.

**Grim, Bridget**

***The Buddhist Temple at Yama: Religious and Cultural Identity of a Late 19<sup>th</sup> – Early 20<sup>th</sup> Century Japanese-American Community***

Associated with the Port Blakely Mill on Bainbridge Island, Washington, the village of Yama was home to Japanese immigrant workers and families. The community existed from the years of 1887 to 1929 and at its peak reached a population of nearly 300. Along with the ebb and flow of its population, the Nihonmachi village grew to house several businesses and community spaces, including a building referred to by locals as “the Buddhist Temple.” Though previously assumed to have functioned as a temple only informally, research conducted as part of the 2017 Olympic College Archaeology Field School indicates that the temple was one of the earliest established in the Pacific Northwest. This presentation examines the history of the Buddhist temple at Yama, including an analysis of its role in shaping the cultural and religious identities of the residents of Yama, as well as the larger Japanese-American community of Puget Sound.

**Hackenberger, Steven**

***Homescapes: The Once and Future Archaeozillow.com?***

Patterns of house settlement, or “homescapes,” are enduring and perpetual. Patterns of house settlement have been well summarized and systematically compared within the Canadian or Northern Plateau. Similar analysis has initiated for the upper and middle Columbia and includes broad comparison with the Northern Plateau. A general explanation for settlement in all three regions, plus the Snake River, has also been formulated. These analyses need to incorporate data (and reevaluate seminal settlement studies) from the Snake and Salmon River. Data must also be combined for the lower middle Columbia and tributary rivers of central Oregon. The above efforts, creating a type of archaeozillow.com, rest on growing and grooming radiocarbon databases. Meta-regional and regional scale settlement models, include factors such as fisheries, root scheduling, terrain and transhumance for hunting, travel networks, and defensive locations. These models must ultimately be tested with data for upland settlement sites. Settlement models must account for locales where house sites are now inundated, but also where they must still be protected. This larger frame of reference will help explain and conserve homescapes.

**Hall-Holton, Joseph*****10-OE-2256; The Shoofly Rock Alignment Complex***

10-OE-2256, historically known as the Shoofly Rock Alignments, is an archaeological site located in Owyhee County, Idaho, within the Little Jack's Creek Wilderness Area and is managed by BLM. It lies primarily on a bluff and extends roughly one mile from a road south to north, culminating with a small (10-15ft.) cliff on its northernmost edge. The site consists of several basalt rock alignments, the largest of which extends from two large hunting blinds and slopes downhill to the north. Sites similar to this one exist in semi-arid, steppe-like ecological contexts within the Great Basin in the Western United States; rock alignment features can be found at sites in Wyoming, Oregon, Utah, and Nevada as well as in other areas of Idaho. These features have been associated with the communal hunting of pronghorn and other game animals, as evidenced by the ethnographic record and faunal assemblages. While no faunal assemblages were found on the surface of 10-OE-2256, other characteristics, including the arrangement of the rock alignments and the existence of lithic assemblages at particular locations within the site, may link it to seasonal communal hunting and the re-working of projectile points used for the hunting of a variety of game animals. Conclusively dating the site is made difficult by a lack of culturally-associated organic material, but the presence of Elko-type projectile points within the site and an historic account of the site's utilization as a pronghorn trap approximate its use as being within the Late Archaic into the Proto-Historic and Historic periods, ca. 140-3,500BP.

**Hall, Mark E.*****Monte-Carlo Summed Probability Distributions as a Demographic Proxy: A Case Study from the Ruby Pipeline Excavations***

As demonstrated by Shennan et al. (2013), Downey et al. (2014), Crema et al. (2016) and others, bootstrapped Monte-Carlo summed probability distributions (MCSPD) of radiocarbon dates can serve as a proxy for prehistoric populations. Hypothesis testing can be implemented using permutation testing of the MCSPDs. This talk looks at applying this methodology to part of the radiocarbon date assemblage from the Ruby Pipeline excavations. Ruby is a 680-mile natural gas pipeline stretching from Malin, Oregon to Kemmer, Wyoming. The 124 radiocarbon dates analyzed here come from 110 sites located in Oregon and northern Nevada. These sites are spread across the following five geomorphic regions (from west to east): Northern Modoc Plateau, the High Rock Country, Upper Lahontan Basin, Upper Humboldt Plains, and Thousand Springs Valley. Permutation tests indicate that the differences between the MCSPDs for each geomorphic region are not statistically significant. The overall trend in the MCSPDs is an increasing population through the Holocene with a drop during the Medieval Warm Period and in the Contact Period (circa 150 BP). The High Rock Country has the earliest occupation and the highest population densities during the Terminal Pleistocene/Early Holocene. Hiatuses in each regional MCSPD will be discussed in terms of known climatic events and phases.

**Hallingstad, Ellen, Mitchell Overdick*****Let's Speed This Up: Testing the Applicability of Machine Learning in Ceramic Trademark Identification***

Machine learning offers archaeologists an unprecedented method of pattern recognition, one which may make artifact identification and analysis faster and more accurate than ever before. This approach, from a growing subfield of computer science, involves creating an artificial neural network (ANN) which can learn to identify artifacts based on a provided digital reference collection. Particularly exciting is the application of machine learning to cases where identification by hand would be either impractical or impossible due to the completeness or preservation of the artifacts. This research explores such an

application, with ceramic trademarks as the key focus. A small test set of trademarks was gathered, photographed, and digitally broken to create a digital reference collection of over 100,000 sherds; this reference collection was then used to train an ANN to identify naturally broken sherds from the same test set. This addresses two primary issues: 1) creating a usable and diverse reference collection and training set from a limited source of artifacts; and 2) improving speed and accuracy of artifact identification. This research presents a preliminary look at what may be the next wave of artifact identification in the rapidly developing world of digital archaeology.

**Hamilton, Dale, Adam Calkins**

***Unmanned Aircraft Systems in Idaho Archaeology, Where We Have Been and Where We Are Going***

Since the early 20th century, archaeologists have used aerial photography to locate and record archaeological sites. Today, archaeologists can use small unmanned aircraft systems (UAS or drones) to locate and record archaeological sites. UAS provides archaeologists with a low-cost alternative for recording complex sites. In 2017, Northwest Nazarene University and the Bureau of Land Management, partnered to complete a pilot project to test the capabilities of UAS and machine learning technologies for identifying archaeological features. Study areas in southwest Idaho included a two-mile segment of the Oregon Trail as well as multiple historic can scatters. After successfully completing this project, NNU is initiating additional collaborations with the Boise National Forest, Idaho State Parks and the BLM to identify and record historic railroads, trails, mining activity and campsites.

**Hammersberg, Barbara, Lourdes Henebry-DeLeon, Breann Stoner, Brooke Webley**

***NAGPRA Case Studies: Creating a Problem Based Learning Opportunity***

Cases brought before the NAGPRA Review Committee provide opportunities to create problem based learning exercises for students studying the nuances of the Native American Graves Protection and Repatriation Act. This poster is a culmination of work done by graduate students taking Central Washington University's 400-level class – NAGPRA: Complicated Reality of Repatriation. The goal was to create a problem base learning exercise for undergraduate students utilizing two cases heard by the National NAGPRA Review Committee. Both cases were chosen because they were unique in either the outcome or process. All materials provided by the parties involved in each case were examined by the undergraduate students who reenacted the hearing using the pertinent evidence and original arguments presented. Students were not allowed to introduce any new evidence or findings since the cases were heard by the Review Committee and were not given the outcome of the cases beforehand. The first goal was to have students understand the process of navigating NAGPRA before it is heard in front of a committee. Another goal was for students to come to terms with the complexity and sensitivity of each case, as well as learning how the ambiguity of terms, language, and different types of interpretation can impact a case. The project also provided students an opportunity to gain practical experience asking and answering valid questions about the materials, organizing arguments, and finding crucial pieces of evidence to support their positions. Graduate students were able to gain valuable teaching experience as well as learning how to guide students to look for general themes within the material.

**Hampton, Ashley**

***Transforming a Housepit into a Home: Examining the Intersection of Identity and Space-Use Within Housepit 54***

This study examines issues of cultural change/continuity as embodied within a singular multi-generational housepit (Housepit 54) located within the Bridge River site in the Mid-Fraser Canyon, British Columbia, Canada. Previous research has focused on understanding the changing social dynamics at both a village and household-level, examining shifts from a more collaborative to competitive framework in response to

external environmental pressures (e.g. resource depression). As interpersonal dynamics within Housepit 54 were renegotiated within a context of increased competition, this study will address how—if at all—such changes beget corresponding shifts in identity-defining tasks in order to better understand the recursive relationship between culture, environment, and individual agency. If hunter-gatherer identities were tied to resource-extraction activities (i.e. individuals who hunted had identities based around such hunting practices) then changes in resource access may have caused subsequent, measurable shifts in how identity was constructed. This study uses Geographical Information Systems (GIS) in order to examine in fine-grained detail spatially-defined activity patterns within HP54 to illuminate the interplay between personal identity, space-use, and the emergence of inequality.

**Hannah, Jean**

***Divining Water at Yama Village, 45KP105: Discovering archaeological and historical evidence regarding water resources in a Japanese sawmill community***

Like any other new settlement, the Japanese village of Yama (45KP105) near the Port Blakely Mill in Washington State, required access to reliable, fresh water resources. Oral history describes the water collection system to be filling buckets from a nearby stream. However, as the community became more established, evidence indicates a growing diversity and sophistication in the manner in which fresh water was obtained, transported, utilized, and stored. This presentation uses archeological data such as pipes and pumps, along with historical evidence such as oral histories and photographic analysis, to trace probable changes in community water sources, storage and utilization in this dynamic Japanese American community. In doing so, we enrich the significant, but seldom told story of Issei and Nisei life in the Pacific Northwest in the late nineteenth and early twentieth centuries.

**Hannold, Cynthia**

***The Continued Relevance of Experimental Archaeology***

Experimental archaeology, which became relevant as a product of processualism in the 1960s, is now much less common in archaeological research and university curricula. Modern experimental archaeology blends phenomenological and scientific approaches, leading to a greater understanding of past technology and lifeways. If approached appropriately experimental archaeology has the ability to answer previously overlooked or unanswerable questions. Regional experimental archaeology programs that are currently contributing to this effort include both lithic and ceramic studies. The author proposes that experimental archaeology should return to the proverbial table, both as a tool for public outreach and as a tool for training the next generation of anthropologists before they are sent into the field, either for archaeological or ethnographic work.

**Harris, John S.**

***Rethinking "Anthropogenism" and Discerning Anthropogenic Site Vegetation***

How do archaeologists know what plants to look for during surveying? One of the various reasons archaeologists record vegetation at archaeological sites is out of building awareness of plants as site/feature indicators, due to their ‘conspicuous’ nature and co-occurrence with sites. Though, the idea of vegetal indicators has largely remained little more than archaeological folk wisdom. When archaeologists refer to plants, as well other non-human objects in the environment, as indicators, they often refer to such things as “anthropogenic”. “Anthropogenic” is a flexible term used to occupy conceptual gaps between existing notions of site constituents, but despite its popular usage in the last 15 years, the word has evaded clear and constructive definition, resulting in surprisingly divergent usages over its ambiguity of what constitutes human “modification” or “influence”. Without conceptual cohesion on this phenomenon, archaeologists risk overlooking data potential in ‘nature’, focusing on particular aspects of



anthropogenism while missing out on others. This paper seeks to bring unity to the recognition of anthropogenism, using vegetation as an example, by lashing together theory and method for the categorical recognition of such phenomena as both intrinsic and extrinsic in nature.

**Harris, Lucille, Joe Bergstrom**

***Early to Middle Holocene Occupations of Long Valley, Idaho: A Synthesis of Private Collections and Surface Finds from an Erosional Context***

The western margin of Cascade Reservoir in Valley County, Idaho contains an important record of Early to Middle Holocene human occupation. In order to develop a better understanding of potential contributions these sites can make to our understanding of the Idaho Middle Holocene and to generate testable hypotheses, we synthesized available information from private collections and surface finds data collected over the last forty years and report our findings here. The data indicate an unusually high density of Middle Holocene sites along the western edge of Long Valley at the base of the West Mountains that includes temporally overlapping use by Great Basin and Plateau affiliated groups. The sites are commonly, but not exclusively, located adjacent to streams at an elevation roughly 100 ft above the valley floor (prior to inundation by the reservoir). Based on setting, ecological context, and the presence of numerous deflated FCR features identified below the reservoir's high-water line, we suggest that camas or other plant resources were being targeted by Middle Holocene peoples. If these plant resources were being harvested and processed in quantity, this could provide the key to understanding a range of cultural developments that occurred during this period, including the first experimentations with sedentism and the development of an elaborate burial complex known as the Western Idaho Archaic Burial Complex. Further testing at these sites is warranted in order to evaluate this proposition.

**Hawes, Kathleen L.**

***Re-Awakening Salish Sea Basketry: Continuing Research of the Biderbost Wet-Site Basketry Materials***

Microscopic identification by cellular analysis of the 2,000-year-old Biderbost wet-site pack baskets, currently located at the U.W. Burke Museum in Seattle, reveals the materials used in the construction of this collection of beautiful ancient weaving technology. I worked with Suquamish Elder and Master Basketmaker Ed Carriere, and Dr. Dale Croes, Wet-Site archaeologist and an expert in the analysis of ancient Northwest Coast basketry, to understand the qualities, stylistic similarities and differences, and uses of the traditional materials found in basketry from this time period and areal region. The Biderbost baskets were recovered from the banks of the Snoqualmie River near Duvall, WA in the early 1960's (45SN100). Excavations were conducted by the Washington Archaeological Society (WAS) in one of the earliest Northwest Coast wet-site excavations. I will discuss the process of cellular analysis involving plant and plant parts (root, limb, and bark) used at this ancient site, as well as plans for future research in understanding the choice of materials from this collection. This includes comparing the Biderbost basketry materials with materials from two early Salish Sea collections: Water Hazard and Musqueam Northeast, both located in the Fraser River Delta, B.C. to explore the following hypothesis: If the 2,000-year-old styles are similar between Biderbost and Water Hazard and the materials (roots) are the same, what best explains this similarity of sites separated by over 100 miles? If the styles are similar but the materials are different, then would the connection still apply, but with individual/local variation in material choice?

**Helmer, Emily**

***Seasonal Sociopolitical Reversals and the Reinforcement of Autonomy and Fluidity among the Coast Salish***

There has been a great deal of archaeological interest in the fluid and decentralized nature of the Coast Salish sociopolitical structure. This paper addresses this unique sociopolitical organization through an analysis of five seasonal resource procurement camps in the Puget Sound region of Washington state. The seasonal camp represents a major node of the Coast Salish settlement pattern, but has remained underutilized in analyses of sociopolitical organization, in comparison to the winter village. This paper directly compares the relative investment in structure, systematic patterning, and functional differentiation of space at seasonal camps to the expected patterns of the winter plankhouse villages. By analyzing these seasonal settlements through the same lens often used to interpret plankhouse villages, an inverse relationship between the two is revealed that suggests a seasonal reversal of sociopolitical structure that would have served to reinforce autonomy and fluidity among the Coast Salish

**Henebry-DeLeon, Lourdes**

***Some comments regarding the Osteological Remains of the Curious Old Man buried in the upland Yakima Basalt Folds***

In May 1982 a Native American skeleton representing an adult male was discovered during the Golden Blade Exercise training maneuver by the U.S. Army near the Yakima Training Center, Washington. A retrodocumentation of the human remains recovered from 45-YA-344 has the potential to provide insights into early populations on the Columbia Plateau. This commentary reviews the osteological documentation and analysis included in the August 1982 physical anthropology report, "Osteological Analysis of the Cold Creek Burial", and the reliability of the data collected. Despite the difficulties in documenting human remains excavated, analyzed, and reburied in 1982, the process can potentially produce new knowledge.

**Henebry-DeLeon, Lourdes**

***NAGPRA Human Remains Inventory: Making Our Work More Visible***

In 2008, the Central Washington University NAGPRA Program and the Columbia Plateau tribes – the Colville, Nez Perce, Umatilla, Yakama Nation, and Wanapum Band of Priest Rapids - created a more visible, participatory human remains inventory process. Central let go of the "culture of secrecy" around our NAGPRA human remains documentation process and found the benefits outweigh the fears. A participatory process includes tribal representatives in all phases of the osteological analysis including completing skeletal inventory forms, recording data, describing taphonomy, and writing life histories. The change showed the tribes what we really do, generated research questions from tribal representatives and created productive, respectful working relationships. Central Washington University and the Columbia Plateau tribes have used the data to verify old data, identify and verify specific burials, and identify individuals in other collections. When we engage tribes in our work they become advocates and collaboration continues after repatriation with multi-institution tribal driven research projects.

**Holton, Stephanie**

***Erasing History? Analyzing Modern Monument Destruction in an Archaeological Context***

Cultures throughout the world have expended great amounts of energy in the practice of monument construction. Often, the resulting monuments become a part of the archaeological record through processes of either environmental or cultural deposition, and sometimes even by the means of intentional destruction. The destruction of such an energetically costly object begs explanation and is particularly relevant given the movement currently taking place across the United States to destroy or relocate

standing Confederate monuments. My project sought to place the current monument destruction in a larger historical context through the analysis of three archaeological case studies. I attempted to separate intentional destruction vs. natural site formation processes and drew on independent archival records to assess the relationship between monuments and written history. Monuments represent a constructed narrative of the past and inevitably outlive their intended function in society, which has ultimately been the cause of their destruction throughout human history.

### **House, Kendall**

#### ***Design Anthropology at Boise State: Lessons from the First Year***

In 2017 the Department of Anthropology at Boise State University, in collaboration with the College of Innovation and Design, developed a new 12 credit Design Ethnography Certificate. Currently we are developing additional coursework in design anthropology. This paper discusses why the DEC was developed, our strategies for developing content and recruiting students, and outcomes in student engagement, recruitment, and placement.

### **Hutchinson, Ian**

#### ***Climate change, landslides and the palaeodemography of the northern Columbia Basin in the late Holocene: the view from Kettle Falls.***

The numerous archaeological sites in the vicinity of Kettle Falls bear witness to the fact that large numbers of people from across the northern Plateau gathered at this cascade on the Columbia River each summer to catch salmon. We interpret a summed probability distribution function (SPDF) derived from a catalog of 106 late Holocene radiocarbon ages from these sites as an index of the relative number of people visiting the falls over the last 2000 years. Deviations between the observed SPDF and temporal patterns generated by a bootstrapped null model are strongly correlated with century-scale variability in regional palaeoclimate archived in records of glacier dynamics and wildfire activity. Phases of increased activity at Kettle Falls are correlative with the Late Antique Little Ice Age and the Little Ice Age. Reduced activity at Kettle Falls likely reflects lower numbers of returning Chinook salmon in the intervening warm periods. A marked decrease in activity at Kettle Falls from 650-550 cal BP may be indicative of prolonged failure of the salmon runs following blockage of the Columbia River by the Bonneville landslide.

### **James, Nathaniel**

#### ***The Role of Labor in the Creation of Northwest Coast Landscapes***

Past Northwest Coast landscapes are increasingly recognized as the anthropogenic result of people engaging with and reshaping the environment to suit their needs. However, there has been little effort to quantify or study the labor investment into the wide range of known landscape features in the Northwest. A method for archaeologists to pursue these questions is architectural energetics. Architectural energetics has been used both in the New and Old Worlds in a variety of cultural contexts. The explicit goal of architectural energetics is to reconstruct, estimate and quantify the expenditure of energy required to build architectural features, and from that infer the scale, organization, and complexity of labor. In this preliminary analysis I apply architectural energetics to several previously documented features, I then discuss possible implications for Northwest Coastal complexity and future directions for architectural energetics in the Pacific Northwest.

**Jenkins, Dennis L.**

***Dating the Western Stemmed Tradition in the Northern Great Basin***

Western Stemmed Tradition assemblages include projectile point types exhibiting long, thick stems, weak, sloping shoulders, and rounded, flat, or pointed bases such as Haskett, Cougar Mountain, Lind Coulee, Parman, and Lake Mojave projectile points. They are the oldest directly dated lithic technology in the Great Basin where fluted point technology has not been radiocarbon dated. This paper draws on more than 100 radiocarbon dates obtained from Western Stemmed deposits in the Paisley and Connley Caves of south-central Oregon.

**Johnson, Matt**

***A Quarter Century of Archaeological Collections at the Wanapum Heritage Center***

Archives have recently been organized at the Wanapum Heritage Center for three large archaeological collections from the Priest Rapids and Wanapum Reservoirs: those of the University of Washington, the Washington Archaeological Society, and Eastern Washington University. These collections fall almost entirely within the span of time between 1957 and 1982, during which major salvage, or “emergency” archaeology was carried out for the Priest Rapids Hydroelectric Project. The collections have complicated and unique histories encompassing over 150 sites. As part of the process to organize and describe the archival material, over 20,000 pages of documents and photographs have been cataloged and entered into the Wanapum Heritage Center repository database. To date, 14,000 pages of those records have been digitized. Additional steps have included the creation of an “archaeobiography” (a document detailing the history of the project and collection) and the creation of a site summary database. Future steps will include rehabilitation and organization of the archaeological material to gain intellectual control and achieve research ready conditions.

**Johnson, Paula**

***Goofy Stories, Fun Facts, and Brushes With Destiny: Revelations During Research on Airports***

Recent projects at rural airports in the Northwest have revealed the kinds of information and historic trivia that deserve to be shared. In this five-minutes-or-less paper, hear about goats with unique abilities, the prelude to WWII heroism, and smoke jumping.

**Johnson, Raini**

***Faunal Heterogeneity in the Middens of Prince Rupert Harbour***

The density of Salmon and Herring remains from 25 archaeological samples from 15 excavated sites in the Prince Rupert Harbour (PRH) were analyzed for assemblage heterogeneity. By examining the number of identified specimens (NISP) per liter (L) I compared three excavation methods, bulk sampling, column sampling, and auger tests. High densities of fish are present in bulk samples taken from house floor and back midden excavations while column samples and augers from house terraces and front and side middens have a much lower density. I hypothesize that inter and intra site faunal assemblage’s heterogeneity is due to sampling method and/or testing location. This difference in faunal representation between sampled areas may also suggest differential patterning in the depositional history of middens (e.g. differences between refuse and purposeful shell terrace construction). This research exemplifies the necessity of rigorous sampling methodology to properly understand intra midden heterogeneity when examining PRH faunal assemblages.

**Johnson, Royce**

***Indigenous Landscape Modification in the Pacific Northwest Coast: A Case Study Using the Binford Hunter-Gatherer Database***

The landscape of North America at the arrival of Europeans was carefully managed by the Native Americans and First Nation peoples. This is especially true for the Pacific Northwest and the Northwest Coast. There were several resource management strategies employed by the hunter gatherers living along the Northwest Coast. These ranged from the construction of large clams or root gardens and controlled burning to sculpt the landscape, to transplantation and selective harvesting practices. These methods have been recently well documented along the Northwest Coast and other areas of complex sedentary hunter gatherers. What is the mechanism that drives the adoption of these different resource management strategies? The Binford Hunter-Gatherer Database has the ability to provide relevant reference information on this subject. The mobility variables were used to create scatterplots in SPSS and a visual analysis of the results were conducted. This analysis illustrates two distinct groupings of mobility. After breaking the different methods of resource management into separate categories, those methods of resource management that rely on landscape modification are more likely to be adopted by those with lower mobility.

**Jolivette, Stephanie A. E., Sarah R. Hibdon**

***Modeling Shoreline Site Survival under Predicted Climate Change in the Puget Sound***

Recent climate change models project that sea level will rise significantly in the Puget Sound in the next 50 to 100 years. The Sound is also expected to be impacted by increased storm activity which, in combination with sea level rise, is projected to lead to increased shoreline erosion and larger and more frequent landslides. In partnership with the Pierce County Planning and Public Works, Statistical Research, Inc. (SRI) has conducted a multiyear survey project along the shoreline of the Key Peninsula. During this project we have observed evidence of extensive impacts to shell midden sites through erosion and the construction of bulkheads designed to protect shoreline property. Although all of the shell midden sites show some impacts, the extent of shell midden erosion varies significantly between sites. SRI proposes to examine the factors needed to develop a model to determine which sites are most likely to be lost to erosion in the next 50 to 100 years. This project will assess a variety of landscape factors for modeling erosion rates, including elevation above mean sea level, slope of bank, upland landslide risk, exposure to wind and wave action, and the potential of shoreline drift to contribute to, or potentially reduce erosion. This project will assess the availability of data sets needed to examine these factors in the Puget Sound, as well as provide some preliminary results for shell midden sites located on the Key Peninsula.

**Kaehler, Gretchen**

***The Golden Idol: Archaeology and Archaeologists in Popular Media***

This five-minutes-or-less paper will evaluate how archaeology is portrayed in popular media including movies and TV and how it effects real-life archaeologists.

**LeTourneau, Philippe D.**

***Synthesis of Recent Archaeological Work at King County's Marymoor Park***

King County's Marymoor Park has perhaps the highest density of precontact archaeological sites of any park in the county system and the area is extremely important to numerous western Washington Indian Tribes. The park's location adjacent to Bear Creek on the north, Lake Sammamish on the south, and the Sammamish River on the west combined with abundant salmon runs to make it a favored destination for the past ca. 13,000 years. There are 14 recorded precontact sites in the park and 4 more within 250 m of

the current park boundaries. In addition, there are 15 precontact isolates in or adjacent to the park and there are reports of a large Sammamish Indian village yet to be discovered somewhere in the undeveloped southern portion of the parkland. Marymoor Park is also the most heavily visited park in King County's 275-park system with ~3,000,000 visitors annually. This 640-acre park contains an off-leash dog area, soccer, baseball, and cricket fields, a velodrome, tennis courts, a radio-controlled aircraft field, an Audubon bird loop, community gardens, pet cemetery, and hosts numerous concerts and other events every year. All of these activities, plus associated required maintenance activities, have the potential to disturb the numerous archaeological sites in the park. King County DNRP archaeologists have recently overseen and conducted several archaeological surveys in the park.

In this brief presentation paper, I discuss the history of archaeological investigations in Marymoor Park with a focus on recent work by DNRP archaeologists that is not yet available on WISAARD.

**Lewarch, Dennis E., Stephanie E. Trudel**

***The Bertelson Artifact Collection from Old Man House (45KP2): A Central Puget Sound Type Collection***

Free-lance writer Ernest Bertelson collected more than 1,000 artifacts off the eroding beach of the Old Man House archaeological site (45KP2) in Suquamish, Washington, during the 1930s and early 1940s. Bertelson's heirs donated most of his collection to the Burke Museum of Natural History and Culture at the University of Washington. Burke archaeology collections manager Laura Phillips tracked down letters in Bertelson's papers to show he wanted the collection to reside with the Suquamish People. Previous artifact summaries by Marian Smith (1950) and Randall Schalk and David Rhode (1985) provide a general picture of the range of stylistic classes. Here we present data on more than 300 projectile points to infer time depth of occupations. The range of point types facilitates comparison with excavated assemblages from other sites, such as Sbabadid (45KI51), Bay Street Shell Midden (45KP115), Duwamish No. 1 (45KI23), 45KI1083, Tualdad Altu (45KI59), and West Point (45KI432).

**Litzkow, Jamie M.**

***Early Placer Gold Discoveries in Washington Territory (ca.1853 – ca.1868)***

Beginning in 1853, Washington Territory witnessed numerous gold discoveries that propelled immigration, commerce, and transportation in the region. The search for placer gold formed unique landscapes, social networks, and sociotechnical systems influenced by global interactions, transnational migrations, and rapid change. Archaeological data can enlighten the record regarding local and regional manifestations of such themes. In order to identify areas with the potential to yield relevant information, an investigation of early gold discoveries was undertaken. Study results clarify when and where the first strikes were made, and illustrate the transitory nature of mining camps during this frenetic phase of development in the far west.

**Lyons, Ashley Lorraine**

***Human and Non-Human Differentiation: A Theoretical Review on Spiritualism, Political Ecology, and Existentialism***

This paper will review the bridge of differentiation between humans and non-humans by taking a theoretical approach to the topic through a review of spiritualism and existentialism. The impacts of this differentiation will then be discussed through a review of political ecology, understanding how metaphysical theory can play a part in the material world. Where is the line drawn between humans and non-humans beyond biology? How do humans go out of their way to construct that strict barrier between them and their non-human neighbors? How do the interactions between humans and non-humans affect the relationship both sides have with the environment?

These are the questions that will be discussed throughout this review.

**MacDonald, Douglas, Matthew R. Nelson**

***Paleoindians in Yellowstone National Park: Implications for the Rockies, Snake River Headwaters, Great Basin, and Great Plains Research***

Over the last decade, numerous Paleoindian sites have been identified within the high-elevation Yellowstone Plateau dating the Late Pleistocene-Early Holocene. Herein, we summarize prior Paleoindian research in Yellowstone, as well as present results of our research between 2009 and 2017 at 25 sites which yielded evidence of early Native American use of Yellowstone Lake, Wyoming, North America's largest, high-elevation natural lake. Our studies include the recovery of the only Clovis points in Yellowstone, as well as excavations of a Late Paleoindian Cody Complex occupation at Fishing Bridge Peninsula. We conclude the paper with a statement regarding the implications of our research on Paleoindian use of the Rocky Mountains, Snake River headwaters, northern Great Basin, and northwestern Great Plains. Finally, we briefly summarize the results of a GIS predictive model of Paleoindian site locations based on this research.

**MacIntyre, Hannah**

***Cultural and Social Biases in Educational Access***

This study considers and evaluates the educational access of LGBTQ students, and the cultural and social influences in the Dallas-Fort Worth Metroplex area. It is largely shaped by the theoretical framework of Judith Butler's Performance Identity Theory, with the linguistic aspects expanded through the consideration of the Sapir-Whorf Hypothesis and its' theoretical expansion from Lera Boroditsky. This study utilizes a multifaceted approach. The study covers an analysis of the existing literature and public data, ethnographically captured perspectives of current teachers and administrator and recent students, and statistical evaluation, to holistically assess educational access and evaluate its' cultural and social biases within North Texas; specifically, the Dallas-Fort Worth Metroplex. The statistical evaluation replicates a national study (Fetner and Kush, 2008) at a small scale to test the model's viability and corresponding findings utility at a micro level, in the southern region. The added consideration for the Ethnic Disparity Rating (EDR) is also included in a new model. The ethnographic sample consists of interviews with educators (teachers and administrators) and former students (18-24-year-olds). They were pulled from ten districts within the statistical sample (n=55). The study concludes with recommendations for future analyses as well as policy revisions and reforms.

**Major, Maurice**

***Talking Talus***

How do you find a feature that may hide in glaring fields of stone, revealing itself only a few minutes a day on good days? How do you record a feature type whose very nature lends itself to descriptors like "amorphous," "irregular," and "subtle?" How do you jam a wide variety of forms and ages into the single category "pre-contact talus pit?" How can archaeologists learn about features whose excavation is physically and technically demanding, and in some cases a kind of desecration? What do we mean by talus pits for, anyway? I may not have solid answers, but I do have observations from a decade of finding talus features on Washington State Trust lands. I'll discuss ways of finding them using tech as old as the sun and as new as LiDAR and drone-generated point clouds, ways of recording them that result in something more than a bad photo of rocks, and ways of considering these features in context.

**Maloy, Kelsey*****Imagining Truth, History and Reality of the Vestige***

There is a relationship between social memory and visuals that exist in the material and mixed media records. Illustrators and graphic specialists work with many disciplines and voices to publicize such knowledge pertaining to the identities of the past. It is in this descriptive transaction that has the potential to warp the image, and keep trauma silenced. I employ critical theory of the source, where did historical images come from, why do we still use them, and how they are consistently represented and preserved in social memory. Digitizing reality does not permit an infallible context of truth, it only creates a critical understanding of observation and how we use media to document ideas that are signaled and received within a social interpretation.

**Martin, Jillian C.*****Considering Cultural Resource Constraints in Design: Early Lessons from Old Highway 30, Caldwell, Canyon County***

The Canyon Highway District #4 and the City of Caldwell are proposing roadway improvements to Old Highway 30 and a new crossing of the Boise River, north of downtown Caldwell and east of I-84 in Canyon County, Idaho. The purpose of the project is to improve user operating requirements and safety needs of the Old Highway 30 Bridge. The project is needed as the current bridge is structurally deficient and the 94-year-old deteriorating structure has met its design life. The existing truss bridge is a single lane, three span, 388-foot long structure constructed in 1922 and was listed in the National Register of Historic Places (NRHP) in 2007. This project presents many design difficulties for the Idaho Transportation Department, because the project contains numerous environmental concerns, including several notable cultural resource issues. Within the Area of Potential Effect (APE), there is a previously recorded archaeological site that was identified as a “possible burial”, several eligible linear resources (including Old Highway 30, canals, a railroad, and the Oregon Trail), two eligible bridges (one that is listed in the NRHP and one canal bridge that is eligible for the NRHP), historic architectural resources and residences, and the potential for additional unknown archaeological resources (historic and pre-contact). Additionally, the project contains two trailer parks that present significant Environmental Justice issues, a public park, and additional wetland and biological concerns. In addition to the environmental constraints, the APE contains significant landform constraints, which have impacted the design of the proposed project. The design team, in conjunction with

**May, Nathan J.*****Top Shot: Recreational and Military Firearms of Fort Boise, Idaho***

Multiple archaeological investigations on the grounds of Fort Boise, Idaho (1863-1913), now the site of the Boise Veterans Administration, recovered over 1,500 munitions related artifacts. Analysis of two assemblages, one from a historic dump and the other from Fort Boise's Surgeons Quarters, indicates technological development of the United States Army from the Civil War to the years just before the First World War. The munitions recovered also identify the use of recreational firearms at Fort Boise which was a popular pastime on the post. Munitions recovered from domestic contexts, such as the Surgeons Quarters, also suggest children were instructed on firearm use and etiquette.

**McCoy, Juli*****What's Going on Out There? An Investigation of Historic Land Use Patterns at the Orchard Combat Training Center***

Traditionally most low density historic archaeological sites have been labeled “sheep camps” though there has never been an established criteria of what constitutes a sheep camp. This work focuses on the



assemblage of selected archaeological sites located on the Idaho National Guard Orchard Combat Training Center (OCTC), just south of Boise, Idaho, to determine the land use of the area. The research conducted utilizes historical accounts, archaeological data and historical records with the intent of establishing a criteria that can be used to determine the potential land use that created the sites studied to determine if the label “sheep camp” is a misnomer and if so what other land use is seen in the study area.

**McElwain, Mitchell E.**

***The Cutting Edge: What Obsidian Use-wear Analysis Can Say About Function***

This paper presents the results of an analysis of use-wear on a sample of Coatlan del Rio prismatic blades. The analysis was conducted using an Olympus SZ61 microscope. Previous studies of obsidian blade technology have shown that different materials will leave distinctive signatures on recovered artifacts. Hence, the purpose of this analysis was to examine blade use-wear using magnification to address three issues: 1) to evaluate the “naked-eye” use-wear calls made during the overall technological classification of these collections; 2) to seek to identify the type of materials that were worked with these blades; 3) to evaluate whether post-depositional damage could be distinguished from use-wear. This latter issue has implications for assessing the utility of use-wear analyses on collections obtained from the surface. Functional lithic use-wear analysis can provide information about subsistence and craft practices but is often underused and under analyzed. This study, therefore, contributes to functional analysis of Aztec-period flaked stone tools in general, and those from a provincial context in particular.

**Mertens, Karl**

***Patterns of mobility among the Evenki of Eastern Siberia***

Mobility is an aspect of human activity that is highly contextual but also in need of a framework for comparative analysis through time and space. This presentation examines Evenki mobility patterns and how these patterns relate to the economic practices of hunting, fishing, and reindeer herding, and utilizes a framework for considering mobility cross-culturally. The Evenkis are an indigenous minority living throughout central and eastern Siberia in the Russian Federation. In the fall and winter of 2011/2012, fieldwork among two groups of Evenkis documented patterns of resource use, foraging, and mobility. One group lives in a village and disperses to the outlying area during the hunting and fishing seasons. The other group migrates year-round with their reindeer for hunting, trapping, fishing, and pasturage. Both groups are integrated into market and government systems through exchange of forest products for industrially produced goods, employment, taxes, and permitting. Additionally, Evenkis have changed their household and economic structure over the last century in connection with ecological and administrative conditions. This research approaches questions of human behavior and decision making as dynamic responses to complex social and environmental worlds. The information gathered through this research sheds light on contemporary indigenous mobility patterns connected to a variety of ecological, social, and economic factors.

**Miller-Atkins, Galen, James W. Brown**

***Politics on the Landscape: Evaluating Settlement Organization in the San Juan Islands***

Political and social complexity is inextricably linked to settlement organization and subsistence economies. The interconnection between politics and settlements is particularly clear when comparing the ordered neighborhoods of Teotihuacan to the dispersed residential camps of hunter-gatherers. Reconstructing political organization and social complexity in the Northwest Coast remains a highly-debated topic. Did the people in the Salish Sea live in incipient chiefdoms, autonomous villages, or some combination? The research utilizes little-used point pattern analyses and measures of spatial autocorrelation on previously-published site location data from the San Juan Islands in order to

characterize the settlement patterns of villages and resource procurement camps. The results are compared to theoretical expectations for more centralized chiefdoms and more autonomous village settlements. The research suggests that people in the San Juan Islands lived in scattered, and perhaps, independent communities. The methods employed here may help reconstruct political organization in other areas along the Northwest Coast.

**Monaco, Marci**

***Student Flintknappers: New Tool Makers Help Reveal Old Technology***

In 2015, fifteen obsidian bifacial blanks were recovered from site 35MA375 near Salem, Oregon. Experimental replication of the bifacial blanks has provided information to help answer lithic technological questions regarding the possible reduction strategies and technologies employed in the manufacture of these tools by the examination of the experimental debitage. This study is based on the analysis of the bifacial blanks recovered from the site, the use of similar material, and employing a similar reduction technology and strategy.

**Monaghan, Brian**

***The Mowitch Project- Traditional/Contemporary Methods of Hunting and Use: Showing You how to Brain Tan a Deer Hide.***

Building upon the previous presentation, I share my own experiences regarding the process of tanning a deer hide into buckskin, start to finish. There are numerous aspects of processing upon which I will present, including: seasonal considerations for optimal results; methods and techniques for preparing, stretching, scraping, smoking, and finishing buckskin; potential difficulties and solutions; ideal processing tools; and construction of necessary equipment. Based on my own life experiences as a subsistence and ceremonial hunter, I will share the techniques that have served me best.

**Moon, Johnathan**

***Incorporating Decolonizing Methods into Ethnography***

Ethnographers advocate constant reflexivity within our discipline which gives the writer a better sense of self within their own work with varying communities. This focus has been found to help the author realize their positionality, how their worldview leads to their interpretations as well as where they fit in the structures of power which govern our society. Alongside this trend in anthropology, many of the minoritized communities which anthropologists have worked with are developing their own methods and theories focusing on indigenous knowledges and voices to relay those knowledges. This paper proposes through an ethnography of Indigenous student at the University of Idaho that by maintaining reflexivity and adopting a framework such as Tribal Critical Race Theory ethnographers can combine traditional anthropological methods with new decolonizing methods to produce ethnographies with the most authentic voices possible. At this primary stage in research this paper presents a collection of self-reflective field notes with detailed outlines of the theories and methods to be applied welcoming feedback.

**Moses, Pendleton**

***Plants, People and Places: Mapping Historic Cultural Plants and Populations***

The Colville Reservation covers 1.4 million acres and includes habitat types ranging from sagebrush-steppe to subalpine, where many native plants are still gathered today. In 2017 the Cultural Plant Project began mapping place names of plants on the reservation, like “the place of hazelnut” or “aʔkʌsq̄p̄xʷiʌp̄.” Literature from the 1930s mentions a large Indian hemp population utilized for generations near a place we call “No Name Lake” to protect the confidentiality of such places. The population is still there and we have now mapped it. We are tracking down other historic sites with names like “Small place with

Camas,” adding them to our cultural plant map where they still exist. We also document culturally modified trees (CMTs), to gain a better understanding of past and current gathering locations and practices. Our goal is to consolidate information for each species and place name in order to protect, manage and restore populations.

**Munsell, David A., David G. Rice**

***The Context of a Holocene Thermal Climactic Native American Skeleton Discovered in the Yakima Basaltic Folds Are of South Central Washington State***

In early May 1982 a pre-NAGPRA inadvertent discovery of deeply buried Native American skeleton was encountered during a US Army training maneuver near the Yakima Training Center, Washington. Army personnel consulted the Wanapum Indian Community and agreed to recovery and re interment arrangements. Found artifacts include a stemmed point, a river mussel shell pendant, and over 400 small ground stone disc beads arranged in strings over the body. The grave artifacts indicate a person of high social status. The findings were in natural bed of Mt. Mazama volcanic tephra, enabling dating of around 6850 calendar years B.P. No reports of these finds, their age, or environmental context has been written. The purpose of this session is to organize this material for a technical report to share these findings.

**Neller, Angela, Matthew Johnson, Steven Hackenberger**

***Households on the Middle Columbia Residing in Collections at the Wanapum Heritage Center***

The prehistory of the Priest Rapids-Wanapum Region resides in archaeological collections curated by the Wanapum Heritage Center. Pre-dam excavations undertaken by the University of Washington documented house pits and other features along the Middle Columbia. While much of this household data has been sitting for years, parts of these collections have proven to be valuable for research undertaken by students at Central Washington University. As the Wanapum Heritage Center repository works towards gaining intellectual control of the collection, plans to rehabilitate the archaeological material to current curation standards are underway. Future research projects will demonstrate what a valuable resource these collections are for understanding households and settlement patterns in the interior Northwest along the Middle Columbia. These collections are the remaining site material for sites now inundated by the Priest Rapids Hydro-Electric Project.

**Noll, Christopher D.**

***Beyond Membership: Professional Service to the Society***

Archaeological societies depend on individuals to volunteer countless hours to manage the business of the organization, recruit members, and lead activities that engage those members. Society service is invaluable to the success of the organization but also provides benefits to those to serve. For many archaeologists society and committee service is a key part of the profession with personal and career rewards. This panel assembles officers from the Idaho Archaeological Society (IAS), Association of Oregon Archaeologists (AOA), Association for Washington Archaeology (AWA), Maritime Archaeological Society (MAS), and Northwest Anthropological Association (NWAA) to talk about professional service, archaeological careers, and their experiences as officers. This open discussion will provide students and young professionals with critical insights into archaeology as a profession and opportunities for engaging with the professional community.

**North, Michelle N., Virginia L. Butler**

***Cultivation of the Backwater: Weirs as a Window into Historical Ecology and Ecosystem Engineering in the Lower Columbia***

This poster uses the existence of a possible fish weir feature in a backwater lake on Sauvie Island in the Lower Columbia to explore questions surrounding systems of resource cultivation and human ecosystem engineering. Multiple archaeological sites in backwater areas contain large quantities of freshwater fish remains; and use of technology such as weirs would provide an efficient method of capture. However, such facilities suggest more than capture method, when considered in the larger context of landscape use and the food systems that indigenous people were part of, as demonstrated by archaeology and oral traditions. By synthesizing information surrounding precontact cultural and subsistence use of the backwaters of the Lower Columbia through the lens of historical ecology, this project seeks to highlight the broader implications of technologies that represent components in interconnected systems of indigenous aquaculture and landscape use in this rich environment.

**Nosaka, Akiko, Donna L. Leonetti**

***Fertility Trends among First-generation Japanese Immigrant Women in Seattle***

This study examines the fertility of first generation Japanese immigrant women, who came to the U.S. before 1924. Based on data collected from immigrants living in Seattle in the mid-1970s, it investigates factors associated with their comparatively high fertility. Of particular interest is the difference between women from “large kens” versus those from “non-large kens.” Kens are Japanese administrative prefectures, and “large kens” are defined as those from which many Japanese immigrants originated. This study finds that large ken women were more likely to have high fertility if they continued living in the Seattle area where there were many other Japanese immigrants. In comparison, the high fertility of non-large ken women had a stronger correlation with employment status; those who had little, or limited employment throughout their reproductive years were more likely to have high fertility. Also, non-large ken women’s employment during their early reproductive period might have contributed to delaying the onset of their reproductive years, which eventually resulted in low fertility. These findings support the inference that large ken women were more likely to receive significant support while living in the Seattle community with many other families from their natal ken. In contrast, non-large ken women were less likely to receive such support, and therefore their employment affected their fertility more significantly.

**Nuss, Kathryn Fujiye**

***An Examination of Early Sites on the Oregon Coast***

Other studies have focused on the where and when of coastal migration and habitation, this paper aims to understand how and where people lived in the landscape of Oregon’s coast. A GIS based predictive model is used to establish where there is high potential for archaeological sites. When combined with knowledge of known archaeological sites across the Pacific Northwest region, we can gain a better understanding of what we might find in these submerged sites. The expectation is that by using known archaeological sites as an analogy for what we might find in these submerged landscapes, will provide a basis for further exploration of how people lived. This research aims to expand the ways in which we envision early archaeological sites in the Americas, shifting the focus of archaeological inquiry to examine the human condition.

**O'Brien, Stephanie, Lindsay Costigan**

***More than Just a Bone to Pick: Deciphering Walla Walla's Cultural Consumption Patterns at the Turn of the Century***

Walla Walla has a rich history due to its geographic location near the confluence of the Snake and Columbia Rivers. This advantageous positioning, with its proximity to plentiful resources and agricultural opportunities, allowed the city to grow and prosper on the edge of the frontier despite isolation from other major urban centers. For a short period of time, it was notably the largest city west of Minneapolis and north of San Francisco. Though material culture from this time of rapid expansionism probably exists in deposits throughout the city, limited excavations have occurred that focus on the city's urban populace rather than its historic fort. Excavations stemming from an inadvertent discovery in 2017 identified several refuse scatters during a road construction project in the Walnut Grove neighborhood of Walla Walla. The resulting collection provides insight to the consumption habits of Walla Walla's diverse population from the late 1800s to the early 1900s. This poster presents analysis of the site's gustatory material culture, which represents the city as both an urban center with access to imports from railways, and as a city on the edge of the frontier utilizing native resources.

**Ostrander, Tom**

***No Wizardry in These Bones: tips and tricks for working with, and as, an osteologist***

The specialized nature of osteological research and practice has resulted in confusion and misunderstanding within the archeological community. This talk will explain how osteologists determine if remains are human and provide an overview of what questions osteological examination can and cannot answer. It will then provide steps for effective photography to aid accurate and timely identification of remains, proper handling of suspected remains and associated matrix, and strategies for discussing a possible inadvertent discovery with non-cultural personnel. This facilitates compliance with relevant laws, and successful future consultation. If remains are determined to be human, and a burial recovery is required, the implementation of a successful burial recovery plan requires direct step-by-step consultation between all parties and the osteologist. Confusion at this step often stems from jargon laden procedures such as isotope analysis, DNA extraction, parasitology, and noninvasive methods. These will be explained in simple terms, with a focus on the physical processes and facilities required by each method. Finally, I will provide some illustrative examples from my experience implementing an osteological practice across three states and 12+ offices. Questions at the end are welcomed and encouraged.

**Pacheco, Ryan, Dale Hamilton**

***Unmanned Aircraft Systems and Machine Learning for Archaeological Prospection***

In 2017, Northwest Nazarene University partnered with the Bureau of Land Management to complete a pilot project to test the capabilities of small Unmanned Aircraft Systems (sUAS) and Machine Learning in Archaeology. For this project, NNU recorded two historic can scatters, historic mine tailings, and two miles of the Oregon Trail with an sUAS. After data collection, NNU created orthophotomosaics and 3D models of each site from imagery acquired with the sUAS. NNU then trained a support vector machine (SVM) algorithm to identify historic cans from the imagery, resulting in higher accuracy of can identification than researchers achieved by initial visual observation of the imagery. NNU also trained an SVM to identify segments of the Oregon Trail from the sUAS acquired imagery, identifying both the main swale as well as tributary swales adjacent to the main swale. The discussion focuses on the methods employed to collect the and process the data, as well as the results.

**Palmer, Sara E., Thomas Laxson**

***Making Better Guesses: Archaeological Modeling for Adaptive Land Management in the Teanaway***

A predictive model for archaeological resources becomes a practical tool for land managers when it is fine-grained, based on the best available data, adapts to new information, and predicts the presence of sites reliably enough that stakeholders use it for project planning. As part of the development of a cultural resources management plan for the Teanaway Community Forest, the Department of Natural Resources (DNR) is creating a predictive model for prehistoric resources in the greater Teanaway River watershed that processes known site, topographic, soils, and hydrology data using a Maximum Entropy (Maxent) model. This generates a model which allows project managers to assess risk and cultural resource survey needs. It can be field-tested and then updated as surveys provide new data. The Teanaway Community Forest lies just east of Snoqualmie Pass, above the towns of Cle Elum and Ellensburg, and is co-managed by DNR and the Washington State Department of Fish and Wildlife (DFW) with input from tribes, local residents, community organizations, and state and federal project funding partners.

**Parks, Shareena**

***Cultural Relativism and Moral Absolutism: Philosophers and Anthropology***

Social scientists and philosophers have contemplated the conflict between cultural relativism and moral absolutism as they work to reconcile ideas of universal human rights with the modern understanding that morals and beliefs are culturally constructed. In this research, I explore philosophers' theories about how to deal with this conflict, and how their ideas can be illuminated and made stronger through an anthropological perspective. I will apply specific cases studies to offer an important perspective for evaluating the real-world consequences for the ideas that philosophers have put forward. In the process, this research elucidates some areas in which future theorists should focus in order to better alleviate the conflicts between moral absolutism and cultural relativism, particularly as the issue relates to how we view activism and human rights.

**Peasley, Sylvia Tatshama**

***The Mowitch Project-Traditional/Contemporary Methods of Uunting and Use: The Use of Deer Meat Within Our Teachings***

I discuss what we, as the three people who created this project, practice in regards to our subsistence hunting and how we use each deer harvested. Some people are designated hunters on our reservation, by choice, and they go out and harvest deer as requested. Others, as is the right of each tribal member, may harvest deer as needed within certain times of the year. When we go out to hunt, there is already an idea of what we will do with the meat once the successful hunt is over. The meat is either obligated to our own households, to elders, to a traditional function request, or for many other uses. So when we butcher our meat it is already ordained how it will be butchered. Perhaps deboned and cut up as roasts, steaks, stew meat and wrapped and frozen, or processed to use for drying or smoking the meat which is another way of cutting up the meat. There are many things to talk about regarding how to handle the meat, ensuring proper usage of all the deer.

**Pennell, Jennifer**

***Social Stratification and Resources Processing, Case #2: A Northwest Case Study of Camas and Salmon Using the Binford Hunter-Gatherer Database***

Here the implications of resource processing on social stratification are considered in the context of the Pacific Northwest. Salmon and camas are the respective front-loaded and back-loaded resources utilized in the following case studies. The Binford Database provides the environmental and cultural data for making projections to further evaluate the conditions in which three levels of social stratification may

exist. This project was done in conjunction with Ollie Shannon to compare and contrast the main back-loaded resources in the Pacific Northwest.

**Peone, Michelle**

***The Mowitch Project-Traditional/Contemporary Methods of Unting and Use: Harvesting and Skinning of Deer***

I will be talking about the way my family hunts and processes deer compared to how my great grandfather did, as passed down to my grandfather and then to me. I will discuss the use and types of tools, weapons, and transportation I use now compared to those of my grandparents. My family traditionally used a longbow and my great grandfather was a flint knapper who also used metal tools. He would ride his horse to where he wanted to hunt and would sometimes also hunt horseback. Today, rifles, trucks and binoculars are used instead. I will discuss the importance of how to quarter deer for meat, and Sylvia will cover preparing meat in the next paper. I will also cover how the important steps in skinning and getting the hide ready to be brain tanned, which Brian will discuss in a later talk.

**Pfeiffer, Chelsea**

***Masticatory Stress and the Human Chin***

Among the few characteristics that make modern Homo sapiens unique to their genus, the gradual enlargement of the mental protuberance, or chin, is a characteristic that is quite puzzling in regards to function and purpose. Many hypotheses have been proposed to explain this unique adaptation such as speech, masticatory stress, sexual selection, etc. However, the lack of concrete empirical data regarding the behaviors and characteristics of ancestral species of hominins creates a lack of consensus on the matter. Through this research, I attempt to explain or eliminate change in diet and masticatory stress as one of the theories associated with the development of the chin. Through visual assessment of the mandibular structures of both modern Homo sapiens, and Homo neanderthalensis as well as a short discussion of the muscle attachment sites and actions, I attempt to offer insight into how the chin is related to the aforementioned hypothesis.

**Phillips, Christina Marie**

***Katmai National Park and Preserve: A Case Study Reviewing Current Cultural Resource Management Tribal Consultation Protocol and Promoting Culturally Responsive***

Drawing on experiences working as a member of Cultural Resource Management for two seasons at Katmai National Park and Preserve, my graduate research examines the effectiveness of consultation protocol as it stands with federally recognized tribes, Alaska Native village corporations, and Alaska Native Claims Settlement Act (ANCSA) corporations. As mandated by Section 106 of the National Historic Preservation Act, Cultural Resources must consult with Indian tribes pursuant to respecting tribal sovereignty and government-to-government relationships. Owing to failed consultation and noncompliance, this research seeks to review protocol/processes that present pressing tensions in consultation exchanges. My concern for motivating research that focuses on consultation addresses underlying asymmetrical power relations perpetuated through federal agency protocol, and the challenges this develops for Cultural Resources to serve in supportive roles with tribes. The purpose of this research is to suggest that despite good intentions, there are underlying incongruities of consultation processes. Processes I focus on as developing consultation tension concerns issues of initiation, consultation settings, and representation. Within the frameworks of Critical Indigenous Research Methodologies(CIRM), I review issues of how consultation is shaped and informed by western methodologies. Issues of redressing asymmetrical power in consultation exchanges and placing new emphasis on tribes, by way of adopting CIRM, may prove more culturally responsive. I assert that new spaces/exchanges that emphasize

indigenous methodologies/frameworks will treat tribes as partners in consultation rather than clients in an exchange. Utilizing vignettes from working at Katmai and personal experiences, I will discuss the importance these themes have in designing my research that is interested in developing discussions/recommendations for culturally responsive consultation. This as a new focus in consultation can encourage greater participation. Present tension and failed consultation presents a situation now, more than ever, where Katmai needs to fulfill its trust responsibility with Alaska Native tribes. I assert to responsibly fulfill Cultural Resources role with tribes, there needs an increased emphasis on a praxis-oriented relationship-forms of praxis and inquiry that are emancipatory and empowering for tribes.

**Plew, Mark, James Eschenbrenner**

***Bone as Fuel: Implications for Assessing Hunter-Gatherer Mobility***

Noting that the use of bone as fuel can compensate for deadwood deficits, Thery-Periosot (2001:56) argues that sites with much burned bone are probably sites of temporary occupation reflecting higher levels of mobility. In this regard, bone may have extended the seasonal length of occupation of some groups during the winter period or reflect temporary locations in which little deadfall or otherwise green woods would not have been readily available. This paper tests three hypotheses relating to the use of bone as fuel in Western Snake River Plain sites—many of which have been described as temporary use locations. We examine a number of studies that have used Kelly's (2001) chipped stone mobility index to assess degrees of residential mobility in western Snake River site assemblages (Willson and Plew 2007, Plew and Wilson 2010, Plew and Willson 2013, Roberts 2015), which have in general corroborated the probably short term uses of many of the sites within the corridor. We explore this issue as it pertains to availability of combustible material and as it relates to Thery-Periosot's argument that a higher frequency of burned bone represents increased residential mobility. We utilized a multiple regression analysis of the percentage of charred bone against Roberts' modified variables of Kelly's original analysis as well as our own variables that include site elevation and distance from rivers. Our analysis suggests that those sites exhibiting greater percentages of burned bone are most commonly associated with sites at lower elevations. ( $r=.603$ ,  $p=.015$ ). We also note that these increases occur with sites at greater distances from rivers ( $r=.581$ ,  $p=.019$ )—sites that show a decrease in the presence of groundstone ( $r=.485$ ,  $p=.47$ ). A lesser correlation exists for other variables. We find that the rate of burned bone appears to correlate with variables in Kelly's mobility index where those variables suggest higher levels of residential mobility.

**Pullen, Reginald**

***Bends of the River-Defining the Late Prehistoric/Protohistoric Cultures of the Coos and Coquille***

There has been a tendency of most researchers in recent years to consider the Coos and Coquille peoples to be an integrated culture depending primarily upon shellfish and fish for subsistence. However, there are many differences in the material culture and settlement patterns as well as subsistence practices of the people who lived on the Coos Bay estuary and those who resided on the Coquille River estuary. In particular, the Hanis Coos who lived on main Coos Bay differed significantly from the Miluk Coos who occupied lower Coos Bay to the northern edge of the mouth of the Coquille River and the Na-So-Mah who resided on the southern edge of the Coquille River estuary. The influence of Athapaskan encroachment to within a few miles of the mouth of the Coquille River had a profound influence upon the Na-So-Mah, who many researchers consider bilingual. Understanding these differences is critical in the formation of research questions that may only be answered through future archaeological investigations.



**Reid, Ken**

***The Big Cougar Creek Lodge Depression in Hells Canyon: Thoughts Concerning a Protohistoric Longhouse***

During the Lewis and Clark bicentennial in 2006, two lines of evidence converged on Big Cougar Creek as the site of the fishing camp visited by Sergeant Ordway on a provisioning sortie in May, 1806. Geophysical survey and site testing data (hearth spacing, trade goods, fish remains, C14 date) are consistent with Ordway's description of a Nez Perce longhouse. Located on a landform used for 1,600 years amidst a cluster of circular house depressions, the lodge may mark a shift from unilocal or ambulocal to bilocal residence patterns following catastrophic depopulation ca. 1780.

**Rice, David**

***Considering Women's Contributions to NW Anthropology in Light of the Jungian Anima Archetype within a Man's Mind***

Women involved in NW anthropology have surrounded me all of my life, and affected me during every stage of my developing career in this discipline! My view of that experience, of course, is that of a man! However, the Anima archetype in Jungian psychology provides a fleeting glimpse of an impression, any original creative impression, in any individual's mind that, unconsciously, we search for it all of our lives. It is a source of nurturing, creativity, and insight that we learn and pattern during our lives. The source of our first conscious sense of the Anima comes from the women around us at any age, particularly, in this case, from the insight and experience of their knowledge and success in their working contexts, and by the confidence they have shown in how they presented themselves to us as accomplished individual human beings.

This presentation highlights the lives of four original accomplished women who profoundly affected my emerging and ongoing career in NW Anthropology. They also have impacted the many contexts in which they worked, and created new directions and opportunities for many others, men and women, as role models for the future. From the influence of these role models, I became a personal proponent for mentoring three generations of NW anthropologists, and a more effective catalyst for Action Anthropology to bring about change in our societal mores.

**Robertson, Rylee, Kristina Cockerille, Renae Campbell**

***Shoe Analysis of a Boise Basin Chinese Mining Camp***

Currently there is not a lot of information regarding utilitarian shoes in the archaeological record, not only because of their fragile and easily perishable state, but also because they are not always seen as the most insightful reflection of our past. This poster discusses an archaeological analysis of shoe fragments found at site 10BO357 in Southern Idaho's Boise Basin. This is a late nineteenth-century mining site located along Grimes Creek in the Boise National Forest that was occupied by Chinese miners. Among the nearly 5,000 artifacts recovered from the site in 1985 were 124 shoe fragments and shoe nails, as well as one complete shoe sole. In this analysis, we will be looking at the manufacture dates, nail type, makers' marks, and shoe size and gender of the fragments in this collection. These details demonstrate the value of information that can be gathered from the analysis of utilitarian footwear, including date ranges, shoe types, and manufacturing techniques. The goal of this analysis is to contribute more information towards future research on utilitarian shoes and the people they belonged to.

## **Rorabaugh, Adam**

### ***Results of the 2016-2017 Net Pens (450K247) Excavations***

The CCT History/Archaeology Program conducted a total station survey and excavation of 450K247, the Net Pens, a pre-contact shell midden and pithouse village site as part of the development of the RV park and fishing area. Excavation revealed three shell lens features and an assemblage consisting of bifaces (N=2), lithic debitage (N=28) consistent with bifacial retouch and worked *Odocoileus* sp. metapodial fragments (MNI=1, NISP=22) indicative of bone tool manufacture. Shellfish analysis (N=932) revealed consistency in represented taxa (*Margarifitera falcata* and *Gonidea angulata*). The eastern and northwestern portions of the site have both had significant disturbance from the development of the parking lot and Net Pens facilities and active erosion of the cut bank where pithouses had been previously documented. The results of the field investigations and background research, including recalibrating 14C dates, identified two pre-contact cultural components dating to the Kartar (2,000-4,000 BP) and Hudnut (4,000-7,000 BP) periods.

## **Rose, John**

### ***Recent Work on Fire Lookouts in the Frank Church-River of No Return Wilderness***

This paper presents an overview of recent stabilization work conducted on historic fire lookouts located in the Frank Church-River of No Return Wilderness in central Idaho. The presentation includes information on the history of the lookouts, their current conditions, management, and recent work.

## **Rossi, Mary**

### ***Association for Washington Archaeology (AWA) Advocacy Workshop-Get Informed and Get Involved: How to Communicate With Your Elected/Appointed Officials About Cultural Resources***

Between bidding for contracts, conducting surveys and excavations, analyzing collections, and writing reports, who has time for advocacy? Many among us may have hoped that someone else would take care of this task. However, long-simmering and now more recent, new attacks on the current system of cultural resource protections have elevated the critical need for all of us to communicate effectively and often to our elected/appointed officials at all levels of government (federal, state, local) about cultural resources and the benefits of their protection. Given the current climate, are you ready to advocate? Do you need some guidance or some refreshers? Are you attending the SAA meetings in DC and need help preparing to storm Capitol Hill? If you answered “yes” to any of these, then this AWA Workshop is for you!

Join our experienced and enthusiastic panel for the following discussion:

- 1) What’s happening? - tips for learning about/tracking the latest news about policies/legislation that will impact cultural resources;
- 2) What do I do about it? - tips for communicating to elected/appointed officials (i.e. the decision makers) in person, via telephone, or in writing;
- 3) What else can I do? - strategies for individual engagement in other types of advocacy efforts;
- 4) An open discussion with attendees about issues and ideas for more effective advocacy.

We would also like to compile a list of those attending the SAA meetings in DC in April who would be interested in visiting their elected officials on Capitol Hill.

If you love working to protect cultural resources, you can’t put advocacy off any longer. Let’s all get informed and get involved!

**Rudnicki, Larissa*****Growing Pains in Transportation***

The Transportation Symposium will consist of multiple DOTs discussing in panel form new issues that seem to arising as a trend. Oregon DOT will be discussing Visual Impacts and ADA conflicts. I will address visual concerns and how ultimately, we see a trend of being asked to assess visual impacts not from the project out, but from the surrounding world in. The FHWA VIA does not account for this change and we had to be creative in our documentation. Additionally, currently, we are in the midst of dealing with the clashing of ADA standards and the preservation of historic resources. We, in Oregon, have a couple of projects where if we are completely compliant to the current ADA standards, we run into the risk of compromising the integrity of historic resources. For example, an eligible bridge where the walkway on either side does not meet the ADA width requirement. The options of improving the width are widening the bridge or constructing bulb outs - both of which would result in an adverse effect. We have a design exemption from SHPO saying such, but ADA parties feel that exemption is not sufficient. Ultimately, the question being asked is which takes precedence? ADA standards or the preservation of an eligible historic resource?

**Sappington, Lee*****A New Look at Pre-Contact Houses at Three Sites near Ahsahka in the Clearwater River Region, North Central Idaho***

A variety of house pits, mat lodges, and other structures were reported in the Clearwater River Region by Lewis and Clark in 1805. Since the late 1970s, archaeologists have investigated numerous locations across the region including three house pit sites near Ahsahka. The house at the Ahsahka Sportsmen's Access Site had multiple floors and internal features dated from 2500 to 2000 BP. The largest house in the region was a 14-m diameter probable mat lodge at the Clearwater Fish Hatchery that was radiocarbon dated 1200 BP. Extensive data recovery excavations exposed 80% of the floor. Spatial analyses provided evidence of activities related to lithic tool use and manufacture, mammal processing, fishing, and storage, as well as indications of the presence of children. The most recent house was a shallow 8-m diameter structure at Canoe Camp that had lithic tools, faunal remains, and charcoal on the floor dated at 700 BP.

**Schroeder, William*****Of Ruptures and Raptures: Locating Ideology with LiDAR Imagery***

Archaeology necessarily requires at least one artifact, a piece of technology, or something that functions as an object, to articulate and explain ideologies from the past. Slavoj Žižek finds there are three types of ideological objects: voids (or absences); large, unattractive objects left over or resultant from the past of which we are all aware; and a circulating object, one that is known to have existed and requires an ideological structure to understand it, e.g. Capitalism or Mormonism. Mark Leone identified certain technologies, e.g. fences and Mormon temple architecture, yet critical examination reveals that neither meets Žižek's definition of an object of ideological desire. The purpose of my dissertation research is to perform Landscape Archaeology landscape analysis to an historic Mormon community (Grosvont, Wyoming/Mormon Row) within Grand Teton National Park and to deconstruct the local legend of "Miracle" Spring in an effort to identify and locate 'the object.' The significance is: deconstruction of the local legend revealed 'the object' that meets Žižek's and Leone's criteria. GIS then facilitated virtual identification of 'the object' in LiDAR imagery and groundtruthing revealed its material existence. In this way, artifacts from the past were studied and understood within the framework of culture change over time within capitalism within an Historical Landscape Archaeology paradigm, a 40+-year-old research problem has been resolved, and myth is not perpetuated.

**Schwab, David C., Timothy Ryan, D. Alex Schwab**

***The Archaeology of Hungry Horse Reservoir, Northwestern Montana***

Archaeological investigations at the Hungry Horse Reservoir in northwestern Montana have revealed evidence of pre-contact campsite distribution patterns that shows a strong association with aboriginal trail systems identified and documented by the Confederated Salish and Kootenai Tribes. The theme of transportation permeates the mountainous setting of the area, being a transitional contact zone connecting two major culture areas, the Columbia Plateau and Northern Plains. Pre-contact diagnostic artifacts indicate a strong Middle Prehistoric Period presence that coincides with the Mid-Holocene warming episode suggesting intensive, regular use of mountain environments in this portion of the Northern Rockies from approximately 5,000 to 7,000 B.P. Palynological studies indicate the long term systematic use of fire by humans to promote and manage Ponderosa Pine parkland habitats along the South Fork of the Flathead River. Finally, recent UAV based remote sensing of sites on the reservoir have given us a first look at accessible and affordable approaches to measure reservoir impacts on archaeological sites.

**Schwartz, Tracy, Barbara Perry Bauer**

***Collaborative and Creative Mitigation: The Broadway Bridge and Christ Chapel Project***

Mitigation for adverse effects to historic properties can be shaped to highlight history and inform the public. When the removal of the eligible 1956 Broadway Bridge in Boise resulted in an Adverse Effect under Section 106, the Idaho Transportation Department, the Idaho State Historic Preservation Office, the Federal Highway Administration and the City of Boise worked together to minimize impacts to the nearby historic Christ Chapel, constructed in 1866, and mitigate for the loss of the historic bridge. Tracy Schwartz, Architectural Historian (ITD) and historian Barbara Perry Bauer (TAG Historical Research and Consulting) will present an overview of the creative mitigation measures developed for the project.

**Schweitzer, Alleah**

***Finding Common Ground: Navigating Ideological Diversity and Coexistence in Northern Idaho's Alternative Food Movement***

Topics concerning food sustainability, anti-globalization, and ecological conservation have fallen within the purview of an unlikely strand of farmers in northern Idaho. This paper examines the foodways of farmers in fringe pockets of Northern Idaho's farm-to-fork movement and how their positionality is rationalized within the context of a greater unified food movement. An intersection of free-market values, traditional Christian morals, and distrust in conventional methods while adhering to the principles of sustainability colors the priorities of this group. Through a mixed-method approach of interviews and participant observation, a qualitative analysis of these priorities are discussed in hopes of demonstrating the diversity of ideologies in the American alternative food movement.

**Shannon, Donald**

***Panel Discussion on Ethnographic Research with Pacific Northwest Tribes***

This session will highlight the importance of ethnographic research with Tribes in the Pacific Northwest, and to show how the Federal compliance process can generate ethnographic work. Panelists will include Federal Agencies who fund ethnographic research, academicians who work with regional Tribes, and representatives from Tribal cultural resource programs. We will discuss some of the differences between academically driven ethnography and compliance ethnography, both through consultants and research done by Tribes. Compliance ethnographic work highlights the living culture of Tribes in the Pacific Northwest, exemplified by issues such as: cultural adaptation to a new riverine ecology; restricted use of traditional homelands to hunt and gather culturally significant plants; the complex dynamics of access to salmon and salmon fishing; and many more. The importance of ethnographic research, specifically

related to Traditional Cultural Properties, is increasingly acknowledged in management documents generated by land-managing agencies.

**Shannon, Ollie**

***Social Stratification and Resources Processing, Case #1: A Northwest Case Study of Acorns and Salmon Using the Binford Hunter-Gatherer Database***

This poster will explore the development of social stratification levels in native groups, along the southern border of Oregon. Archaeological evidence will be utilized in conjunction with the Binford Database to expound on the proposed connection between high levels of acorn processing and consumption, and higher levels of social stratification. Optimal foraging theory will be applied to discuss the cultural implications between the procurement of acorns, a back-loaded resource and salmon, a front-loaded resource. This project was done in conjunction with Jennifer Pennell, to compare and contrast the main back-loaded resources in the Pacific Northwest.

**Sheldon, Alexandra, Dr. Kermyt G. Anderson**

***Male care and life history traits among primates: a comparative analysis***

While previous studies have examined the relationship between allocare and life history traits using a comparative sample of primates, none has focused on male care as the main predictor variable. Male care can reflect paternity, mating effort, or kinship, but regardless of the motive we expect it to have positive effects on offspring or female lifetime reproductive success. Male care is predicted to increase fertility by lowering age at first reproduction and increasing the pace of reproduction. We test this hypothesis using an updated comparative database of wild populations ( $n = 239$  species; analytical  $n$  ranges from 40 to 174 due to missing data for many variables). To control for phylogeny (especially among the Ceboidea and Lemuroidea, where male care is most common), multilevel mixed-effects generalized linear models are used, which allow for nesting at multiple levels (e.g., superfamily, family and genus). Continuous variables were logged. We find that male care is negatively associated with lifespan, litter mass, neonatal weight, infant mortality, male endocranial volume and female endocranial volume ( $p < .05$ ). Neither female age at first reproduction, interbirth interval, gestation length, lactation length, territoriality or neonatal weight are associated with male care. Females in species in which male care occurs thus give birth earlier, to smaller offspring or litters, and live longer lives, though the intervals between births is unchanged.

**Sloma, Robert**

***Colville Tribes Engaged in the Basin: FY2017 in Retrospect***

The Colville Tribes History/Archaeology Program is assisting the Washington State Department of Ecology (Ecology) and Bureau of Reclamation (Reclamation) with cultural resource management in the Columbia Basin based on a cooperative agreement regarding implementation of the Odessa Subarea project. The Odessa Subarea project is a groundwater replacement effort under the Columbia Basin Project in eastern Washington State designed to deliver surface water from the Columbia River to lands that currently rely on the aquifer. Since 2015, one Colville Tribes Resource Specialist has reviewed and considered specific improvements proposed under the Odessa Subarea Special Study Area – Odessa Groundwater Replacement Program, and other undertakings within the broader Columbia Basin Project region to protect cultural resources and assert Tribal interests in Traditional Territory off reservation. A summary of Fiscal Year 2017 highlights goals and accomplishments under this mutual agreement.

**Smith, Julia*****Coffee Talk: High-End Coffee in the Modern World***

Over the last few decades, coffee has become a different kind of object of consumption: shifting from a dependable source of caffeine to a means of expression. Whether we talk about elaborately flavored espresso drinks or single source coffee from a particular place, our choice of coffee and how we talk about it has become an important means of self-expression and communication. This paper explores the choices available to people in the Inland Northwest, how those choices are framed, and how those choices reflect the growing “foodie” trend towards a kind of omnivorous consumption.

**Smith, Sonja*****The Development of Warfare in Native British Columbia***

The Binford Database charts compiled here look into the relationship of landscape available, subsistence and the possibility of warfare in Native British Columbia. Using SPSS to analyze the Binford database the information is presented in four scatterplots. The variables measured are Effective Temperature, Calculated real rainfall, States (Alaska, British Columbia and Washington), Subsistence, Expected moderate body-size ungulate biomass, Net above-ground productivity, Expected percentage of fishing using ethnographically known hunter-gatherer cases and Projected Hunter and Gatherer density. It was found that limited landscape and the abundance of salmon does lead to an increase in warfare. The Binford database analysis has concluded that the more dependent on fishing the more sedentary a group of people are. Leading to a higher degree of territoriality, violence and warfare. Kemano, British Columbia has the highest population density and population most dependent on fishing. It could be expected to find more archaeological site tied to war, weapons and direct injuries consistent with warfare on the skeletal remains.

**Spencer, Steven, Patrick Lubinski*****Faunal Analysis of a Sample Unit at the Grissom Site, 45KT301, Central Washington***

As a collaborative faculty-mentored undergraduate research project, we are analyzing nearly 500 specimens from a single 2 x 2 m unit excavated 1967-1971 at the upland Grissom Site in the northeast corner of Kittitas Valley in central Washington. The Grissom site is near an historic regional intertribal gathering and trading area recorded by Alexander Ross in 1814. The site was excavated by students from what is now Central Washington University (CWU), and unit U0E was dug to 120 cm below surface. Identification of vertebrate remains (excluding fish, which were previously identified) was performed collaboratively through comparisons to known osteological specimens housed at the Zooarchaeology Laboratory at CWU, with the aid of published diagnostic criteria. Taphonomic indicators recorded for each specimen included burning, weathering stage, root etching, type of break, and modifications. We identified 11 distinct taxa, including deer, pronghorn, bighorn sheep, elk, ground squirrel, and beaver, although 83% of the specimens analyzed to date were identifiable only to size class. Bones were moderately broken, so that 66% of specimens were < 3 cm in maximum size. We noted 14 culturally modified remains (3% with butchery cutmarks or impact notches) among the analyzed specimens. Nine AMS radiocarbon dates on bone for this unit indicate use from ca. 1600 B.P. to the historic era and some stratigraphic mixing. Mixing is also indicated by domestic cat and pig remains from 0-20 cm and historic glass and metal from 0-120 cm. Specimen identifications are about 95% complete, and will be followed by placing the site into context compared to other regional sites along the Columbia River.

**Stauch, KiriLi, Dr. Lori K. Sheeran, Jessica A. Mayhew**

***The Impact of Web Based Visitor Education on Human-Tibetan Macaque (*Macaca thibetana*) Interactions at Mt. Huangshan, China***

Daily visitor-macaque interactions negatively impact both macaques and visitors, leading to higher rates of macaque aggression (macaque-human, intragroup), macaque self-directed behaviors, zoonotic disease transfer (macaque-human and vice versa). Tourists interact daily with Tibetan macaques at a tourist destination, Valley of the Wild Monkeys, in Anhui, China. I made an educational website with site specific information (i.e., guidelines for conduct, park rules, conservation) which was made accessible (through QR codes) and inaccessible for an equal number of randomized days. Previous research at the indicated a correlation between decibel levels and macaque self-directed behaviors so LS, JM, and I recorded visitor-macaque interactions and decibel levels daily using an ethogram for both human and macaque behaviors, and the Sper Scientific Sound Level Pen (840018). Following data collection, I compared the frequencies of macaque and human behaviors and average decibel levels on website “on” and “off” days. On website “on” days, visitors exhibited higher rates of macaque directed behaviors ( $F(1, 68) = 6.54, p < 0.05$ ). No difference was found in the decibel levels ( $F(1, 60) = 2.34, p = 0.13$ ) and macaques’ rates of aggressive and self-directed behaviors during website “off” days or “on” days ( $F(1, 68) = 1.49, p = 0.23$ ). These results indicate that, at this site, web-based technology did not help reduce the rate of stress-inducing visitor behaviors. Visitors at the site were using their phones as cameras rather than to read the website.

**Stevenson, Alexander, Stephenie Kramer**

***Women in our Midst: Role Models, Mentors, and Leaders in Our Past, Present, and Future***

Our academic and professional histories are dominated by women who have served as role models, mentors, and leaders in archaeology and historic preservation. By developing the ‘Nevertheless’ session we wanted to highlight the place of women in the field, lab, office, and classroom. This presentation will provide a spring board for our session and provide a venue for us to share our thoughts on working with and for women throughout our academic and professional histories, as short as they may be.

**Stutzman, Esther**

***The Legacy of Indiana Ross***

Dr. Richard E. Ross was one of the first anthropologists in Oregon to pursue a working relationship with tribal people in order to establish a line of communication. During the 1970s and 80s, he worked to begin conversations with tribes so that the anthropological community and the tribes could come together working for common goals such as preservation of historic sites and the subject of Native burials. ¶ I was fortunate to become a good friend of his and together we were able to undertake the task of bringing together tribal groups and anthropologists. It was during a time when the attitude toward Native people was changing for the better and it provided an ideal scene for better communication. ¶ Although he was often cast aside by his colleagues and dismissed for his views on cooperating with tribes, he persisted and began building the foundation upon which much of today’s attitudes are built.

**Taylor, Amanda, Stephanie Jolivette**

***Taking On Dominant Narratives: A Paper in Honor of the Work of Dr. Julie Stein***

In this paper in honor of the contributions of Dr. Julie Stein to Northwest Coast archaeology, we explore the role that Stein and her cohort have played in challenging dominant narratives of precontact culture history using scientific evidence. Advocates of standpoint theory might suggest that Stein, Butler, Campbell, Miss, Moss, and others benefitted from an outsider’s perspective--being women allowed them to see unique aspects of the past and pursue novel research questions. Another perspective casts implicit

bias as a driving force behind their scientific rigor. They had to work harder to advance their ideas, and as a result, reshaped archaeological understandings of chronology, site formation processes, social complexity, technology, and past human diet. During her career in the Northwest, Stein tackled dominant narratives both about the past and about the ways that archaeologists interpret the past. Her geoarchaeological data from English Camp in the 1990s called into question the idea that ‘the dark and the light’ strata represented different time periods. Her later work on house formation at English Camp challenged the assumption that houses and other features are immediately recognizable. Our work with Stein from 2005-2010 questioned the assumption that shell midden sites accumulate at a uniform rate. Here, we examine Stein’s work from both a standpoint theory and implicit bias lens to demonstrate that both played a role in her successful research agenda to advance the geoarchaeology of Coast Salish sites.

### **Thomas, Scott**

#### ***Percussion Blade Cores and Blades: A Late Prehistoric Lithic Tradition in Southeastern Oregon***

Percussion blades and blade cores are next to absent in archaeological assemblages of any age in southeastern Oregon. However, less than 20 late prehistoric sites, associated with Shoshone buffalo hunters, have evidence of this lithic reduction technique. In researching the literature of similar age sites with clear associations with Shoshone groups in Nevada, Idaho and Wyoming, evidence of associated percussion blade production is absent. This paper explores the distribution of these artifacts, the obsidian sources where they were procured and other assemblage traits they are commonly associated with. It is hoped that those researchers in the Intermountain West working on this time period will provide the author with clues about where and what time period(s) this lithic reduction technique is evident.

### **Thornburg, Aaron**

#### ***Open Prosthetics Design Anthropology Project: Visual Methods in Design Ethnography***

Werner Sperschneider has suggested that “[e]thnographers in the emerging field of design anthropology make extensive use of video to study how people interact with computers and other information technology devices. Many practitioners in design studies find that using video is an effective way to collect and analyse observational visual data to inform product development and design.”\* This presentation will explore an application of visual ethnographic techniques in a design anthropology project on a product that heretofore has been given little attention: prostheses. In the summer of 2017, I undertook a cooperative project with Open Prosthetics, a web-based education initiative dedicated to facilitating crowd-sourced curation of information and collaboration in the field of prosthetics and coping with missing body parts in general. Open Prosthetics held its 2017 conference in Portland, Oregon, and invited me and an Eastern Oregon University student to document attendees’ experiences of and challenges with using prostheses. This presentation will screen clips from the resulting videos and explore the potential they have for being used by designers to develop more effective prostheses.

\*Sperschneider, Werner. 2007. “Video Ethnography under Industrial Constraints: Observational Techniques and Video Analysis.” In *Visual Interventions: Applied Visual Anthropology*, edited by Sarah Pink, 273-293. New York: Berghahn Books.

### **Tushingam, Shannon**

#### ***Subsistence Intensification, Storage, and the Emergence of Pithouse Villages in Western North America***

As observed by Ames and Marshall in their 1980 paper, “Villages, Demography, and Subsistence Intensification on the Southern Columbia Plateau”, the southeastern Columbia Plateau has one of the best archaeological records documenting the evolution of the seasonal winter village pattern. Indeed, research in the region has the potential to contribute to global debates about topics such as the development of



sedentism, subsistence intensification, and the evolution and diversity of food storage systems. In this paper I address notions of flexibility and diversity in hunter-gatherer-fisher systems, houses, and village formation, in particular the notion of storage diversity, plant and salmon intensification, and settlement flexibility. Research on legacy collections housed at regional curation facilities has great potential to shed light on these issues, and I address current and future directions of such work at the Washington State University Museum of Anthropology.

**Tyler, Donald E.**

***Origins of the Modern Concept of Race***

Despite decades of advances in scientific and social theory, racism is still prevalent. Most people think that the world's populations can be placed roughly into one of three major racial groups with origins in Africa, Europe, and Asia. What they lack is an understanding of why people vary in visible traits. For nearly two million years, human ancestors and humans spent most of their life outdoors, and, through natural selection, developed unique, localized traits in response to climatic features such as amount of sunlight, temperature, humidity, and altitude of their geographic area. Some of these traits vary gradually over space, while others are adaptations to different climatic features that do not coincide with each other. Thus, these physiological adaptations do not fall into discrete, bounded categories and so do not conform to many people's perceptions of separate races. About 12,000 years ago, the earliest farming cultures emerged in a few areas around the world. These early farmers expanded and wiped out many hunters and gatherers as well as their unique climate adaptations, thus leading earlier scholars to propose three major races based on overly simplistic assumptions about race. This ultimately influenced the general population's perceptions of race.

**Vance, Emma, Liz Dolinar**

***Investigating least cost path from raw material sources to Bridge River site (EeR14)***

Excavations at Housepit 54, Bridge River site, British Columbia produced a large collection of lithic debitage and tools made of a wide variety of different materials. Dacite, chert, and slate are particularly common and have been sourced to a few different locations around the region. This research seeks to test transportation cost from these sources to the Bridge River site using the least cost path function in Geographic Information Systems (GIS) software. By looking at the quantity of the commonly sourced materials at Bridge River and comparing it to the cost of transport from its source it is expected that the most frequent material will come from the most easily accessible location. If the expected pattern does not emerge, it is hypothesized that the people chose lithic sources based on political, cultural, spiritual, or symbolic preference and not solely on geographic accessibility.

**VanWassenhove, Anne, Connor Neal, Weston Wardle, Keana Winninger, Mark Plew**

***Archaeological Excavations at the Swenson Site (10-EL-1417), Southwest Idaho***

During May and June of 2016, and May 2017, Boise State University conducted its annual field school at Swenson site (10-EL-1417). The site is located on private land north of the Snake River between Glens Ferry and King Hill, Idaho. Excavations sought to further explore site functions, age of deposits, and the extent to which levels of mobility might be inferred. This poster offers an overview of the material culture, use-wear analysis of lithic artifacts, lithic debitage, radiocarbon dates, and faunal remains of 10-EL-1417. As a primary research question, Kelly's (2001) index of residential mobility was used to correlate lithic assemblage data with levels of mobility. By measuring technological dimensions of the lithic assemblage and placing them within units of measurement on a dichotomous scale (e.g., low or high, rare or common, etc.), a likely mobility pattern can be ascertained from the site. This assemblage suggests high residential mobility and expedient tool production. This is consistent with the use-wear

analysis which suggests minimal use of tools probably due to high mobility and abundant raw material which could be easily produced and altered. This is also consistent with the indicators highlighted by Roberts (2015), including a lack of evidence of storage, few features, few groundstones, and simple, utilitarian pottery. These indicators suggest a foraging strategy that moves groups to resources, the utilization of task specific sites, and the production of multifunctional tools to adapt to local, seasonal resources.

**Von Lintig, Matthew R, Tate Meehan, Gabriel Gribler**

***Ground Penetrating Radar and Cadaver Dogs to Close a Nampa P.D. Cold Case***

A tip informed the Nampa, Idaho, Police Department that a cold case homicide victim may be buried beneath the floor of a Nampa School District building. The Society of Exploration Geophysics Student Chapter at Boise State University was contacted by the lead detective of the case to investigate the site with ground-penetrating radar (GPR). In the crawl space below the building, 500 MHz GPR depth profiles were acquired for initial characterization of the subsurface. The initial study on February 7, 2018 covered an anomalous area with a surface expression (a mound) with an area of ~1.5m<sup>2</sup> of compact dirt, relative to the surrounding loose sandy construction fill. In the location of the mound, GPR amplitude bright spots indicate a localized soil disturbance at 1.5-2m depth. On March 8, two cadaver dogs were used independently to identify other areas of interest. Collectively, the dogs signaled three 10m<sup>2</sup> areas underneath the building. Two of the areas pose difficulties for radar imaging due to concrete structures. The third area was more open, allowing us to collect thorough GPR depth profiles. If a soil disturbance at depth is detected, and coupled with a cadaver dog flagged location, then Nampa Police detectives may have reason to use invasive investigation methods.

**Wallen, Dakota, Andrew Frierson, Tiffany Fulkerson**

***Washington State University Archaeological Research at the Hart Mountain National Antelope Refuge, Lake County, Oregon***

In 1967, students and faculty from Washington State University (WSU) conducted excavations at Rock Creek Shelter (35LK22) on the Hart Mountain National Antelope Refuge in Lake County, Oregon. This work revealed a robust archaeological record and provided evidence of human occupation ranging from ca. 8,300-780 cal B.P., thus demonstrating the potential for future research in an area that had received little archaeological attention. In the summer of 2017, students and faculty from WSU, along with staff from the U.S. Fish and Wildlife, revisited the Hart Mountain refuge as part of an ongoing Cooperative Ecosystem Studies Unit agreement to rehabilitate, document, and analyze archaeological materials from the Rock Creek Shelter and elsewhere on the refuge. The 2017 fieldwork identified six new precontact sites and resulted in 14 sites revisited. Many previously unrecorded cultural resources were identified, including petroglyphs, ground stone implements, and a multitude of diagnostic points such as Western Stemmed, Northern Side Notched, Elko, and Desert Side Notched. The 2017 fieldwork demonstrates that the Hart Mountain Refuge has vast potential to address many archaeological questions in the northern Great Basin.

**Wang, Penglin**

***Cervidae Ethnonyms in Inner Asia***

Included in the fauna of Inner Asia is a wide variety of deer, such as antelope, gazelle, roe deer, and elk or moose. This diverse cervid species serves as reservoir of food and fur supply. For millennia, early humans in Inner Asia had been chronic achievers in rock art. In Mongolia Altai and Inner Mongolia Yin mountain ranges there where rock drawings are found, there exists a long-standing connection between appreciably artistic gratifications and an animal motive. Rock artists took interest in representing animals including

deer and elk, reflecting people's zoographic fondness, which could feed into nomenclature. In this presentation I focus on the ethnonyms Qarta'an, Hart, and Bugu, which derived from Cervidae terminology. I argue that the names Hart, Harta, Hartar, Hartagin, and Qarta'an came from Old English heort 'hart,' which was in turn diffused into Manchu kandagan (<-- \*karda-gan) and Mongolian qandaḡai 'Manchurian moose,' and Bugu or Pugu (僕骨) from Turkic and Mongolic buḡu and Manchu buhū 'deer,' which has an etymological connection with Sariqul (an eastern Iranian language) buḡui 'deer.'

### **Wardle, Weston**

#### ***Archaeological Expectations Based Upon Resident Fisheries in the Owyhee River***

There are dozens of native non-migratory fish species that could have been utilized by foragers in the Owyhee River of southeast Oregon and southwest Idaho during the Late Archaic. Using the approach of human behavioral ecology, with the assumption of Optimal Foraging Theory that foragers will maximize returns by either increasing energy consumed or decreasing time spent searching for and handling resources, variables such as caloric content and search time influence whether a resource is included in a diet breadth. One important factor that is often overlooked is predictability. How predictable were the resident fisheries of the Owyhee River and its tributaries? Variables that might cause fish to aggregate (e.g., spawning timing and location, feeding behavior, river configuration, river flow levels, etc.) are assessed to establish a predictive map of locations where resident fisheries might have been predictable enough to be utilized during temporary, seasonal foraging. This predictive map will then be tested with archaeological data during the summer of 2018 to assess whether site location or evidence of fishing technology correlate with the expected locations of temporarily predictable resident fisheries.

### **Welch, John R., Erin Hogg, Michael Klassen**

#### ***An Online Professional Master's Program in Heritage Resource Management: Digital Bridges Across Disciplinary, Practical and Pedagogical Divides***

Growth and diversification in heritage resource management (HRM) archaeology since the 1960s has created new demands for training the next generations of HRM leaders and for addressing persistent and counterproductive divisions between academic and applied archaeologies. The Simon Fraser University Department of Archaeology (SFU) has responded to these demands with an all-new, cohort-based, thesis-focused graduate program created by and for HRM professionals. The program's target audience is HRM practitioners who hold Bachelor's credentials, have initiated promising careers in HRM, and desire advanced, research-focused degrees to enable their upward mobility. The SFU program is structured and focused to provide intensive, predominantly online training in the four essential dimensions of HRM: law and policy, ethics and practice, business management, and research design and methods. The program has been successful through initial cohort cycles and in attracting HRM industry partners. Critical next steps in program development entail the identification of critical attributes of HRM futures desired by all or most HRM stakeholders and the collaborative pursuit of those desired futures. Industry-academic partnerships are effective in comparable circumstances in cognate disciplines but remain underdeveloped as bases for planning and delivering state-of-the-art training in applied archaeology and the broader field of HRM.

### **Whisenant, Idah**

#### ***Archaeological Testing at an 1866 North Idaho Site and Subsequent Potential Activities of Blacksmithing, Hunting, Logging, Cement Making, Homesteading, WWII Training and Recreation***

The specific area of research for my thesis and this presentation concentrates on Pen d'Oreille City located on a small spit of land at the south end of Lake Pend Oreille in Northern Idaho. Founded in 1866, Pen d'Oreille City is regarded as the second Euro-American settlement in North Idaho and a waypoint for

gold-seekers traveling east to Montana and British Columbia by steamboat. It has gained the interest of local historians, archaeologists, and the Kootenai County Historic Preservation Commission, resulting in archaeological efforts to assess the site's eligibility for nomination to the National Register of Historic Places. Presentation on this site explores frontier daily life at the settlement through historic research and the archaeological testing results from August 2017 that paint a fuller picture of subsequent land use previously unrecorded at the site. Activities employed for the archaeological testing project were tree coring, chemical analysis, feature recording, metal detection, two test units, artifact analysis, and surface survey. Additional information surfaced leading to tentative conclusions of activities associated with blacksmithing, hunting, logging, recreational periods, cement making, homesteading, and the WWII Farragut Naval Training Station. More research is suggested as several mysteries remain, including a large, unidentified depression measuring 50 yards in diameter. The results of this project clarifies the potential for intact subsurface feature remains and artifacts, what may have disturbed the remains of Pen d'Oreille City, and how to proceed with future subsurface archaeological investigation.

**Whistler, Emily L.**

***Searching for Diversity: A Detailed Zooarchaeological Analysis of Birds from San Juan Islands sites***

Researchers in the Salish Sea have focused much of the zooarchaeological work on resource intensification. In recent years, a shift has occurred placing an emphasis on the diversity contained within faunal assemblages. This paper utilizes preliminary findings of research on the human-bird interactions as a representation of resource diversity. This analysis uses avian remains from three collections previously excavated from sites on the San Juan Islands. A total NISP of 471 was identified from three sites: Fisherman's Bay (45-SJ-254) and Mud Bay (45-SJ-278) located on Lopez Island, and English Camp (45-SJ-24), located on San Juan Island. Ducks were the most common taxa identified followed by gulls and alcids. Overall diversity and equitability will be addressed as well as the ecological information of the species present. This preliminary analysis addresses the information that birds can provide archaeologists with about human subsistence and past environmental exploitation.

**Williams, Scott**

***Don't Believe Everything You Read: A Lesson in Historical Sources and The Power of the Internet for Good***

In 1939, William Schurz published his seminal work on the Manila galleon trade between Manila and Acapulco. Schurz, the "dean of galleon studies" wrote in a brief passage (without reference) that the galleon Santo Cristo de Burgos burned in the western Pacific. That single passage was enough to persuade researchers for the next 70 years that the galleon could not be the source of the Beeswax Wreck in Oregon. However, archaeological data from the Beeswax Wreck research project suggested the Santo Cristo de Burgos was, instead, the most likely candidate for the wreck. A random encounter with a travel blog from the Philippines and a lucky interlibrary loan revealed that Schurz's statement was based on a satirical source he accepted at face value, rather than primary documents. This led to further research into the primary documents, which confirmed that rather than burning in the western Pacific, the galleon sailed east and was never seen again.

**Wyatt, Noella, Elizabeth Armstrong, Patrick T. McCutcheon, Breann Stoner**

***Errors Across Lithic Analysts: How much is Enough Training? A Comparison Analysis of the Neely Collection***

Dr. Robert C. Dunnell and Patrick T. McCutcheon first analyzed a sample (n=200) of the Neely lithic assemblage as part of McCutcheon's 1997 dissertation on stone tool heat treatment. The sample was

drawn randomly from a larger plow-zone surface collection (n=659). Recently, McCutcheon borrowed the collection and worked with three students with varying levels of lithic training to analyze the entire assemblage. The original purpose was to determine if the initial sub-sample was representative of the entire surface collection. After the analysis was finished, numerous errors in attribute identification were found when McCutcheon and two of the students reviewed a ten percent quality-control sample. Finding discrepancies between the original 1997 analysis and the quality control analysis begs the question “what are the factors that may cause variation in observations of flake attributes?” After receiving further training in lithic analysis, one of the students who partook in the spring 2017 student analysis conducted a new blind analysis on the quality-controlled lithics that were compared to the 1997 analysis, to determine if further training has caused a significant difference in their ability to correctly identify flake attributes. Percentage of correct observations from the 2017 and 2018 analyses were statistically tested for significant differences using the original 1997 analysis as the standard. This comparison of multiple analyses of the same lithic assemblage may provide information regarding the factors that drive variation in lithic attribute identification, even when using the same techniques. Possible causal factors range from experience to collection treatment.

### **Yu, Pei-Lin**

#### ***Undergraduates Doing Research! Using the Binford Hunter-Gatherer Database to Explore Problems in Cultural Evolution.***

Lewis R. Binford had a 50-year career in explorations of cultural change, with special focus on hunting and gathering peoples. Over three decades he worked with students and colleagues to create a database of environmental data and ethnographically derived hunting and gathering projections (Binford and Johnson 2014) with the aim of conceptualizing research questions and refining hypotheses. The database has been used in global research from Africa to Japan and China, as well as North and South America, but primarily among trained researchers and their graduate students. Boise State University undergraduates are now working with the Binford database to help develop and refine their own research problems.

### **Zentgraf, Diane**

#### ***Mid-Nineteenth Century Clay Smoking Pipes from Fort Hoskins and Fort Yamhill, Oregon***

Mid-Nineteenth Century Clay Smoking Pipes from Fort Hoskins and Fort Yamhill, Oregon  
Soldiers stationed at two remote Pacific Northwest military forts, Fort Hoskins (1856-1865) and Fort Yamhill (1856-1866), Oregon, led a monotonous life in the wet, dreary western Oregon coastal mountain range. The repetitive nature of military life for these men was relieved by what was considered at the time a pleasure and a distraction, the smoking pipe. Fortunately for these soldiers it was the peak of European and American manufacture of clay smoking pipes in variety, quality and artistry. The focus of this comparative analysis and historical research is the interpretation of the wide range of clay smoking pipes recovered from the two forts for a better understanding and insight into the social and economic status of the forts soldiers. An additional benefit will be helping to date other archaeological and historical sites where clay smoking pipes are found.

Boise State University

welcomes

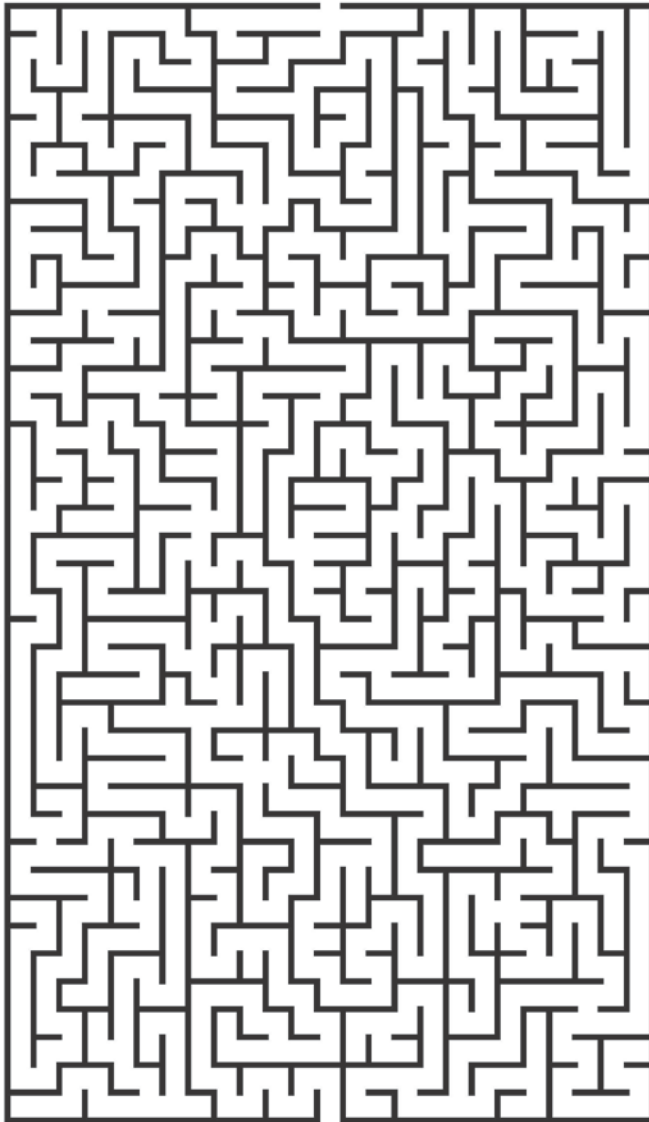
The Northwest  
Anthropological  
Conference  
2018!







Applied  
Archaeological  
Research, Inc.



I got moos like Jagger.

Copyright © 2018 JGB Service, <http://www.mazegenerator.net/>



Enjoy  
NWAC 2018

Find your way through  
the field.

Applied Archaeological Research, Inc.  
4001 NE Halsey St., Suite 3, Portland, Oregon  
[www.aar-crm.com](http://www.aar-crm.com)



# AINW

Archaeological Investigations  
Northwest, Inc.

## Cultural Resource Services throughout the Pacific Northwest

Archaeology  
Architectural History and History  
Blood Residue Analysis  
Lithic Technology Workshops  
Lithic Technological Analysis  
Geoarchaeology  
Ethnography  
Osteology

3510 NE 122nd Avenue, Portland, Oregon 97230  
Phone 503-761-6605 Fax 503-761-6620  
Vancouver Phone 360-696-7473  
[www.AINW.com](http://www.AINW.com)







# We Welcome you to NWAC 2020!

March 19-21st  
Ellensburg, Washington

**Where we work:**  
Forensics Lab  
Mammoth Lab  
Museum of Culture & Environment  
Zooarchaeology Lab  
and beyond...

**Certificates**  
Captive Care Certificate  
Forensics Certificate

**Minors**  
American Indian Studies Minor  
Anthropology Minor  
Museum Studies Minor

**Undergraduate Degrees**  
Anthropology (4-field, BS, BA)  
Primate Behavior & Ecology (BS)

**Graduate Degrees**  
Cultural & Environmental Resource Management (MS)  
Primate Behavior (MS)



# DirectAMS

RADIOCARBON DATING SERVICE

Need A Date?



## About DirectAMS

**Affordable:** Lowest prices in the industry.  
Organics from \$299, Bone from \$349.

**Accurate:** Samples analyzed by AMS owned by DirectAMS, designed specifically for C<sup>14</sup>.

**Attentive:** Free, expert consultation by staff scientists.

**Accelerated:** Expedited results in 10 business days.  
Standard Service in under 6 weeks.

*Measure more. Learn more.*

DirectAMS.com





## *Living Landscapes, Living Cultures*

The 2018 Cultural Resource Protection Summit marks our 11th gathering. Since its inception, the primary goal in organizing the annual Summit has been to facilitate amongst all affected parties an open, frank discussion about the intersection between cultural resources and land use.

This year, the Summit agenda includes an engaging array of cutting-edge topics that will encourage attendees to examine the benefits of a landscape approach and how it might inform workable solutions for today's most pressing challenges to effective cultural resource protection.

Please join us at the Suquamish Tribe's beautiful and inviting House of Awakened Culture for a two-day gathering that will help you improve your technical skills while deepening your connection to why we do this work. Leave with more tools for protecting cultural resources and sharing the important stories they tell, not to mention new allies and friends.

### **SUMMIT HIGHLIGHTS:**

#### **Day #1 Keynote – Marion Werkheiser, Cultural Heritage Partners in D.C.**

We welcome Marion Werkheiser, founding partner of Cultural Heritage Partners law firm, from the “other Washington” as she shares with us the very latest about the Federal legislative and regulatory landscape. Marion currently serves as Government Relations Strategist for both the Coalition for American Heritage and the American Cultural Resources Association (ACRA).

**The Merits of a Landscape Approach** – Increasing attention is being paid by cultural resource managers to the potential merits of a “landscape approach.” Join us for an examination of a wide variety of landscapes (e.g. legislative, educational, environmental, linguistic, resource management, TCPs, ethnobotanical), and explore how such an approach might inform workable solutions for today's most pressing challenges to effective cultural resource protection.

*-Early Bird Registration Now Open - Visit [www.theleadershipseries.info](http://www.theleadershipseries.info) for special rates, draft agenda, and to register online!*

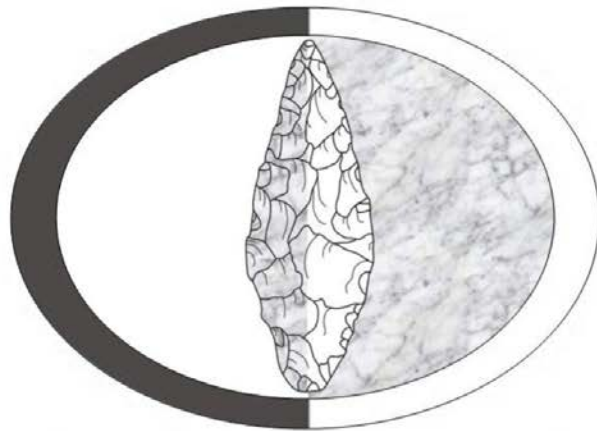
*-Students: Email Mary Rossi at [Mary@eppardvision.org](mailto:Mary@eppardvision.org) for information about student rates!*

*-Go to the website and enter to win a free registration!! One award will be made in each of these categories: Tribes, agencies, consultants, students*

### THANK YOU TO OUR 2018 SPONSORS TO DATE



# Equinox Research and Consulting International Inc.



## **ERCI**

Preserving Archaeological and Historic Resources  
in the Pacific Northwest since 2002

### **Mount Vernon, Washington**

[www.equinoxerci.com](http://www.equinoxerci.com)



## THE JOURNAL OF NORTHWEST ANTHROPOLOGY WELCOMES YOU TO BOISE

Stop by the *JONA* table in the NWAC bookroom and pick up your copy of *Memoir 13* for \$24.99. The *Memoir* summarizes 50 years of anthropology in the Northwest and includes a fully-searchable DVD with *NARN/JONA* Volumes 1-50 and *Memoirs* 1-7:

- Over 500 research articles and
- NWAC abstracts from 1967 to 2016.

A Content Analysis and Guide to the  
*Journal of Northwest Anthropology*

# 50

*Years of  
Northwest Anthropology*

Memoir 13

Deward E. Walker, Jr., Darby C. Stapp, & Amanda S. Cervantes

Visit JONA's website:  
[www.northwestanthropology.com](http://www.northwestanthropology.com)

*Providing award-winning consulting  
for more than 30 years.  
Now offering Cultural Resources  
Management services.*

- ▶ Cultural Resources Assessments to comply with Section 106, Executive Order 05-05, NEPA, & SEPA
- ▶ Archaeological monitoring during construction
- ▶ Archaeological testing and data recovery
- ▶ Historical GIS map progressions
- ▶ Historical research



Engineering • Transit • Planning/Traffic • Environmental • Construction Management  
Emergency Preparedness • Cultural Resources Management



# AHA!

Architectural History & Archaeology! LLC

**Architectural History & Archaeology! LLC  
(AHA!)**

**509.998.5074**

**206.353.2186**

**ann@AHAexclamation.com**

**fran@AHAexclamation.com**

**109 S. Holiday Road**

**Spokane Valley, WA 99016**



ARH Archaeology and Architectural History, LLC (ARH) is a woman owned DBE cultural resource consulting firm founded on over 30 years of cultural resource management (CRM) experience. Our principals have built a reputation for sound technical work, outstanding customer service, timeliness, and our superior relationships with regulatory agencies.

ARH is based in Boise and permitted to conduct inventory and evaluation projects on BLM, State, and Forest Service lands in Idaho, Nevada, Oregon, and Utah.

If you would like more information about ARH's services, please visit our website.

## Key services

Our outstanding service areas include the following:

- Compliance with Section 106 of the National Historic Protection Act (NHPA);
- Archaeological inventory, monitoring, and data recovery;
- Architectural inventory, building documentation, determination of effects documentation, and streetscape project aid;
- Historic context preparation;
- National Register of Historic Places (NRHP) evaluation and nominations;
- Historic Structure Reports;
- Historic Property Treatment Plans (HPTP) and management plans;
- Public interpretation; and
- Agreement document preparation.

[WWW.ARHarchaeology.com](http://WWW.ARHarchaeology.com)



## **Bionomics Environmental, Inc.**

1045 East Winding Creek Drive  
Eagle, Idaho 83616  
Phone: (208) 939-1022  
Fax: (208) 368-0001  
[www.bionom.com](http://www.bionom.com)

### **Services**

- ❖ Cultural Resources, Archaeology and Architectural History
- ❖ Environmental/NEPA Process and Documentation
- ❖ Wetland Delineations and Mitigation
- ❖ Water Quality
- ❖ U.S. Department of Transportation Act of 1966, Section 4(f) Evaluation
- ❖ Biological, Wildlife, Vegetation, and Fisheries Resource Studies
- ❖ Threatened and Endangered Species
- ❖ Noise Analysis and Mitigation
- ❖ Environmental Compliance and Due Diligence Audits
- ❖ Hazardous Wastes/Materials
- ❖ Avian and Bat Studies
- ❖ Public and Agency Involvement
- ❖ Technical Writing



# **CANNON**

## **HERITAGE CONSULTANTS**

Cannon Heritage Consultants is a full-service cultural resource management firm with offices in Logan, Utah and Boise, Idaho.

We offer the following services: archaeological surveys, data recovery, Geographic Information Science, geomorphology and site formation processes, geophysics and remote sensing, zooarchaeology and mammalian biogeography, and historic building and district documentation.

Please visit our website for more additional information on services and experience: [www.cannonheritage.com](http://www.cannonheritage.com)





**Local expertise.**  
Around the World.

Cardno can provide Project Management for Section 106 Consultation under the National Historic Preservation Act; Geographical Information Systems (GIS) mapping; as well as cultural resources analyses and/or surveys identified below:

- > Integrated Cultural Resources Management Plans
- > Sections 106 and 110 compliance surveys
- > Archaeological surveys (Phase I and II)
- > Archaeological excavations (test and data recovery)
- > Architectural surveys, inventories, and assessments
- > National Register of Historic Places (NRHP) evaluations
- > Archival research
- > Historical military research
- > General historical research
- > Laboratory analysis and artifact curation
- > Predictive modeling
- > Historic American Buildings Survey / Historic American Engineering Record documentation
- > Memorandum of Agreement/ Programmatic Agreement development
- > Historic and Archaeological Resources Protection Plans
- > Native American tribal consultation
- > Public Involvement/Public Meetings



[www.cardno.com](http://www.cardno.com)



# HARRIS ENVIRONMENTAL

*Environmental Compliance Excellence*

Our Secretary of Interior qualified archaeologists, architectural historians, and anthropologists bring proven experience to our clients' project goals.

## FEATURED SERVICES

Section 106 & Section 110 Compliance  
Archival Research (Class I) & Archaeological Surveys (Class III)  
Historic Structure Reports, Surveys, Inventories; HABS/HAER Documentation  
GIS and Predictive Modeling

## SERVING THE WESTERN U.S.

OFFICES: ARIZONA • CALIFORNIA • NEW MEXICO • OREGON • WASHINGTON

971-888-7566 • [HEG-INC.COM](http://HEG-INC.COM)



**Idaho**  
**Archæological**  
**Society**  
SINCE 1971

Membership includes the biannual journal Idaho Archaeologist and the monthly Artifacts newsletter.

With events that include the annual Archaeology Fair and IAS Conference

**JOIN IAS TODAY!!**  
[www.idahoarchaeology.org](http://www.idahoarchaeology.org)

The Idaho Archaeological Society's mission is to preserve, educate, and encourage the study of Idaho's antiquities.



**OLD IDAHO PENITENTIARY**

OPEN DAILY  
10 AM TO 5 PM (Summer Hours)  
(Last admission at 4:15 pm)

Featuring:  
J. Curtis Earl Weapons Exhibit  
Guided Tours  
Special Events & More!



OLD IDAHO  
**PENITENTIARY**  
/ IDAHO STATE  
HISTORICAL SOCIETY

**YOU CAN'T  
ESCAPE HISTORY**



[HISTORY.IDAHO.GOV](http://HISTORY.IDAHO.GOV)  
208.334.2682

We are a  
**Blue Star  
Museum**



**IDAHO STATE MUSEUM**

OPENING  
LATE SUMMER 2018



JOIN US IN MAKING HISTORY!



IDAHO STATE  
**MUSEUM**  
/ IDAHO STATE  
HISTORICAL SOCIETY



206.823.3394 (Seattle)  
208.528.8718 (Idaho Falls)

# NORTHWIND RESOURCE CONSULTING

Edgar Huber  
Principal Investigator  
ehuber@northwindgrp.com  
520.904.5247



NORTH WIND RESOURCE CONSULTING, LLC – a CIRI company – provides full service cultural resources consulting, geographic information systems, National Historic Preservation Act (NHPA), and National Environmental Policy Act (NEPA) compliance.

NWRC maintains offices in Seattle, WA, and throughout the United States – and is comprised of professional cultural resources staff spanning qualifications and experience in various aspects of cultural resources management.

[www.northwindgrp.com](http://www.northwindgrp.com)



## transectfilms

Telling stories fueled by the wonder of science and culture, with the hope of making the world a better place.

[transectfilms.com](http://transectfilms.com)

