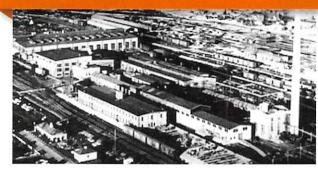
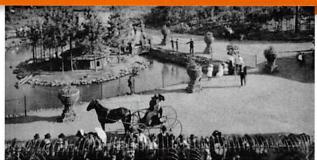
# DARBY Stapp

# 70th Northwest Anthropological Conference

















April 12-15, 2017 | Spokane, Washington | Hosted by EWU at Hotel RL

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# 70th Northwest Anthropological Conference

# Program

 $70^{\text{th Annual Meeting}}$  Northwest Anthropological Association

April 12 - 15, 2017

### Hotel RL Spokane

303 W. North River Dr., Spokane, WA

#### Host

Eastern Washington University

Department of Geography and Anthropology

#### **Local Arrangements Committee**

Sarah Keller, Chair

Jeffrey Johnson

Serena Borges

Jamie Litzkow

Jerry Galm

Robert Sauders

Stan Gough

Matthew Thomas

LeAnn Knoles



### Northwest Anthropological Association Officers:

Lee Sappington, President
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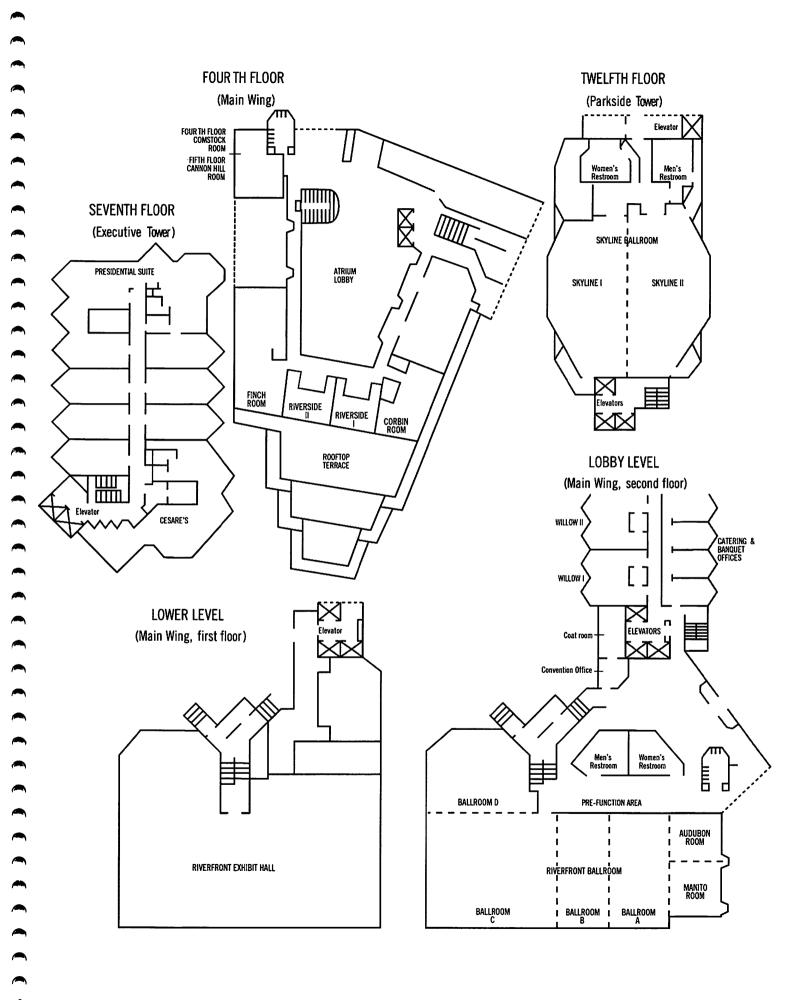
#### Volunteers

Christy Berg, Steven Dampf, Mary Day-Pestana, Brandy Frick, Amanda Gardner, Kate Heylman, Fiona Lahmeyer, Emma McCain, Mercedes McLain, Angeline Nesbit, Griselda Sanchez, Matt Setzer, Jordan Thompson, Dulce Gutierrez Vasquez, Diana Wilson

### Thanks for all the help and support from

Provost Scott Gordon, Vice-Provost David May, Dean Vickie Shields,
Dean Lynn Briggs, Associate Dean and Department Chair Robert Sauders,
Ruth Galm, Jerry Galm, Kassahun Kebede, Julia Smith, Shelley Stickelmeyer,
Brent Ashton, Dan Meate, Craig Holstine, Freddy Vega

And special thanks for all the hard work of Serena Borges, Michael Childress, Jennifer Dahl, Melissa Fisher, Stan Gough, Jeff Johnson, LeAnn Knoles, Jamie Litzkow, and Matthew Thomas



### **Conference Events and Meetings**

Conference Registration (Conference registration is required for all conference events; single day registration and a limited number of banquet tickets may be purchased at the desk.)

Convention wing entrance lobby

Wednesday – April 12, 2017 5:00 p.m. – 8:00 p.m.

Thursday – April 12, 2017 7:00 a.m. – 5:00 p.m.

Friday – April 12, 2017 8:00 a.m. – 5:00 p.m.

Saturday – April 12, 2017 8:00 p.m. – 12:00 p.m.

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

### **Meetings:**

### Association of Oregon Archaeologists (AOA)

Thursday, April 12, 2017 3:40 - 5:00 p.m. (Comstock)

### **NWAC Business Meeting Lunch**

Friday, April 13, 2017 12:00 – 1:30 p.m. (Willow 2)

### Association of Washington Archaeologists (AWA)

Friday, April 13, 2017 5:00 – 7:00 p.m. (Audubon-Manito)

### **Conference Events and Meetings**

### Wednesday – April 12, 2017

Opening Reception 5:00 – 8:00 p.m. (hosted beer, wine and hors d'oeuvres) Convention Wing Entrance Lobby/Prefunction area

### Thursday – April 13, 2017

Student Luncheon and Career Fair 12:00 – 1:30 p.m. Ballroom D

Conference Reception 5:00 - 7:00 p.m. (hosted beer, wine and hors d'oeuvres Skyline Ballroom (Twelfth floor, Entrance lobby elevators)

AWA Pub Crawl 6:00 - 10:00 p.m.

(Sponsored by the Association for Washington Archaeology (AWA)

(Participants must be 21 years of age or older)

Leaves from Convention Wing entrance lobby

### Friday – April 14, 2017

Banquet Reception 6:00 – 7:00 p.m. (no host bars)
(Skyline Ballroom)
Conference Banquet 7: 00 – 9:00 p.m. (tickets required)

Banquet Speaker: Dr. Robert Sutton, Chief Historian, National Park Service (retired 2016) "What The Past Tells Us About The Future Of Cultural Resource Management"

# Day-by-day

## **Thursday Morning**

	<u>Session</u>	Room	<u>Time</u>	<u>Type</u>
1	Paleoindian Archaeology	Ballroom A	9:20-12:00	General
2	Site Location	Audubon-Manito	8:40-10:40	General
3	Making a Difference in Community	Audubon-Manito	10:40-12:00	Symposium
	Colleges			
4	ODOT-WSDOT Transportation Symposium	Ballroom B	9:00-11:40	Symposium
5	Discourse and Its Effects: Gender, Health,	Corbin	8:50-10:00	Symposium
	and Race			
6	Medical Anthropology	Corbin	10:20-12:00	General
7	Past and Current Reality, Future Vision	Comstock	9:00-11:00	General
8	Opportunities for Archaeological Societies in	Comstock	11:00-12:00	Discussion
	Legislative Protection of Cultural Resources	3		Panel
	Poster Session A	Willow 1	10:00-12:00	Posters

### Thursday Afternoon

<u>Session</u>	Room	<u>Time</u>	<u>Type</u>
9 Supporting Native American Self-	Ballroom A	1:30-4:50	Symposium
Determination - Papers in Honor of			
Lawr Salo's Career and Contributions.			
10 Community Colleges continued	Audubon-Manito	1:30-4:30	General
11 Historic Archaeology	Ballroom B	1:30-3:10	General
12 Public Archaeology	Ballroom B	3:30-4:30	General
12A Refugees	Ballroom C	1:30-2:10	General
12B Public Forum: Panel Discussion on	Ballroom C	2:30-4:30	Discussion
Ethnographic Research with Pacific			
Northwest Tribes			
13 Working Side-by-Side: Reflections on	Corbin	1:30-4:10	Symposium
Collaborative Anthropology and Archaeolo	gy		
14 Archaeology Surveys	Comstock	1:30-3:40	General
Posters Session B	Willow 1	2:00-4:00	Posters

# Day-by-day

## Friday Morning

	<u>Sessions</u>	Room	<u>Time</u>	<u>Type</u>
15	Archaeology Elsewhere	Audubon-Manito	9:00-9:40	General
16	CACOA (Cool A** Central Oregon	Audubon-Manito	9:40-12:00	Symposium
	Archaeology)			
17	Chemical Analyses of Residues	Ballroom A	9:00-10:00	General
18	Global Applications of Chemical Analysis	Ballroom A	10:40-12:00	Symposium
	in Archaeology			
19	Topics in Cultural Anthropology	Ballroom B	9:00-10:20	General
20	Stories from the Past: Presentations in	Ballroom B	10:40-12:00	Symposium
	Honor of Priscilla Wegars, University			
	of Idaho			
21	Topics in Medical Anthropology	Corbin	9:00-11:20	Symposium
22	Ameliorants	Corbin	11:20-12:00	General
23	Artifact Analysis	Comstock	9:20-11:40	General
	Posters Session C	Willow 1	10:00-12:00	Posters

### Friday Afternoon

	<u>Sessions</u>	Room	<u>Time</u>	<b>Type</b>
24	Mitigating for Cultural Resource Loss in	Audubon-Manito	1:30-5:00	Symposium
	the Real World, Examples from The			
	Confederated Tribes of the Colville Reserva	tion		
	(CCT) History/Archaeology Program			
25	Chemical Analysis Symposium	Ballroom A	1:30-4:30	Symposium
	continued			
26	Priscilla Wegars symposium continued	Ballroom B	1:30-4:30	Symposium
27	Data Recovery at Anderson Creek, a	Corbin	1:30-2:50	Symposium
	Hunter-Fisher-Gatherer Camp on			
	Sinclair Inlet, Puget Sound			

# Day-by-day

## Friday Afternoon continued

<u>Sessions</u>	Room	<u>Time</u>	<u>Type</u>
28 Historical Forts Archaeology	Corbin	3:10-4:50	General
29 Topics in Physical Anthropology	Comstock	1:30-5:00	Symposium
Poster Session D	Willow 1	2:00-4:00	Posters

### **Saturday Morning**

<u>Sessions</u>	<b>Room</b>	<u>Time</u>	<u>Type</u>
30 Investigating The Dittman Biface Cache	Audubon-Manito	9:00-12:00	Symposium
(35ma375): Stewardship, Collaboration,			
Consultation, and Public Outreach			
Associated with The First Documented			
Biface Cache in The Willamette Valley			
31 Spokane's Riverfront Park Cultural	Ballroom A	9:00-12:00	Symposium
Resource Management and Beyond			
32 Historic Archaeology	Ballroom B	9:00-11:40	General
34 Archaeology Overview	Corbin	10:20-11:20	General
35 Native and Non-Native Voices	Comstock	9:40-11:40	General

### Thursday, April 13, 2017

•	•
Session 1:	Paleoindian Archaeology
	(Ballroom A)
9:20	Are There Pre-Clovis Mammoth Sites in the Columbia Plateau? Lee Sappington
9:40	A Paleoindian Archaeological Assemblage from a Late Pleistocene Flood Deposit Derived from
	the Last Channeled Scabland Floods Across the Columbia Basin in the Horse Heaven Hills,
	Benton County, Washington David G. Rice
10:00	Radiocarbon Dating at the Paisley Caves Dennis L. Jenkins
10:20	Break
10:40	Identification of Faunal Remains Recovered from Coprolites in Paisley Cave 2
	R-Patrick D. Cromwell
11:00	Archaeoparasitology of the Paisley Caves Brianna Kendrick
11:20	Revisiting the Old Cordilleran Tradition in the Puget Sound: Reanalysis of Bifaces from the
	Olcott Type Site James W. Brown and James C. Chatters
11:40	CAVEAT EMPTOR: A History and Technological Analysis of the Rutz Clovis Point
	Daniel Meate and Scott Williams
Session 2:	Site Location
	(Audubon-Manito)
8:40	In Search of Mounds: Development of a LiDAR and Remote Sensing Predictive Model of the
	Calapooia Watershed, Oregon Tia R. Cody and Shelby Anderson
9:00	Using LiDAR Data for Archaeological Recon: Tips and Tricks Sara E. Palmer
9:20	Remote Sensing at the South Flying Goose Site John T. Dorwin
9:40	Refining an Automated Model for Basic Landform Classification Josh Moss
10:00	Wherever They're Naming a "There" of Theirs: Native Place Names, Landscape Features, and
	Refining Archaeological Expectations in a Sea of "High Risk" Maurice Major
10:20	Western Washington Shell Midden Chronology: Demographic Information
	Gary Wessen, Thomas J. Brown
10:40	Western Washington Shell Midden Chronology: Antiquity
11:00	Break
Session 3:	Symposium. Making A Difference in Community Colleges
	Organizer: Thomas Murphy
	(Audubon-Manito)

Community colleges are strategically positioned to make a difference for students and community.

Community-based missions with structural linkages to local governmental, tribal, social, and economic institutions

create feedback loops conducive to substantive impacts on a local scale. This session highlights some of the work in anthropology departments at community colleges across the state of Washington. Anthropology students and instructors in community colleges cross-disciplinary and sub-disciplinary boundaries as they meet real challenges in local communities. Presenters highlight examples of archaeological projects that connect with cultural, linguistic, and biological anthropology as well as with history and engineering. Ethnographic and biological fieldwork complement surveys and excavations of cultural resources. Many of the featured projects include service-learning and community-based methodologies that involve the subjects of anthropology in the design, implementation, and analysis of both research and pedagogy.

- 11:20 Making a Difference to Ours Students: Addressing a Variety of Wants and Needs in the Classroom Jennifer Zovar
- 11:40 The Challenges of Teaching Human Evolution at a Community College
  Mark Taff, E.F. Aranyosi

  (This symposium will continue in this room at 1:30 as Session 10)

Session 4: Symposium. ODOT-WSDOT Transportation Symposium

Organizer: Scott Williams

(Ballroom B)

Transportation projects touch upon all aspects of cultural resources management and result in large amounts of public dollars spent on management and historic preservation. Staff from both Oregon and Washington State Departments of Transportation come together again for a session to discuss recent projects and developing issues in the field of cultural resources management for transportation projects.

- 9:00 The East Trent Avenue Bridge: 5 Spans and 107 Years on the Spokane River Craig Holstine
- 9:20 One Of The Most Disturbed Spots In All Of Spokane: Lessons From A Buried Cemetery

  Dean Weaver
- 9:40 "It Was Necessary to Destroy the Village in Order to Save It": Winning The Battle but Losing the War with the McMillin Bridge Project Scott S. Williams
- 10:00 Drive It 'Til the Guardrails Fall Off: An Overview of WSDOT's Historic Bridges Program
  Stephen Austin
- 10:20 Break Thursday Morning Sessions
- 10:40 Revisiting Chetlessenten Village (the Pistol River Site, 35CU61) on the Oregon Coast
  Thomas J Connolly
- 11:00 Coyote, the Sisters, and the Falling Rocks Dean Weaver
- 11:20 CRM Issues in Transportation Projects: Panel Discussion:

Panelists: Dennis Wardlaw, DAHP; Tom Connolly, UO; Dean Weaver, WSDOT; Scott Williams, WSDOT; Craig Holstine, WSDOT; Stephen Austin, WSDOT

Session 5: Symposium. Discourse and Its Effects: Gender, Health, and Race

Organizer: J. Hope Amason

(Corbin)

Symposium Abstract: This panel broadly explores the power of discourse in North America, how it shapes our assumptions, practices, and institutions. Adam Westermann critically examines how heteronormative assumptions about gender become persistently inflected throughout U.S. dating culture, despite social changes that have called into question naturalizing discourses about sex, gender, and sexuality. Discourse is also at the center of Erika King's paper, which provides an analysis of discourse about Dengue in a Mayan community. King's interlocuters—clinical workers and patients—discuss their ideas about disease in ways that reveal their entanglements with traditional and Western medicine, as well as their perception people in the U.S. Through detailed examples of structural institutional, and interpersonal violence she U.S. Collectively these papers help us gain insight into the complexities of structure and agency—and most importantly how individuals internalize and experience the impacts of dominant ideas about gender, health, and race.

8:50 Introduction

9:00 "Lava, Tapa, Tira, Voltea": An Analysis of Discourse and Practice Surrounding Mosquito-born
Illness in Pisté, Yucután" Erika Rae King

9:20 The Means, Moment, and Materialization of Gender in Dating Adam Westerman

9:40 Racial Injustice: A Critique of the Colonial Perspective and Approach to Mass Incarceration and Violence Autumn Adams

10:00 Break

Session 6: *Medical Anthropology* 

(Corbin)

10:20 Exploring Age-Set Determined Domains of Plant Use in a Highland Maasai Village Cynthiann Heckelsmiller

- 10:40 Somatic Shockings Across Ailment Narratives: Lessons from the Sacred Geographies of an Indigenous Spirit World Luke Kernan
- 11:00 Posttraumatic Growth in Nicaragua and El Salvador Hugo De Burgos
- 11:20 The Role of Understanding Language (Particular Underlying Illness Metaphors) in Global Health: A Case Study from HIV and Aids Prevention in Nepal David Beine
- 11:40 Complicated Autonomies: Disability, Family, and Medical Decision Making Shannon Meyer

Session 7: Past and Current Reality, Future Vision

(Comstock)

8:40 Peasant Struggles for the Commons Frederick Strange

- 9:00 The Ordeal and Redemption of Christina Geisel and Mary Harris: The Rogue River War and Oregon's Own Captivity Narrative Mark Tveskov, Chelsea Rose
- 9:20 Staring Down the Hoarde: Resilience Against the Alt-Right Movement Drew Brutzman
- 9:40 Superstructural Fluctuations: The Cult of Kek, Memes, and the 2017 Presidential Election Kirk Packwood
- 10:00 Invisible: Homeless in Spokane Aaron Bocook
- 10:20 Capitalism in the Sky--The Jetson's and the Culture of the Future Stacy Warren
- 10:40 Break

Session 8: Discussion Panel. Opportunities for Archaeological Societies in Legislative Protection of

Cultural Resources Organizer: Christopher Noll

(Comstock)

organizations in the Pacific Northwest. The various states in the region have varying levels of legal protection for archaeological and historical sites. Federal protective legislation for heritage is at risk of being eroded under the current Presidential administration. This panel focuses on the role and potential actions of state and regional archaeological societies that could help safeguard the protections in place for cultural resources. Panelists from several societies discuss the typesof legislative involvement that each society has experienced, successes and failures in legal protection of archaeological materials, and strategies for protecting archaeological sites in the current political climate. This symposium is a discussion panel. The participating organizations include: Idaho Archaeological Society, Association of Oregon Archaeologists, Association for Washington Archaeology, Northwest Anthropological Association

#### Posters Poster Session A

10:00-12:00 (Willow 1)

- 1 A Database Collection Form for Clay Smoking Pipes Diane Zentgraf
- 2. A Clino-Cladistic Look at Pull & Push Tab Patents ca. 1950-1980 William Schroeder
- 3 The Tools of James Castle's Art Lily Loucks, Saffron Kruse, Vincent Wilson
- 4 Recognizing Ethnicity at Historic Placer Mining Sites in the Pacific Northwest Jamie Litzkow and Lindsey M. Evenson
- 5 The Foodways of the Cyrus-Jacobs House and the Uberuaga Boarding House in Boise,
  Idaho Allison Fashing and Darcy Wayman
- 6 A Comparison of Alcohol Consumption Habits at Historic Fort Boise Cynthia Hannold and Sam Raymond
- 7 Connectors to the Past: Two Historic Bridges in Southwestern Washington Dana Holschuh
- 8 Last Call: End Days and Final Detritus of the Hotel Butler Historic Debris at Boeing Field, King County, Washington Eric D. Anderson, Jason B. Cooper, Emily R. Scott

- 9 The Unknown History of Western Washington Logging Camps: St. Paul and Tacoma Lumber Company's Camp #5 ca. 1920-1950 Kayley Bass
- 10 The Limits of Material Culture for Determination of Ethnicity in Eastern Oregon Placer
  Mines Don Hann
- 11 Reassessing the Genus Homo on the Island of Java Through Virtual Reconstruction
  Donald E. Tyler, Ryan P. Harrod, Jordyn Jones, Ted Parsons
- 12 A Captive Ape Society: Social Structure and Dominance Hierarchy Analyses at Chimpanzee Santuary Northwest Jake A. Funkhouser, Jessica A. Mayhew, John B.

Session 9: Symposium. Supporting Native American Self-Determination – Papers in Honor of Lawr Salo's Career and Contributions.

Organizer: Aaron Naumann

(Ballroom A)

Lawr Salo has spent the last forty plus years working as a cultural resource manager for the Seattle-District Army Corps of Engineers (Corps). Throughout his career, Mr. Salo has honored the commitment of the U.S. Government to assist with building tribal capacity and respecting tribal self-determination. He has been an instrumental federal voice championing for Native American rights within the Corp and other federal agencies. He has worked to ensure Native American tribes were not sidelined by such complex entities as the Federal Columbia River Power System (FCRPS), or forgotten during the process of hydroelectric power facilities upgrading in the 1970-80s. The testimony to these efforts can be witnessed through the strong partnerships he has helped forge between the Seattle-District Corps and the Coeur d'Alene Tribe, Confederated Salish & Kootenai Tribes, Confederated Tribes of the Colville Reservation, and the Kalispel Tribe of Indians. We would like to take this time to thank Mr. Salo for all of his hard work and dedication, and hope you will too by attending this session. Lastly, please note that there will be an open jam session and reception to follow. Details will be announced at the meeting, but please bring your own instrument if you wish to jam out with Lawr!

- 1:30 Introduction
- 1:50 Intro to Tribal Sovereignty, Capacity Building and supporting Native American
  Self-Determination thru Cultural Resource Management Aaron Naumann
- 2:10 What's Goin' On -- Example from the Federal Columbia River Power System Projects

  Lawr Salo
- 2:30 Presentation by the Coeur d'Alene Tribe Jill Wagner
- 2:50 Chief Joseph Dam Project and Its Role in Helping Build the CCT H/A Program
  Jacqueline Cook
- 3:10 Assuring that the Public Good is Sustainably Served in Public Archaeology Kevin Lyons
- 3:30 Break
- 3:50 Reflections on Lawr's Career David Rice

4:10	Reflections on Lawr's Career David Munsell
4:30	General Discussion Guy Moura and Dennis Lewarch
Session 10:	Community Colleges Symposium continued
	(Audubon-Manito)
1:30	The Yama Project: A Multidisciplinary Analysis of a Transnational Community
1:50	Little Swamp Creek Site: Exposing an Unpleasant History through Fried Chicken
	Neal Endascott, Luke Jones
2:10	All of Our Relations: Indigenizing Bioanthropology and Archaeology Thomas Murphy
2:30	A Survey of Fish and Wildlife: Japanese and Big Gulch 2016 Skyler Elmstrom
2:50	The Role of Indigenous Knowledge in Observation and Service Learning Cali Drake
3:10	Break Thursday Afternoon Sessions
3:30	Motivations and Incentives for Installation of Rain Gardens: An Ethnographic Assessment in
	the Perrinville Creek Watershed Sahayra Barojas-Tapia
3:50	Community and Conflict: Tales of My College Career Jane Hutchinson
4:10	Discussion Dale Croes
Session 11:	Historic Archaeology
	(Ballroom B)
1:30	Palouse Falls - Almost Sibling to Snoqualmie Falls Hydro Charles T. Luttrell
1:50	The Yama Project: Diverse Partnership and Community College Students Combine for
	Archaeological Success David R. Davis
2:10	Trestles and Tramways: Artifact Biographies from Monte Cristo, a Late 19th-Century
	Hard-Rock Mining Town Located in Washington's Cascade Range Aubrey M. Steingraber
2:30	The Coins of Kam Wuh Chung, John Day, Oregon: Persistence of Chinese Culture Reflected
	Through Non-Monetary Uses of Chinese Coins James. C. Bard
2:50	Introducing the Chinese Material Culture Digital Database!
	Chelsea Rose, Sarah Heffner, Shana Sandor, Mary Maniery
3:10	Break
Session 12:	Public Archaeology
	(Ballroom B)
3:30	Restoring the Rivoli: The Public Archaeology of a Historic Theatre in Pendelton, Oregon
	Cody Schwendiman, Rory Becker, Amanda Welch
3:50	The Lake Roosevelt Partnership: Institutional Collaboration and a Smartphone App
	Larry Cebula, Brandon Cadwell
4:10	Looking Back, Looking Forward: Notions of Heritage, Stewardship, and Sustainability
	Among Southern Oregon Farmers and Ranchers Maureen Flanagan Battistella

Session 12A: Refugees

(Corbin)

1:30 Gender and Generations Among Ethiopian Diaspora in the

Washington, DC, Metropolitan Area Kassahun Kebede

1:50 "Humanity Is Wonderful, If Only I Could Encounter Some": Perspectives of the South Asian

Economic Diaspora in the Southern Mediterranean Matt Husain

2:10 Break

Session 12B Public Forum: 2017 Northwest Anthropological Conference: Panel Discussion on

Ethnographic Research with Pacific Northwest Tribes

Organizer: John Pouley. Participants: John Pouley, Briece Edwards, Daniel Boxberger,

Kevin Cannell, Sara Gonzalez, Guy Moura, Scott Williams, Brandon Reynon, Josh Wisniewski,

Alan Marshall, Jennifer Engum, Joanne Taylor

(Ballroom C)

2:30 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.

Session 13: Symposium. Working Side-by-Side: Reflections on Collaborative

Anthropology and Archaeology

Organizer: Jordan Levy

(Corbin)

This session brings together a diverse group of scholars who are on the verge, or in the midst, of a collaborative project – in both sociocultural and archaeological arenas. While collaborations of some kind have long been part of anthropological work; at the same time "collaboration" has arguably become more ambiguous in meaning. Among whom are anthropologists collaborating and why? How exactly does this happen? Our panel takes as its starting point the ongoing need for anthropologists to involve local communities in research that affects them, and then asks what benefits, if any, local communities have to gain from our projects – and who determines the methods, theoretical

loci, and interpretation of data in the research and dissemination process? We aim to explore the variability of "collaboration" and the usefulness of the term itself, while asking if it is ever misused, as it gains popularity in the current literature on applied, engaged, and public anthropology. Where does one draw the line between "collaboration" and "imposition"? What are some of the best practices in moving forward with a community-based project in our current historical conjuncture? Panelists will be asked to reflect on these dynamics in relation to their diverse projects - ranging from Colville Indian Reservation environmental regulations; to inter-ethnic marriage on San Juan Island; to lessons from the Makah and the Ozette site; to efforts toward de-colonization; to how we approach teaching placebased a

applied a	anthropology
1:30	Introduction
1:50	Efforts of Environmental Justice and Holistic Regulation on the Colville Indian Reservation
	Amelia Marchand
2:10	Colonization and Collaboration: Archaeological Research at the Roche Harbor Homestead,
	San Juan Island Georgia Rae Abrams
2:30	Conscientious Collaboration: Archaeological approaches as inspired by the Makah
	Paris Franklin
2:50	The Tale of Two Cities Kim Richards
3:10	Break
3:30	Cemetery, Sport Fishing, Recreation, Hydropower, Archaeology Respect Brenda Covington
3:50	Teaching Applied Anthropology in The Era of Donald Trump: Reflections on Collaborative
	Research with the Washington Fair Trade Coalition Jordan Levy
4:10	Discussion
n 14:	Archaeology Surveys
	(Comstock)

Session 14:	Archaeology Surveys	
	(C	

- 1:30 Revisiting Eligibility Trends of Archaeological Sites in Oregon 2012-2016: A Follow-up to the 2012 NWAC John Pouley, Matthew Diederich
- 1:50 Broadening the Focus: A Look at the Paleoamerican Surface Assemblage at Rimrock Draw Rockshelter (35HA3855) in Relation to the Burns BLM District at Large Patrick O'Grady, Scott Thomas, Carolyn Temple
- 2:10 An Overview of the Pre-Contact Archeology of the Lochsa River, North Central Idaho Bryce Danner
- 2:30 Precontact Land-Use in the Vicinity of Dworshak Reservoir Paul S. Solimano
- 2:50 Mapping Settlements and Landscapes Along the Mainstem Columbia River in Central Washington Through Aerial Imagery and Survey Julia Furlong

3:10	Federal Columbia River Power System Cultural Resource Program: Harnessing Power and	
	Preserving Cultural Resources for the Future	
	Jennifer Bertolani, Celia Moret-Ferguson, Sunshine Schmidt	
2.20	Dwool	

3:30 **Break** 

3:40 Association of Oregon Archaeologists (AOA) Business Meeting

#### Posters Poster Session B

2:00-4:00

(Willow 1)

- 1 A Cross-Cultural Analysis of How Children Learn About Witchcraft and Sorcery Roxanna Jane King
- 2 Sustainable Tourism in Costa Rica: Aligning Tourists' Interests with Local Development
  Jessica A. Mylan
- 3 Effects of Reproductive Hormones on Pregnancy Related Sickness in Rural Bangladeshi Women Anwesha Pan
- 4 La Leyenda de Yobi, el Zorro con Cinco Colas/Emotion in Translation: A Humanistic Study of Translation Korean to Spanish Lidia Velasco
- 5 Preserving Spokane's Progressive Heritage: Mitigation of the City's Historic Trolley
  Track System Steven Dampf
- 6 Developing Cost-Effective Event-Based Diaries for Low-Literacy Populations
  Baishakhi Basu
- 7 Cultural Practices as Contributing Attributes for Landscape Modeling: A Case Study in Tillamook Bay Briece Edwards, Jessica Curteman, Jon Krier
- 8 Paleolandforms and Landuse Dynamics: Regional Analysis Using Multiproxy Methods in the Pend Oreille Valley, WA

Melissa Goodmaa Elgar, Molly Carney, Elizabeth Truman, William J. Damitio, Emily Whistler, Kevin Lyons

- 9 Minding the Gender Gap: Publishing and Conference Trends in Western North America Tiffany Fulkerson, Shannon Tushingham
- 10 I Forge On: Walkability and Experiencing Early 20th Century Urban Life Through Spokane's Expert Smithy Hannah Ferguson, Ashley M. Morton
- 11 Effects of Famine on Deciduous Tooth Emergence in Rural Bangladeshi Children Darryl Holman
- 12 Cultural Affiliation for Tilcaminsh Uytpama Natitayt, the Ancient One (AKA Kennewick Man)

Lourdes Henebry-Deleon, Angela Neller, Kate Valdez, Jackie Cook, Teara Farrow-Ferman, Robert Taylor

	Friday,	April	14.	2017
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Session 15: Archaeology Elsewhere

(Audubon-Manito)

9:00 Depopulation of the Central Mesa Verde Region: Archaeology with Future Implications
Andrew Gillreath-Brown

9:20 Obsidian Industries and Exchange Spheres of Northwest Nicaragua: A Typological and Geochemical Study from the Department of Chinandega, Nicaragua Justin B. Colon

Session 16: Symposium. CACOA (Cool A\*\* Central Oregon Archaeology)

Organizer: Sara J. Davis

(Audubon-Manito)

Recent cultural resource investigations in central Oregon have provided opportunities to expand our understanding of the region throughout the Holocene. This symposium pulls together data from multiple locales to provide new insight into a variety of themes. Themes explored in this symposium include deeply buried Early Holocene occupations, task specific sites and a village site in the uplands, obsidian procurement in the Middle and Late Holocene, early evidence of wapato and tobacco use, sediment accumulation and its relationship to archaeological sites, and methodology for identifying archaeological sites and features. This symposium provides new information on the variability of human occupation of Central Oregon.

- 9:40 Temporal Variation in Use of the Uplands in South-Central Oregon Bradley Bowden
- 10:00 Spatial Variability in Obsidian Procurement Patterns from Christmas Valley to Warner Rim Stephen C. Hamilton
- 10:20 Break
- 10:40 Wada, Wapato, and Western Stemmed: An Early Holocene Site near Burns, Oregon Daniel Gilmour, David Ellis
- 11:00 An Upland Pithouse village near Maupin, Oregon Sara J. Davis, Michele Punke
- 11:20 Holocene-Age Archaeological Site Potential and Preservation in Sediment Traps of Central
  Oregon Michele Punke
- 11:40 Discussion

Session 17:	Chemical Analyses of Residues
	(Ballroom A)

9:00 Chemical Analysis of Mysterious Finds Jenna Lecates, Ray Von Wandruszka

9:20 Analysis of Old Pharmaceuticals Morgan Spraul, Ray Von Wandruszka

9:40 Historical Pigments Danielle Saurette, Ray Von Wandruszka

10:00 Break

Session 18: Symposium. Global Applications of Chemical Analysis in Archaeology

Organizer: Sydney Hanson

(Ballroom A)

Archaeometric techniques are broadening the frontiers of archaeological science and adding substantially to our knowledge of past human behavior. The participants of this session present research involving residue and isotopic methodologies in a variety of contexts and locations. Residue analysis is the study of non-artifactual traces left by humans: blood, alcohol, milk, nicotine, and other substances. There are many archaeometric techniques aimed at identifying residues, many of which are currently in development. Isotopic analysis concerns itself with the stable isotopes found within human and animal bones. Isotopic analysis can answer questions about past subsistence, mobility, or environments.

- 10:40 Introduction
- 11:00 TExtraction of Rice Residues from Experimental Potsherds

Sydney Hanson, Shannon Tushingham, Korey Brownstein, David R. Gang

- 11:20 An Isotopic Analysis of the Early Historic Fauna Recovered at the Collier Lodge Site (12PR36),

  Porter County, Indiana Dominic Bush
- 11:40 Talking Turkeys: Stable Isotope Analysis of Turkeys from Postclassic Mayapán

Lori Phillips, Erin Thornton, Kitty Emery, Carlos Peraza-Lope

(This symposium will continue in this room at 1:30 as Session 25)

Session 19: Topics in Cultural Anthropology

(Ballroom B)

- 9:00 COUPON and OFTEN: Changing Patterns in American Speech Edwin Battistella
- 9:20 Cultural and Social Biases in Educational Access for LGBTQ Public School Students
  Hannah MacIntyre
- 9:40 Research in Identity and Video Games Olivia "Morgan" Manusia
- 10:00 "Asktransgender": A Digital Ethnography of Common Questions and Daily Challenges

  Related to Transgender Communities and Identity Processes Cambria Sullivan, Kerensa Allison
- 10:20 Break

Session 20 Symposium. Stories from the Past: Presentations in Honor of Priscilla Wegars,

University of Idaho

Organizer: Mary Anne Davis

(Ballroom B)

Developing stories about the past based on archaeological resources is a common goal of archaeologists regardless of whether you favor pre-contact, historical, terrestrial, aquatic, or any combination of these in your archaeological research. This symposium focusses on historical archaeology to honor the long and

distinguished career of Priscilla Wegars, founder of the Asian American Comparative Collection at the University of Idaho. The topics are diverse but each story is important to our understanding of the past.

- 10:40 Idaho Archaeologists in Review: Revisiting The Past Mary Anne Davis
- 11:00 The Search for Relevance: Archaeology in Public in Idaho Mark Warner
- 11:20 The Art of Consumption: A Faunal and Glass Analysis from The James Castle House

  Archaeological Project Meredith Breen
- 11;40 James Castle House Archaeology Project: Public Place in a Small Work Space

  Mary Petrich-Guy, Renae Campbell

  (This symposium will continue in this room at 1:30 as Session 26)

Session 21 Symposium. Topics in Medical Anthropology
Organizer: Kassahun Kebede

(Corbin)

The theme of the session, topics in medical anthropology, focuses on conversations and debates surrounding structural violence. The papers analyze how structural factors affect health and wellbeing of people around the world. As Paul Farmer, the doyen of medical anthropology, stated structural factors are social arrangements that put individuals in harm's way. The arrangements are structural because their embeddedness in the political and economic systems of our social world. Structural factors are best described as violence and violent because they are corporeally real and cause injury to people (Farmer et al. 2006). Certainly, structural factors are beyond dispensing prescriptions or providing temporary aids to marginalized areas and individuals. It is about understanding and ameliorating large-scale social structures – differences of power, wealth, privilege and health that are unfair, undesirable and discriminatory. The papers in this panel attend to the following questions: How are people embroiled in culturally, economically and politically-imposed suffering? How do the actions of government and other powerful institutions produce and reproduce unnecessary suffering? How do decisions made at the family level undermine the lives of children? In what ways marginalized groups respond to structural factors that threaten their health? How do everyday forms of symbolic violence endanger the health of vulnerable people such as the disabled, LGBT+, etc.? Taken together, these papers make significant contributions to the existing literature on structural violence in the United States.

- 9:00 Introduction
   9:20 The Effects of Perceived Discrimination on LGBT+ Latinx Individuals in the United States.
   *Matthew Thomas* 9:40 Commercial Sex Workers and the HIV/AIDS Epidemic Holly Johnson
   10:00 Forced Sterilization in Australia and the Question of Human Rights Tabitha Ormaechea
   10:20 Break
- 10:40 Mothers Perspectives and Dilemmas Regarding Vaccines in Spokane Courtney Carroll
- 11:00 The Role of Arc of Spokane in Disability Advocacy Shawn Watson

Session 22:	Ameliorants
	(Corbin)
11:20	Economic Growth of the Legal Cannabis Market in the inland Northwest Elise Cuentas
11:40	Terroir: From Wine to Coffee Julia Smith
Session 23:	Artifact Analysis (Comstock) Dale Croes
9:20	N=I: The Power of Charismatic Artifacts Thomas Ostrander
9:40	Indian Rock Obsidian: Preliminary Investigation of Toolstone Sources in the Simcoe Mountains
	Eric Gleason, Rick McClure, Megan Wonderly
10:00	Reading Flakes and Flake Scars Terry L. Ozbun, John L. Fagan
10:20	Paradigmatic Lithic Classification at Different Site Types on the Slopes of Mount Rainier
	Caitlin Limberg
10:40	Break
11:00	Comparing Stemmed Projectile Point Technology Among Several Early Southern Plateau Sites
	Loren G. Davis, Alexander J. Nyers, Daniel W. Bean
11:20	Pottery at Skull Creek Dunes, and Its Implications for Pottery Tradition in Southwestern Orego
	Makaela O'Rourke, Scott Thomas
11:40	Like a Moss: Exploring Paleoethnobotanical Sample Size and Return Rates in Cultural Resourc
	Management Molly Carney, Sydney Hanson

#### Posters Poster Session C

10:00-12:00 (Willow 1)

- 1 Low Density Doesn't Mean Low Value: Evaluating the Significance of 10CR179, a Low Density Site in the Mountains of South-Central Idaho Christopher Noll
- 2. Quartzite Artifact Analysis at Woodstock Farm, Chuckanut Bay, WA MacKenzie Hughes
- 3 The Gundlach Collection: A Large Sample of Projectile Points from the Upper Pend Oreille Watershed Jeffrey Cortlund Johnson
- 4 Analysis of Lithics from Bone Processing and Lithic Tool Production Units at Woodstock Farm (45WH0055) Jori Hurst, Dessa Meehan
- 5 The History of Lake Warner and the Clovis and Western Stemmed Point Lithic Assemblages

  Left Along Its Shore Teresa Wriston, Geoffrey M. Smith
- 6 Lithic Debitage Analysis of the Kelly Forks Work Center Site (10CW34) Daniel J. Polito
- 7 Latah Mammoth Radiocarbon and DNA Analysis Stan Gough, Thomas W. Stafford, Jr., Emil Karpinski, Charles T. Luttrell, Jerry R. Galm, Hendrick Poinar

- 8 Correlating Fire Histories and Demographic Signatures on Vancouver Island: A Pilot Study
  Thomas J. Brown, Jonathan Duelks, Kelly M. Derr
- Above It All: Aerial Imagery Support of Archaeological Research in the Fort
   Rock Basin, Oregon Pat Luther, Thomas Marsh
- 10 Ground Penetrating Radar at 45PO153: Stratigraphic Analysis Kendra Maroney
- 11 Utilization of Multibeam Sonar Data for Modeling Submerged Areas of Archaeological Interest Jon Krier, Kathryn Nuss
- 12 Omak Bell Site Excavations Adam N. Rorabaugh
- 13 Results of the 2016 Bungalow Dance Hall Excavations Adam N. Rorabaugh

Session 24: Symposium. Mitigating for Cultural Resource Loss in the Real World, Examples from The

Confederated Tribes of the Colville Reservation (CCT) History/Archaeology Program

Organizers: Aaron J. Naumann And Jacqueline M. Cook

(Audubon-Manito)

Mitigating cultural resource loss is complex and largely dependent on the type(s) of cultural resource(s) being adversely affected and those involved in the process. Most cultural resource specialists have been exposed to construction projects that impact archaeological sites, as in the case of the Zayo Project (Sloma). However, mitigation can be more creative as it should also address the irreparable and ongoing loss of cultural resources where Cultural Plant Team (Campbell, Adolph and Johnson, and Robson) illustrate how work with traditional plants and use areas are mitigating the effects of climate change and environmental degradation on plant communities important to tribal members. In addition to natural resources, protecting significant structures is also of high importance to the CCT (Coyote). And lastly, situations requiring immediate attention such as those created by the 2015 wildfires can occur at any time (Rorabaugh, and Dean, Bailey and Meyer). It is hoped by highlighting this range of treatments that other cultural resource practitioners will find inspiration to create contextualized solutions appropriate for ameliorating some of the loss and irreparable damage to cultural resources of the affected communities.

- 1:30 Introduction to the Confederated Tribes of the Colville Reservation, History/Archaeology Program
  Aaron J. Naumann Or Jacqueline M. Cook
- 1:50 Refining Where and When to Look: The Zayo Project an Example of Monitoring the Installation of Fiber Optic Infrastructure Robert Sloma
- 2:10 Break & Ouick Introduction to the Plant Talks (Presenter: Kali Robson)
- 2:30 Mapping Traditional Cultural Plants on the Colville Reservation Trisha Johnson
- 2:50 Mapping Traditional Cultural Plants on the Colville Reservation Kali Robson
- 3:10 Break
- 3:30 Pia Mission and Skolaskin Church Examples of Creative Mitigation Arrow Coyote
- 3:50 After the Burn: 2016 Northstar and Tunk Block Post-Fire Site Assessments Adam Rorabaugh
- 4:10 McLaughlin Canyon Pictograph Site Stabilization Claire Dean, Richard Bailey, Jon Meyer

4:30	Concluding Thoughts and Discussant Guy Moura
5:00	Association of Washington Archaeologists (AWA) Business Meeting
Session 25:	Chemical Analysis Symposium continued
	(Ballroom A)
1:30	Proteomic Residue Analysis of Stone Tools and Implications for Future Research
	Andrew Frierson, Korey Brownstein, Shannon Tushingham, David Gang
1:50	From their Pipes to Curicaueri: Tobacco Use Among the Ancient Tarascans Lori Phillips,
	Steven Hackenberger, Shannon Tushingham, Korey Brownstein, David R. Gang
2:10	Ancient Cacao Recipes: An Experimental Approach to Identify Recipe Variation in The
	Archaeological Record Jessica Devio, Shannon Tushingham, Korey Brownstein, David R. Gang,
2:30	In Search of Chocolate in the American Southwest: Residue Analysis of Ceramics from an Early
	Pueblo I Site in Southeastern Utah Katie Richards
2:50	Break
3:10	What Doña Ana Phase and Modern Jackrabbits (Lepus californicus) Can Tell Us About Climate
	Change in the Southeastern Southwest Brandon McIntosh
3:30	A Preliminary Ancient DNA Analysis of Middle and Late Period Humans from Ryan Mound
	(CA-ALA-329), San Francisco Bay, California Nichole Fournier, Cara Monroe
3:50	A Chemical Residue Analysis of Pre-Contact Smoking Pipes from Three Mid-Columbian Sites
	William J. Damitio, Shannon Tushingham, Korey Brownstein, And David R. Gang
4:10	Tobacco Use Patterns Among Tribal Communities in the Pacific Northwest: Long Term
	Trajectories and Implications for Modern Health Initiatives
	William J. Damitio, Shannon Tushingham, Korey Brownstein, David R. Gang
Session 26:	Priscilla Wegars symposium continued
	(Ballroom B)
1:30	Built Environment Survey of Walla Walla's Historic Volga German Neighborhood Ann Sharley
1:50	A Community Along the Tracks: An Examination of Sam Sing's Laundry in Sandpoint, Idaho
1.50	Molly Swords, Margaret Clark and Mark Warner
2:10	Diversification in a Time of Adversity Maryanne Maddoux
2:30	Ophir Creek Brewery: An Analysis of a Nineteenth Century Chinese Community
	Heather Sargent-Gross
2:50	Break
3:10	Expressions of Ethnicity in a Modern World, Archaeological and Historical Traces of
	Pre-WWII Japanese-American Culture Lorelea Hudson
3:30	Digitizing the Archaeology of WWII Japanese Internment Stacy Camp
	5 5 <del>6</del> 1yy

- 3:50 Constructive Play: Fort Boise, Archaeology, and Children's Toys Nathan J. May
- 4:10 Discussion

Session 27: Symposium. Data Recovery at Anderson Creek, a Hunter-Fisher-Gatherer Camp

on Sinclair Inlet, Puget Sound

Organizer: Roger Kiers

(Corbin)

A federal court injunction issued in 2013 requires Washington State to correct hundreds of fish passage barriers in western Washington by 2030. Months after the injunction was issued, Washington State Department of Transportation (WSDOT) archaeologists identified site 45KP233 within the footprint of a proposed culvert replacement project at the mouth of Anderson Creek on Sinclair Inlet in Kitsap County. Data recovery excavations conducted in September 2015 yielded a range of shell and vertebrate faunal remains, a small assemblage of stone and bone tools, and historic objects, from stratified deposits. Initial use of this small hunter-fisher-gatherer camp began approximately 800 years ago, as evidenced by a shell-free component containing vertebrate faunal remains and the majority of the site's lithic assemblage. Accumulation of shell-rich midden began shortly thereafter, and continued during multiple episodes of site use that extended into the historic period. Shell-free deposits capping the midden suggest a shift in Native American site use during the late nineteenth century. The site was buried under highway fill in the 1950s. The results of data recovery are presented, with consideration of comparable sites and thoughts on future work.

- 1:30 Anderson Creek in Context: Setting, Methodology and Stratigraphy at 45KP233 Roger Kiers
- 1:50 Vertebrate Faunal Remains from the Anderson Creek Site (45KP233)Robert J. Holstine, Megan A. Partlow
- 2:10 Analysis of Invertebrates from Anderson Creek (45KP233): A Study of Hard and Soft Substrate

  Species of the Intertidal Zone on Sinclair Inlet Erin Littauer, Meredith Austin
- 2:30 The Non-Faunal Artifact Assemblage from Anderson Creek (45KP233)

  Roger Kiers And Scott Williams
- 2:50 Break

# Session 28: Historical Forts Archaeology (Corbin)

- 3:10 The Preservation of Perishable Foods: Results of Recent Excavations in an Ice House and RootCellar, U.S. Army Fort Walla Walla (45WW341) Ryan Ives
- 3:30 A Historical and Archaeological Overview of Fort Yamhill's Hospital (35PO75) Kim Wesseler
- 3:50 In Search of Camps' Warner: Tracking US Military Presence in the Warner Valley,Oregon 1866-1874 Dennis Griffin
- 4:10 Archaeology of the Oregon National Guard: A Search for Archaeological Evidence of Early

  Military Encampments in Oregon Dennis Griffin

4:30 Socio-Cultural Identities of U.S. Army Commissioned Officers: The Negotiation of Class and Rank at Fort Yamhill and Fort Hoskins, Oregon, 1856-1866 Justin Eichelberger

Session 29: Symposium. Topics in Physical Anthropology

Organizer: Guy L. Tasa

(Comstock)

Physical anthropology, or biological anthropology, "is a biological science that deals with the adaptations, variability, and evolution of human beings and their living and fossil relatives" (AAPA). This symposium covers papers on all topics within the field of physical anthropology including but not limited to human skeletal biology, bioarchaeology, primatology, human and primate evolution, and human biological variation.

- 1:30 A Case Study Evidencing Precontact Reinterment of Inadvertently Discovered Human Remains
  Thomas Ostrander, Aja Sutton, Michael Bever
- 1:50 Make No Bones About It: Practical Tips for Recognizing Human vs. Faunal Remains in the Field
  Aja Sutton And Thomas Ostrander
- 2:10 A Skull in the Fireplace: A Narrative of Cultural Appropriation, Identification, Deconstruction, and Repatriation Guy L. Tasa
- 2:30 Indigenous Archaeology and Human Rights: Toward a More Ethical Treatment of Human Remains Juliette Vogel
- 2:50 Break
- 3:00 Comparison of Semi-Captive and Wild Gray-Shanked Douc Langurs' (*Pygathrix cinerea*)

  Activity Budgets Hilary Hemmes-Kavanaugh
- 3:20 A Ten-Year Study of Soil Bacterial Communities Associated with Cadaver Decomposition in the Pacific Northwest Misty Weitzel
- 3:40 Evaluating Possible Relationships Between the Cranial Base Angle and Linear Craniofacial Measurements Sarah Addington
- 4:00 The Potential Conflict between Forensic Ancestral Identification and Societal Interpretation

  Jerielle Cartales
- 4:20 Mother-Infant Interactions in a Wild Population of Southern Pigtail Macaques
  (Macaca nemestrina) Emily Dura, Nadine Rupert
- 4:40 Enrichment Use & Social Interactions in a Mixed-Species Enclosure of Sumatran (*Pongo abelii*) & Bornean Orangutans (*P. pygmaeus*) & Northern White-Cheeked Gibbons (*Nomascus leucogenys*)

  Emily Veitia

#### Posters Poster Session D

2:00-4:00 (Willow 1)

- 1 Geoarchaeology of the Sunrise Ridge Borrow Pit Site (45PI408): The Origin of Buried Soils Sean Stcherbinine, Patrick MCutcheon
- 2 Intra and Intersite Interpretations of Faunal Patterning at the Rock Creek Shelter Site, Southcentral, Oregon Andrew Frierson, James Brown, Dominic Bush, Will Damiato, Nichole Fournier, Samantha Fulgham, Emily Whistler, Shannon Tushingham, Colin Grier
- 3 Reconstructing Faunal Exploitation at the Prehistoric Woodstock Farm Site (45WH55), Whatcom County, Washington Ellen Hallingstad
- 4 Zoographic Nomenclature in Inner Asia Penglin Wang
- 5 Addressing Prehistoric Bird Usage: An Analysis of Avian Material from San Juan Islands Archaeological Sites Emily Whistler
- 6 SQUIRREL! An Experiment on Mammal Bone Decay in Acidic Alkaline, and Neutral Solutions
  Rachel Martin
- 7 Being Taught How to Fish: Understanding People Through Replicating Fishing Tools
  Yuumi Danner
- 8 Analysis of Bone Marrow and Grease Estraction at Site 45WH055 Margaret O'Leary
- 9 Preserving Our Heritage—Pasport in Time Projects on the Colville National Forest Gregory Heide
- 10 Archaeology in the Classroom: How Might I Use This Tool to Get Rid of the Ooey-Gooey, Bloody Bits to Make New Clothes? Ian Richard Lewis
- 11 Eight Years along the Puyallup—Highlights from On-going Tacoma HOV Program Work in Tacoma, Washington Shane Sparks, Kelly Yeates
- 12 Vanishing Images: Finding and Saving Pictograph Sites Jamie Litzkow, Anne Boyd, Richard Bailey, Lindsey Evenson

### **Saturday Morning Sessions**

#### Saturday, April 15, 2017

Session 30: Symposi

Symposium. Investigating The Dittman Biface (35ma375): Stewardship,

Collaboration, Consultation, and Public Outreach Associated with The First

Documented Biface Cache in The Willamette Valley

Organizer: John Pouley

(Audubon-Manito)

In 2015, a Salem, Oregon landowner contacted the State Historic Preservation Office to report what

### **Saturday Morning Sessions**

he correctly believed to be a biface cache discovered on his property. In the subsequent year-and-a-half, the site has become arguably the most well documented biface cache in Oregon and the first reported biface cache in the Willamette Valley. Tribal consultation produced important information about the Santiam Band of the Kalapuya who traditionally occupied the area, aiding research and investigations. Experts throughout the region volunteered useful analyses involving: illustrations, obsidian sourcing, site mapping, 3D scanning, 3D printing, and technological analyses. The site has been surveyed with GPR and Magnetometer, and archaeologically excavated. Obsidian hydration and blood residue analysis on tools recovered during the excavation are planned. To date, 44 professionals from universities, tribes, state and federal agencies, and contracting firms have donated time and assistance. The landowner, who is a teacher, brought students to witness the archaeological excavations on two separate occasions. Oregon Public Broadcasting sent a reporter to cover the story and a Tribal archaeologist was invited to participate in a radio broadcast. Combined with the Oregon Parks and Recreation Department press release, other landowners in the state felt comfortable reporting finds on their property. The story spread locally, regionally, and internationally, including mention on a London news broadcast. The Dittman Biface Cache (35MA375) symposium includes presentations on the research, analyses, results, relationships, and public outreach associated with the site.

9.00	Introduction

- 9:20 "Please Contact Me If This Is of Interest to You" An Introduction to The Dittman Biface Cache (35ma375), The First Recorded Biface Cache in The Willamette Valley John Pouley
- 9:40 Preliminary Results On The 3d Digital Geometric Morphometric Analysis of the Dittman Biface

  Cache hSean Carroll, Loren Davis
- 10:00 Dittman Biface Cache Simulation: Caching A Database for Future Studies Marci Monaco, Meghan Johnson
- 10:40 Dittman Cache Site Debitage Analysis: Caching in on the Experimental Database Meghan Johnson, Marci Monaco
- 11:00 Cache and Carry: Examining Site 35wn93's Role in The Northward Trade of Obsidian

  Cliffs Toolstone Alexandra Williams-Larson
- 11:20 Relationships in Archaeology: Positive Outcomes from The Dittman Biface Cache (35ma375)

  Project Briece Edwards
- 11:40 The "Value" Of The Dittman Biface Cache (35ma375): Public Outreach and Archaeological
  Awareness John Pouley
- Session 31: Symposium. Spokane's Riverfront Park Cultural Resource Management and Beyond
  Organizer: Ashley M. Morton
  (Ballroom A)

Beginning in 2015, cultural resource studies have been conducted in parts of Riverfront Park—a 90-acre area surrounding the Spokane River in the heart of downtown Spokane—in support of redevelopment efforts. Known

### **Saturday Morning Sessions**

for being the site of the 1974 World's Fair, this iconic locale has been an integral part of modern Spokane's landscape for well over a century when first it began to be used for grain milling; and centuries before this, it has been part of a greater landscape used by Native Americans. This symposium shares insights into detailed historical research from census records to Chinese Exclusion Act case files, geospatial analysis, and results from recent archaeological investigations, built environment assessments, and historic preservation planning. Expanding this further, presentations also include topics on creative public outreach in an effort to reconstruct the area's historical landscape such as a project website and 3D technology; thereby highlighting how CRM and historic preservation are making a difference in the real world. This symposium closes with Q & A for audience members.

9:00	Before the Riverfront Park: Historical Research into Early Modern Spokane's Development and
	Settlement In and Around the Falls Ashley M. Morton
9:20	Riverfront Park: A Journey Through the Decades Megan Duvall
9:40	Spokane's Historical Population: Making Those Pivot Tables Meaningful Jonathan M. Haller
10:00	Archaeological Investigations into Spokane's Riverfront Park Ashley M. Morton
10:20	Break
10:40	Managing Historic Properties in Spokane's Riverfront Park – The Expo '74 Site
	Marcia Montgomery
11:00	The Chinese in Spokane's Riverfront Park Area Trish Hackett Nicola
	Williams-Larson, Alexandra
11:20	Digital Spokane and the Chinese Diaspora: A Spatial Dataset of Georeferenced Sanborn Maps,
	1884-1925 Nikki Hart-Brinkley
11:40	Urban Un-Planning: Digital Exploration of Downtown Spokane's Progressive Era
	Jonathan M. Haller
12:00	Discussion and Q & A period for presenters

Session 3	2:	History and Archaeology	
		(Ballroom B)	
g	9:00	Contributions made by various ethnic groups in developing linear cultural reso	urces Russell Holt
g	9:20	Consumer Culture and Colonialism: Archaeology of Contact in the Northwest	Caroline Herritt
g	9:40	Preliminary Research for Testing at a Steamboat Landing Settlement in Idaho	Idah Whisenant
•	10:00	Historical Refuse Features At The Station House Lofts Project	
		Sarah M. H. Steinkraus, Jennifer Hushour	
	10:20	Break	
	10:40	Predicting the Formal Trash David Valentine	
	11:00	And the Dig Goes On, and On and On Madilane A. Perry	

11:20 Impacts of the Civilian Conservation Corps in Idaho Patricia S. Hart, Ivar Nelson

# **Saturday Morning Sessions**

Session 34:	Archaeology Overview
	(Corbin)
10:20	How Do We Preserve Vulnerable Cave Sites? A Look into the Horse Lava Tube System in Central
	Oregon Alexander Gall, Michael Smith
10:40	District or Distraction? Identifying and Evaluating Archaeological Districts
	Gretchen Kaehler, Michael Houser
11:00	Archaeology in the 21st Century: Public, Politics and Science Kirsten Lopez
Session 35:	Native and Non-Native Voices
	(Comstock)
9:40	Blackfeet History from the Inside Out: Correcting the Perceptions of Nicholas Point
	Sally Thompson
10:00	The Wanapum River Patrol
	Chris Kaiser, Joseph Seelatsee, Melvin Lucei, Jason Buck, Malcolm Aleck, Clint Wiltse
10:20	Break
10:40	What Can We Learn About the Colville Reservation Indians from the United States Censuses?
	Arland Thornton, Linda Young-Demarco
11:00	Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition and Sharing It Around the World:
	Master Salish Basketmaker and Wet Site Archaeologist Explore 100 Generations of Cultural
	Dale R. Croes, Ed Carriere
11:00	Opening Doors in Anthropology: Ethnographic Exploration of Collections as Field Sites
	Wendy Wegner
11:20	New Sources from the Archives: How the Letters of One Columbia River Indian Fisherman
	Complicate the History of Salvage Excavations at Wakemap Mound and Other Sites Behind the
	Dalles Dam David-Paul B. Hedberg

#### **GEORGIA RAE ABRAMS**

#### **Pacific Lutheran University**

### Colonization and Collaboration: Archaeological Research at the Roche Harbor Homestead, San Juan Island

A unique area of the Northwest, San Juan Island history is often told from the perspective of Euroamerican entrepreneurs and large-scale farmers. Small-scale homesteaders, their wives, and children are rarely documented beyond the census. Tension between ethnic groups is recounted, but cooperation and intermarriage often goes unnoted. Based on research at 45SJ548 in Roche Harbor on San Juan Island during 2015 and 2016, this paper explores the ways that anthropological archaeology benefits from collaboration with local communities. Excavations at the historic homestead were aided by research from the local historical society and oral histories were provided by residents. In the analysis phase of the project, continuing work with community members has clarified the results of the research and excavations. This paper explores avenues for future collaborative research with tribal communities of Western Washington to better understand the context of intermarriage during the early 20th century on San Juan Island.

#### **AUTUMN ADAMS**

#### **Central Washington University**

### Racial Injustice: A Critique of the Colonial Perspective and Approach to Mass Incarceration and Violence

I will compare the structural, institutional, and individual violence experienced by indigenous peoples in the U.S., which is a consequence of colonial policies and practices. This structural violence includes great inequality economically, socially and politically, while the institutional violence is evidenced in police violence and mass incarceration. Finally, this disproportionate victimization and criminalization affecting indigenous peoples in the U.S. flow from these structural and institutional factors.

#### SARAH ADDINGTON

#### **University of Dundee**

#### Evaluating Possible Relationships Between the Cranial Base Angle and Linear Craniofacial Measurements.

The aim of this research was to examine possible correlations between the cranial base angle and linear craniofacial measurements including the bizygomatic breadth, bicondylar breadth, palatal length from anterior nasal spine, and palatal length from deepest point inferior to anterior nasal spine. Measurements were taken from thirty cranial anonymized MSCT scans, selected from the raw data of European Caucasoid paranasal patients, aged 18-50 years, taken in Germany by Volker Keil and Uwe Roy using a Siemens SOMATOM Sensation 64 spiral MSCT scanner. Angular and linear measurements were taken by rendering 2D and 3D model images in InVesalius 3.0. Intraobserver error rates yielded results within the 99% level of repeatability (p<0.01), while interobserver error rates yielded an approximate reproducible rate within the 95% (p<0.05) range; however bicondylar breadth yielded a standard error rate of 6.48%. An independent t-test expressed no significant variance between sexes. A Pearson correlation test revealed statistically non-significant results.

#### ERIK D. ANDERSON, JASON B. COOPER, AND EMILY R. SCOTT

#### **AMEC Foster Wheeler**

# Last Call: End Days and Final Detritus of the Hotel Butler Historic Debris at Boeing Field, King County, Washington

Hotel Butler was a boisterous Seattle hotel serving politicians, celebrities and prospectors. Its story encompasses the boom and bust of turn-of-the-century Pioneer Square. Constructed in the 1870s, the original 3-story building burnt in the Seattle Fire of 1889. Resurrected in stone and brick in 1890 as an office building and then as a 5-story hotel in 1894, it catered to returning Klondike miners. The notable hostelry added two more floors in 1903, and an almost

continuous stream of music and booze poured from the popular Rose Room during Prohibition years. The Rose Room was silenced in 1929 as the hotel limped into the beginning years of the Great Depression. Hotel Butler closed in 1933 and its remaining items auctioned in 1934. A serendipitous discovery at the King County International Airport uncovered several diagnostic historic artifacts near the Duwamish River. These final fragments tell the story of a hotel's last days.

#### E. F. ARANYOSI

#### Olympic College

### The Yama Project: A Multidisciplinary Analysis of a Transnational Community

Yama Village was a Japanese transnational immigrant settlement on Bainbridge Island, occupied from the 1880s until the 1920s. It was first settled by Japanese bachelors who were recruited to the US to work in the Port Blakely sawmill, and soon grew to a thriving community of over 200 residents. The village was abandoned in the 1920s, after the sawmill closed and residents moved elsewhere in search of employment. Today, nearly 100 years after abandonment, Olympic College, in cooperation with our local partners and sponsors, are attempting to rediscover the lives of the people of Yama, and to reconstruct this "lost chapter" in Washington State history. The unique demographics of community colleges make the Yama Project beneficial both to this particular project, and to archaeology as a discipline within the umbrella of anthropology and the social sciences.

#### STEPHEN AUSTIN

#### Washington State Department of Transportation

### Drive It 'Til the Guardrails Fall Off: An Overview of WSDOT's Historic Bridges Program

For transportation planners, historic bridges illicit a multitude of emotions ranging between disdain and adoration. Some view compliance with federal law, in the form of evaluating a structure's potential eligibility, as a feckless and burdensome process that hampers improvements to infrastructure and public safety. Yet preservationist and bridge constituents continue to advocate for their conservation. Why would we do this to ourselves? Washington is home to over 7000 bridges with more than 300 determined NRHP eligible since 1980. It is estimated that half of all historic bridges in the state were demolished by 1970, a statistic that continues to rise as eligible bridges succumb to degradation and replacement. How does WSDOT evaluate the historical significance of a bridge? How does it manage its inventory of historic highway bridges? What is the fate of these nonrenewable resources in the face of modern transportation demands? The answer is, it depends.

#### **JAMES C. BARD**

#### **Ancient Artifact LLC**

### The Coins of Kam Wah Chung, John Day, Oregon: Persistence of Chinese Culture Reflected Through Non-Monetary Uses of Chinese Coins

Kam Wah Chung (KWC) was a frontier Chinese medical clinic, general store, community center and residence of two Chinese immigrants, Ing "Doc" Hay and Lung On, located in John Day, Oregon. "Doc" Hay practiced traditional herbal medicine and Long On was proprietor of their general store. Left untouched for decades, KWC State Heritage Site is a remarkable time capsule capturing the life and times of the late 19th and early 20th century Chinese community. Chinese coins found within the building and their unique uses and contexts reveal much about the cultural uses of numismatic material culture as these two men maintained aspects of traditional Chinese culture, religion, ritual behavior, and medicinal practices. Like an archaeological site, the surviving Kam Wah Chung building historic site was carefully documented and the re-purposed coins were found in unique contexts that allow meaningful interpretation.

#### SAHAYRA BAROJAS-TAPIA

**Edmonds Community College** 

Motivations and Incentives for Installation of Rain Gardens: An Ethnographic Assessment in the Perrinville Creek Watershed

Community-based participation to better address water quality, reduce pollution, and enhance habitat in the Salish Sea basin is vital for conservation efforts of local municipalities. At the request of The Nature Conservancy and the Snohomish Conservation District, a team of researchers from Edmonds CC in Lynnwood, Washington conducted a rapid ethnographic study of residents of the Perrinville watershed with the goal of helping the Cities of Edmonds and Lynnwood with their efforts to better manage stormwater and to improve their ecology. The study included participant observation, informal interviews, and a door-to-door and online survey. These methods revealed strong community preferences for the aesthetics of rain gardens, concern for the health of the Perrinville Watershed, and a willingness to undertake and contribute to stormwater mitigation. The results helped inform a presentation to the Edmonds City Council made by the Snohomish Conservation District and Edmonds CC researchers.

#### **KAYLEY BASS**

#### **Central Washington University**

The Unknown History of Western Washington Logging Camps: St. Paul and Tacoma Lumber Company's Camp #5 ca. 1920-1950

For years, the timber industry has been an integral part of western Washington's economy, as it is home to the majority of the state's most profitable timber. Despite the importance of the timber industry to Washington, there is little information on life in logging camps, possibly due to their impermanent structures and distance from major cities. The logging camps located within the timberlands, once owned by the St. Paul and Tacoma Lumber Company, can provide information on the organization of camps and the daily lives of the men that inhabited them. My research employs archaeological approaches, such locating, mapping, and documenting a logging camp and any artifacts or architectural remnants, as well as historical methods, such as archival research. The combination of archaeological and historical approaches help to construct a picture of life at the St. Paul and Tacoma's logging camps.

### BAISHAKHI BASU

### University of Washington

#### Developing cost-effective event-based diaries for low-literacy populations

Data on life course events are ideally collected by the individuals experiencing those events. In populations with low literacy levels, self-collection of reliable event data is complicated by the need to record event dates. This study examines the efficacy of a culture-specific, inexpensive diary developed for use in rural Matlab thana, a sub-district of Bangladesh. A calendar was developed that included color-coded icons to provide participants with meaningful cues for specific days of the week. A sample of 30 married women from rural villages collected menstrual cycle data for one week. Women were provided calendars and verbal instructions in a local dialect. Ninety percent of women complied and successfully recorded the daily data; 10% of women either could not follow the instruction or dropped out of the study. I conclude that comprehensive prospective data can be self-collected in low-literacy populations, for event-based anthropological research.

#### **EDWIN BATTISTELLA**

Division of Humanities and Culture, Southern Oregon University

COUPON and OFTEN: Changing Patterns in American Speech

This paper report on two traditional shibboleths, the pronunciations of the words "often" and "coupon, " in the speech of university students in Bellingham, Washington, and Ashland, Oregon. The research reported here is embedded in a larger longitudinal study of Pacific Northwest pronunciation and usage, now in its third year. About 500 undergraduates were surveyed about their pronunciation of the words "coupon" and "often," which have traditionally had both preferred and stigmatized pronunciations (respectively COOP-on and CUE-pon and OFFen and OFTen). Today both pronunciations are acceptable to grammatical authorities and most speakers, but the choice of pronunciation is pattern by social class variation. In this presentation, I review the nature of the stigmatized usages, drawing on twentieth century grammatical commentary, describe the broader Northwest voices survey and some key results, and explore the correlation between social class perception and stated pronunciation preferences, which produce some surprising patterns.

#### MAUREEN FLANAGAN BATTISTELLA

Southern Oregon University

Looking Back, Looking Forward: Notions of Heritage, Stewardship, and Sustainability Among Southern Oregon Farmers and Ranchers

A 2016 Oregon Heritage Commission grant funded an oral history project to collect stories of farmers and ranchers in Jackson County. One objective of the project was to understand how Southern Oregon's family farms have changed over time. I heard stories of Century Farm and Ranch properties, from multi-generation farming families and new growers here in Jackson County. Using a guided interview to elicit family histories, several significant themes emerged over the course of the project: Succession, Economic Viability, Gender, and Land Use. Perhaps the most remarkable aspect of the interviews was how the informants articulated the meanings of the words Heritage, Stewardship, and Sustainability as a reflection of their own history and future. This paper presents notional characteristics and shades of meaning for these three words and suggests reasons why one of these words might be more important to an informant than another.

#### **DAVID BEINE**

Moody Bible Institute-Spokane

The Role of Understanding Language (Particular Underlying Illness Metaphors) In Global Health: A Case Study from HIV and Aids Prevention in Nepal

Words have power, particularly in their unintended consequences. The words associated with health and illness in every culture are informed by the metaphors that undergird them (their referents). We in the West use war imagery to make sense of and communicate about illness. In Nepal the primary metaphor used to talk about illness is eating not warfare. Yet health educators in Nepal most often use the warfare metaphor and imagery (even though they do so using the Nepali language) to communicate ideas about illness. The result has often been major confusion (e.g. AIDS was first understood as a type of beer or an invading army from Tibet). This paper examines the role of language, specifically the use of underlying metaphors which inform these words and evoke their associated meanings and will explore the relationship between language, culture and public health efforts in Nepal and around the globe

#### JENNIFER BERTOLANI, CELIA MORET-FERGUSON, SUNSHINE SCHMIDT

Contractors for Bonneville Power Administration

Federal Columbia River Power System Cultural Resource Program: Harnessing Power and Preserving Cultural Resources for the Future

The Columbia River Basin has been a seminal route for travel, and trade, with steady inhabitation extending beyond the past 13,000 years. Beginning with the Bonneville Dam in 1938, this precontact landscape was drastically altered as Bonneville Power Administration led efforts to transmit and market this new-found hydroelectric energy. In 1997, the Federal Columbia River Power System (FCRPS) Cultural Resource Program was formed to carry out NHPA responsibilities. This highly collaborative program ensures Section 106 Compliance of three Federal agencies, with cooperation of 10 federally recognized tribes, four SHPOs, and seven Federal land managers. With over 4,000 archaeological and traditional sites to manage, this talk provides a brief overview of the history and efforts the Program has taken to identify and assess the changing condition of these resources. Also highlighted are some of the creative ways the Program has mitigated for adverse effects to certain resources.

#### **AARON BOCOOK**

#### **Eastern Washington University**

Invisible: Homeless in Spokane

Homelessness is a problem in Spokane, Washington, just as it is in most cities in the United States, both small and large. While discourse on homelessness is often centered around the stigma of the stereotypical "visible" homeless population, this paper is a collection of examples that deal with the phenomenon the "invisible" homeless population of Spokane. Through a series of three detailed and personal ethnographies, including my own experience with homelessness, a better perspective may be gained of what homelessness in Spokane is like for the "invisible" homeless, and illustrate the need for more robust research into the real numbers of the homeless population in cities like Spokane.

#### **BRADLEY BOWDEN**

#### Historical Research Associates, Inc.

#### Temporal Variation in Use of the Uplands in South-Central Oregon

Settlement models for the Northern Great Basin suggest that large villages in the lowlands were occupied throughout the winter, while smaller task specific sites in the uplands were occupied sporadically in the spring, summer, and fall for various procurement tasks (Fagan 1974; Weide 1968). Some studies have also identified potential variation through time of upland use (Brashear 1994). The recent investigation of several upland sites between Christmas Valley and Warner Rim for the PDCI Uprate project resulted in the identification of over 130 temporally diagnostic projectile points, radiocarbon dates from four sites, OSL samples from one site, and over 1,000 obsidian specimens, allowing for an examination of settlement through time in the region. Analysis of these data indicates that the uplands in this part of Oregon were most intensively used during the Middle to early Late Holocene periods.

#### **MEREDITH BREEN**

#### University of Idaho

#### The Art of Consumption: A Faunal and Glass Analysis from the James Castle House Archaeological Project

In the Fall of 2016, the University of Idaho partnered with the Boise City Department of Arts and History, Boise National Forest, Versar INC., and Idaho Archaeological Society to conduct an excavation on the property formerly occupied by noted Idaho artist, James Castle. The intent of the project was to identify materials associated with Castle's daily life and activities as an artist. In addition to the recovery of art production materials, another outcome of the project was the recovery of a variety of artifacts reflecting Castle and his family's daily life. This paper discusses

some of the findings of the project focusing specifically on the food ways of the Castle family, based on the faunal and glass recovered from the excavation.

#### JAMES W. BROWN AND JAMES C. CHATTERS

#### Washington State University and Applied Paleoscience

#### Revisiting the Old Cordilleran Tradition in the Puget Sound: Reanalysis of Bifaces from the Olcott Type Site

The Old Cordilleran Culture, defined by Butler in 1961 as a founding tradition in the western Americas was based, in part, on artifacts collected from Olcott Site. Olcott then became the informal type locality for what Nelson later called the Olcott Phase, his basal phase of Puget Sound prehistory. Despite the site's prominence in the archaeological lexicon, the Olcott site has received little formal analysis beyond the 1964 descriptions by Kidd. No chronological information has been obtained aside from crude stylistic cross-dating with chronologies outside the region. To address these issues, we used an analytic paradigm already applied to the nearby Granite Falls (45SN28 and 303) and Marymoor (45K19) collections to characterize the distinctive Olcott site bifaces and projectile points. Results show that much of the stylistic variation described previously can be attributed to rejuvenation, not initial manufacture. Sourcing of one obsidian artifact suggests at least some post-Mazama occupancy.

#### THOMAS J. BROWN, JONATHAN DUELKS, KELLY M. DERR

University of British Columbia, Historical Research Associates Inc.

#### Correlating Fire Histories and Demographic Signatures on Vancouver Island: A Pilot Study

Paleo-environmental changes and demography are critically interrelated in archaeology. However, data from these two variables are often difficult to compare directly, forcing us to rely on highly qualitative and/or subject correlations that lack temporal and spatial resolution. In an effort to improve upon our understanding of the link between environmental and demographic changes on the Pacific Northwest, we present a pilot study from Vancouver Island, where we attempt to statistically correlate demographic and environmental signatures using Summed Probability Distributions of calibrated radiocarbon dates as a proxy for demographic changes and charcoal data to reconstruct fire histories. Problems with data comparability, spatial and temporal incongruities and potential solutions are also discussed.

#### **DREW BRUTZMAN**

#### **Eastern Washington University**

#### Staring Down the Horde: Online Resilience against the Alt-Right Movement

As the 2016 Presidential election demonstrated, rising White Nationalist sentiments present a growing, terrifying force in Western politics, spread primarily through online channels – Internet communities of various types. Some online spaces are significantly more susceptible to alt-right incursions than others. This paper examines basic principles of what tools an online space uses to be more adept than others in mitigating alt-right rhetoric, ideology, and actions – and ultimately demonstrating a hard-set resilience against the alt-right movement, its people, and its politics.

#### **DOMINIC BUSH**

#### Department of Anthropology, Washington State University

## An Isotopic Analysis of the Early Historic Fauna Recovered at the Collier Lodge Site (12PR36), Porter County, Indiana

The Collier Lodge Site (12PR36) is found within the limits of the former Grand Kankakee Marsh; a once expansive, taxonomically-rich wetland environment that covered over 200,000 hectares in northwest Indiana. During a phase known as the Removal Period (AD 1795–1840), invasive Euro-Americans settlers attempted to blend Western preconceptions of settlement and subsistence with the realities of life in the untamed American Midwest. These

seemingly oppositional forces came to a fascinating intersection in the form of animal use, both in terms of the native fauna and introduced livestock. In this study, an analysis of the carbon and nitrogen isotopic signatures was carried out for 30 faunal specimens recovered at 12PR36. The  $\delta$ C13 and  $\delta$ N15 values were used to gauge the role of maize, an imported C4 plant, in the foddering of domesticated species and in the procurement of wild species through a phenomenon known as "garden hunting."

#### STACEY CAMP

#### University of Idaho

#### Digitizing the Archaeology of WWII Japanese Internment

In an era when technology has permitted unprecedented forms of data sharing and acquisition, archaeologists have shifted their methodologies in both the field and in the laboratory. In terms of collections management, the technological revolution has allowed artifacts to be shared with the public online. It has also permitted innovative ways of conducting comparative analyses on collections, and facilitated conversations regarding archaeological discoveries amongst scholars and the public. This paper will look at an example of such digital scholarship entitled "Internment Archaeology" (www.internmentarchaeology.org), which is inspired by Dr. Priscilla Wegars' work on Idaho's Kooskia Internment Camp, a WWII incarceration facility that housed a predominantly Japanese population.

#### LOLA CAMPBELL

#### Cultural Plant Inventory and Huckleberry Restoration on the Colville Reservation.

Traditional cultural plants are of deep interest to the tribes and First Nations who have gathered them since time immemorial, and continue to harvest them today. These plants are an intrinsic part of the culture, identity and sovereignty of native people. Some of the most widely distributed species have been inventoried and documented on the Colville Reservation since 2013, including huckleberries, xasxes (couscous or Canby's lovage), Indian carrots (or yampah) and more. When we encounter these plants during surveys, we document population size, vigor and habitat, learning more about their preferred environments. Many populations appear to be healthy so far, but sometimes restoration is needed. The North Star fire of 2015 destroyed large populations of big huckleberry, perhaps the best-known of all cultural plants. Restoration of huckleberry sites began in 2016, with assistance from the CCT/BIA Burned Area Emergency Response Team, Summer.

#### MOLLY CARNEY AND SYDNEY HANSON

#### **Washington State University**

#### Like a Moss: Exploring Paleoethnobotanical Sample Size and Return Rates in Cultural Resource Management

It is well established in the paleoethnobotanical community that larger sediment sample sizes lead to higher rates of recovered plant remains. While paleoethnobotany has the potential to answer important questions about seasonality, past climates, and changes in resource exploitation through time, it is not often included in cultural resource management project proposals. This paper discusses the results of an anonymous survey of contract paleoethnobotanists and cultural resource managers. We explore the reasons behind archaeobotany's infrequent and insufficient application in CRM, and offer time and cost-effective strategies for resource managers.

#### **COURTNEY CARROLL**

#### **Eastern Washington University**

#### Mothers Perspectives and Dilemmas Regarding Vaccines in Spokune

Vaccines have been proven to combat the effects of many life-threatening illnesses, such as pertussis and the seasonal flu. While vaccines have many health benefits and can save lives the rate of prenatal vaccines remains very low.

This paper presents why the rates of prenatal vaccines remains very low. Based on data collected through various mixed methods (interviews with OBGYN's to get a sense of the structure of prenatal care in Spokane, interviews with mothers to understand their perspectives on prenatal vaccines, short surveys, and participant observation) the paper presents how mothers are utilizing available resources, but are still missing critical pieces in their prenatal care. The results show that mothers in Spokane are not being informed of the recommended prenatal vaccinations, or the benefits these vaccinations have or themselves and their babies.

#### **SEAN CARROLL AND LOREN DAVIS**

#### Preliminary Results on the 3d Digital Geometric Morphometric Analysis of the Dittman Biface Cache

The Pacific Slope Archaeological Laboratory, in association with the Oregon State Historic Preservation Office, collected 3D digital structured light scans of the 14 bifaces recovered in the Dittman Biface Cache. The collected 3D scans allow for the bifaces to be subjected to digital morphometric analysis using Geographic information systems-based Lithic Morphometric Research (GLiMR). This analysis provides for the automation of traditional lithic analysis measurements as well as the development of novel digital approaches to lithic analysis. The results of the preliminary findings from the digital geometric morphometric analysis of the Dittman Biface Cache are presented here in an attempt to provide insight into the innovations to lithic analysis that 3D scanning can provide.

#### **JERIELLE CARTALES**

#### **Western Oregon University**

#### The Potential Conflict between Forensic Ancestral Identification and Societal Interpretation.

Forensic anthropology is the application of physical anthropology to a legal setting. Analysis of ancestry, utilized by forensic anthropologists, depends on classification groups created in the past but is hindered by the mantel of racism. This study evaluated how the general educated public, portrayed by members of Western Oregon University (WOU), viewed ancestral terminology and whether or not this opinion was influenced by age, position at WOU, or ethnicity. Age was the most significant factor in reaction to and understanding of the selected terminology. Participants provided a wide variety of definitions, indicating that forensic anthropologists, and WOU specifically, has not satisfactorily educated the public as to the terms associated with biological affinity in their appropriate scientific setting. However, the forensic anthropology program at WOU was in its infancy at the time of the study. As the program expands in the future, perhaps we will see a trend towards unity in definitions.

#### LARRY CEBULA AND BRANDON CADWELL

#### Eastern Washington University and the National Park Service

#### The Lake Roosevelt Partnership: Institutional Collaboration and a Smartphone App

Beginning in 2011, Lake Roosevelt National Recreation Area (LARO) and Eastern Washington University (EWU) partnered on a digital project to tell the stories woven into the landscape of this vast area of eastern Washington. Together they created a series of digital stories for the web and app-based platform, SpokaneHistorical.org, stories that are also being used to populate Lake Roosevelt's "Learn About the Park" section of its website and that will soon appear on the park's own smartphone app. This innovative collaboration between an NPS unit, a public university, and more than 30 students has created lasting content that has reached thousands of visitors.

LARO District Interpreter Brandon Cadwell and EWU Professor Larry Cebula will describe how the collaboration came together, some of the advantages and obstacles to the partnership, and will demonstrate some of the digital products that students have produced.

#### TIA R CODY AND SHELBY ANDERSON

**Portland State University** 

In Search of Mounds: Development of a LiDAR and Remote Sensing Predictive Model of the Calapooia Watershed, Oregon

Kalapuya mound sites are considered highly sensitive locations by the Grand Ronde Tribe. According to the Tribe and written accounts, the Calapooia Watershed contains hundreds of unrecorded mounds extending from Albany to Eugene, Oregon. Protecting mound sites is a priority but traditional archaeological survey of the watershed is impractical as it covers roughly 234,000 acres and is 94% privately owned. We are developing a plan in collaboration with the Grand Ronde Tribe for a LiDAR and remote sensing predictive model to identify the Kalapuya mounds. Still in development, this predictive model will identify unrecorded mound sites remotely. The project will assist the Grand Ronde Tribe's proactive preservation of these sites and will also be generalizable to other regions. We will use LiDAR acquired from the Oregon Department of Geology and Mineral Industries, publicly available remotely sensed infrared imagery, and aerial photography all within a Geographic Information System (GIS).

#### **JUSTIN B COLON**

Florida Atlantic University, Archaeological Services, LLC

Obsidian Industries and Exchange Spheres of Northwest Nicaragua: A Typological and Geochemical Study from the Department of Chinandega, Nicaragua

This Master's thesis examines 2,871 obsidian artifacts from the Department of Chinandega, in northwestern Nicaragua. This research represents the first systematic study of obsidian artifacts in this region, and focuses on two aspects of the obsidian artifacts. First, a macroscopic typological analysis of artifacts collected from twelve sites ranging the geomorphological boundaries of the department and, second, geochemical sourcing of the obsidian from these sites. Results indicate that each pre-Hispanic site contained multiple sets of long-distance trade networks centered on a few major geographical mining sites. This research represents the first inter-site comparison of obsidian from this region of Nicaragua and will provide future researchers with useful baseline data. It is expected that similar studies can address questions regarding the acquisition and manufacture of obsidian artifacts, settlement patterns and trade networks, and ultimately contribute some new information to the cultural chronology of this under-studied region of Central America.

#### THOMAS J CONNOLLY

University of Oregon Museum of Natural & Cultural History

Revisiting Chetlessenten Village (the Pistol River Site, 35CU61) on the Oregon Coast

Chetlessenten was the main village of the Tututni Athapaskan people residing on Pistol River, Oregon. In 1962, a new alignment of the Oregon Coast Highway (US 101) destroying most of the site. Limited professional archaeological work, and much excavation by amateurs and interested neighbors, was done prior to grading for the new highway. Artifacts from the site were mostly dispersed among private collectors; some of the materials were illustrated as line drawings in Eugene Heflin's 1966 publication. In the 1990s, field notes from the 1960s and personal reminiscences were drawn on for additional reporting on the site. In 2016, slumping at the Highway 101 road cut threatened to further damage remaining parts of the site, prompting focused testing. This paper reviews the site history, reports on the recent work, and presents photographs of artifacts from the site from museum and privately held collections not previously publicly available.

#### **BRENDA COVINGTON**

#### **Colville Tribes**

#### Cemetery, Sport Fishing, Recreation, Hydropower, Archaeology... Respect

Over time, we have preferred to segment our world and views into increasingly distinct confines. After we have explicitly defined our position, we produce bookshelves, even libraries, full of material explaining how to work cooperatively with all interested parties. In an environment where intended use and purpose are often at odds for a multitude of reasons, defining and beneficial traits to bring to the discussion are an open-mind and the desire to listen, understand, and strive for a mutually beneficial outcome. Let's talk about stabilizing an archaeological site in Lake Roosevelt reservoir.

#### ARROW COYOTE

#### Pia Mission and Skolaskin Church - examples of Creative Mitigation.

The Confederated Tribes of the Colville Reservation and the Bonneville Power Administration agreed to off-site mitigation to satisfy 36 CFR 800.14(b), the Programmatic Agreement for the resolution of adverse effects. Creative Mitigation was used to resolve the adverse effects to archaeological sites on Lake Roosevelt Reservoir that are continually being impacted by the reservoir. One of the mitigation projects is Pia Mission that is of historical and religious significance to the Colville Reservation membership, particularly to the Lakes and Colville tribal members. The other mitigation project is Skolaskin Church that is of historical and religious significance to the Colville Reservation membership, particularly to the Sanpoil tribal members.

#### DALE R. CROES AND ED CARRIERE

#### Washington State University and Suquamish Tribe

## Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition and Sharing it Around the World: Master Salish Basket maker and Wet Site Archaeologist Explore 100 Generations of Cultural Knowledge

Ed Carriere 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 along the Snoqualmie River near Seattle. 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 great 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. Local Native weavers and anthropologists applaud this work and last summer we shared our work with the Indigenous Ainu on Hokkaido, Japan, and with archaeologist at the Wetland Archaeology Research Project (WARP) conference in Bradford, England to a good response.

#### R-PATRICK D. CROMWELL

### University of Oregon Museum of Natural and Cultural History, University of Nevada Reno Identification of Faunal Remains Recovered from Coprolites in Paisley Cave 2

Following the results of pollen analysis on coprolites from Paisley Cave 2 from levels covering a time period from the Pleistocene to soon after the eruption of Mount Mazama, the remaining materials were examined to determine what faunal remains were present. The process of preparing the coprolites for pollen analysis did not affect the integrity of faunal remains preserved in the coprolites. The faunal remains provide clues about possible biological abundance

on the landscape and insights into predator-prey interactions. This analysis is a portion of a larger ongoing project centered on materials from Paisley Cave 2.

#### **ELISE CUENTAS**

#### **Eastern Washington University**

#### Economic Growth of the Legal Cannabis Market in the Inland Northwest

Since the legalization of recreational marijuana in Washington in 2012, there has been exponential growth in the cannabis storefronts in Eastern Washington. The first store opened officially in the beginning of 2014. There are now 34 dispensaries in our area with more advertised to open their doors within the next 6 months. While a new legal market like this generally grows quickly, this level of expansion should create winners and losers, with some businesses thriving and others failing. This paper explores, through interviews with several cannabis dispensary owners, the ways that these businesses can be successful against a challenging market setting. I explore the business models they use, what allows expansion to continue, how products are selected and priced, and what is involved in creating a successful cannabis dispensary in today's market.

## WILLIAM J. DAMITIO, SHANNON TUSHINGHAM, KOREY BROWNSTEIN, AND DAVID R. GANG Washington State University

#### A Chemical Residue Analysis of Pre-Contact Smoking Pipes from Three Mid-Columbian Sites

The presence of stone pipes and pipe fragments in archaeological sites across the Inland Pacific Northwest indicates that smoking has a part of the spiritual and social lives of native peoples throughout the region for several millennia. Ethnographic evidence and early historical accounts suggest that the traditionally preferred smoke plants in the Inland Pacific Northwest were Nicotiana quadrivalvis (Indian tobacco) and Arctostaphylos uva-ursi (kinnikinnick or bearberry). Recent studies have indicated that tobacco has a significant temporal depth of use in the region. This paper presents the results of chemical residue analyses of twelve smoking pipes and pipe fragments from Mid-Columbian archaeological sites. The presence of nicotine in one of these pipes demonstrates that tobacco was smoked in this region as early as c. 1400 years ago. The potential utility of metabolomic analysis to make further conclusions regarding the residues in these pipes will also be discussed.

#### STEVEN DAMPF

#### **Historical Research Associates**

#### Preserving Spokane's Progressive Heritage: Mitigation of the City's Historic Trolley Track System

In the late nineteenth century, new forms of urban transit were emerging. Horse-drawn streetcars had plied the streets of cities since the 1830s, and some attempts to adapt the familiar steam engine to urban use were made in the United States after the Civil War. Cable-driven systems began to appear with some success in the 1870s and 1880s, but these were generally rendered obsolete by the introduction and refinement of electric-powered trolleys in the 1880s. In the boomtown environment of early Spokane, all four different technologies were on display. The Spokane Street Railway Company began service with horse-drawn cars on rails in 1888. Within four years, other companies had built competing steam-powered, cable-car, and electric-trolley systems. Historical Research Associates, Inc., is assisting the City with mitigation and preservation of the historic trolley track system as a part of the City's efforts to maintain and upgrade its transportation infrastructure.

#### **BRYCE DANNER**

#### University of Idaho

#### An Overview of the Pre-Contact Archaeology of the Lochsa River, North Central Idaho

The Lochsa River, a tributary of the Clearwater River, is an important feature for understanding Pacific Northwest prehistory. Many journals and reports were made from the contact period to the 1970s; they detailed specific sites, but combining the data from these would provide a better comprehension of what the river means to the people that inhabited the region. Utilizing survey methodologies, studying past ethnographic accounts, and reanalyzing previous archaeological reports, this project focused on locating places occupied prior to the contact period. The latest fieldwork, conducted across the river, found 10 new archaeological sites. Further research consisted of an interview with the Nez Perce tribe in order to confirm known uses of the area with the newly recorded sites. With this data, this paper attempts to identify the condition of archaeological sites and discuss where the research is now and where we should direct it in the future.

#### YUUMI DANNER

#### University of Idaho

#### Being Taught How to Fish: Understanding People through Replicating Fishing Tools

Fish hooks are simple enough to recognize their function at a glance, but the recognition does not feed people enough to appreciate what these tools mean. Fishing tools are merely one aspect of traditional living. However, understanding them is one step forward to know a culture better. Among the Plateau culture area, Klamath traditional trout fishing tools appear different from the others', yet there is not enough study conducted among them to know why. This project examines Klamath bone gorge and double-barbed hook technologies by holding an inquiry into similar fishing tool traditions outside of the region and replicating them. Replication process is determined by environmental factors, knowledge from other traditions, and practicality. With this study, I attempt to approach three aspects: material selection, production process, and usage. The replication process, however, taught me not only the fishing tool making but also stone tools and the Klamath lifeways.

#### **DAVID R. DAVIS**

#### **Bainbridge Island Historical Museum**

### The Yama Project: Diverse Partnerships and Community College Students Combine for Archaeological Success

In order to offer a quality archaeological field school experience, faculty from Olympic College coordinated through various regional institutions and sponsors to conduct a three-year archaeological investigation of Yama Village (45KP105) on Bainbridge Island, WA. Occupied from approximately 1883 to 1927, Yama was a Japanese immigrant village whose residents worked mainly at the local sawmill. Village amenities included a hotel, church, general store, community center/Buddhist Temple, photography studio and a tea garden. Yama represents one of the earliest examples of Japanese-American transnational identity formation. Two field seasons, incorporating intensive surface survey and sub-surface excavation, have been completed by students and staff. As a result, 43 features were recorded, and 4,700+ artifacts were recorded, collected, and cataloged. The students gained valuable applied cultural resource management training, as well as individual research, and group laboratory experience. These results demonstrate how inter-agency relationships can provide quality educational experiences that benefit all involved.

#### LOREN G. DAVIS, ALEXANDER J. NYERS, DANIEL W. BEAN

#### Oregon State University, Department of Anthropology

#### Comparing Stemmed Projectile Point Technology Among Several Early Southern Plateau Sites

We seek to examine the degree to which early projectile point hafting and blade technologies are shared among early southern Columbia River Plateau sites and what this might imply about the existence and operation of cultural transmission networks. To do this, we use digital 3D scanning to capture the form of stemmed projectile points from the Cooper's Ferry, Hatwai, Lind Coulee, and Marmes Rockshelter sites. We then subject these 3D scan models to traditional and newly developed geometric morphometric analyses. The results of these analyses are presented to examine variation in point form across time and space. We discuss the question of to what degree we can measure shared cultural transmission networks by considering how closely technological design attributes are expressed within and between early southern Plateau sites.

#### SARA J. DAVIS AND MICHELE PUNKE

#### Historical Research Associates, Inc.

#### An Upland Pithouse Village near Maupin, Oregon

Residential sites are common along the Columbia River and its major tributaries in Oregon (e.g., Deschutes and John Day Rivers). Recent investigations for the PDCI Uprate project along Deep Creek in the uplands 15 miles south of the Deschutes River identified 12 to 15 housepit depressions on the surface and one possible housepit feature buried under thick sand. Excavations and analyses at the site suggest that it was a winter village occupied over multiple periods during the last 3,000 years, as well as potentially in pre-Mazama times. The site likely functioned as a sheltered upland haven adjacent to a year-round water source where fauna and flora procurement were important tasks. Of particular interest, tobacco seeds recovered from a potential storage pit date to at least 2010 cal. B.P. This tobacco deposits dates 900 years earlier than the earliest archaeological evidence of tobacco use in the Pacific Northwest.

#### MARY ANNE DAVIS

#### **Idaho State Historical Society**

#### Idaho Archaeologists in Review: Revisiting The Past

Archaeological research in Idaho dates back more than 100 years starting with a survey in northern Idaho in 1912. This presentation provides a limited view of sites and people that have made Idaho archaeology so captivating through the years.

#### **DR. HUGO DE BURGOS**

#### University of British Columbia, Okanagan

#### Posttraumatic Growth in Nicaragua and In El Salvador.

In this paper, I explore the cultural conditions that allow people to appreciate life and thrive in a healthy fashion instead of succumbing to an illness in the face of traumatic events. I particularly address the construction of non-medical narratives about traumatic experiences and the way in which vernacular accounts inadvertently and effectively work as an antidote for Posttraumatic Stress Disorder (PTSD). My preliminary findings provide new evidence for the indeterminacy of a universal response to traumatic experience that in part explains the lack of general consent on what exactly constitutes a traumatic event. Although I use the DSM-5 Criteria for PTSD to establish some comparable parameters, my research focuses mainly on the subjective narrative of symptoms and survival strategies. Finally, I explore the ways in which ordinary people conceive traumatic memory, and the intersection of such concepts with biomedical models of PSTD in Nicaragua and El Salvador.

#### CLAIRE DEAN, RICHARD BAILEY AND JON MEYER)

#### McLaughlin Canyon Pictograph Site Stabilization.

In the summer of 2015, the Tunk Block Fire roared through McLaughlin Canyon, engulfing a pictograph site. The Bureau of Land Management partnered with the Confederated Tribes of the Colville Reservation to assess and document the fire damage. Initial assessment of the site found spalling and cracking on the pictograph panel in addition to evidence of micro fractures representing areas of weakness in the rock. The federal and tribal partners decided to attempt to stabilize the panel despite the limited potential for long-term success. Dean and Associates Conservation Services used specialized grout and cementitious adhesives to fill twelve cracks/detached areas identified on the panel. We present the results of the initial assessments and treatments. Continued site monitoring will be necessary in following years.

### JESSICA DEVIO, SHANNON TUSHINGHAM, KOREY BROWNSTEIN, AND DAVID R. GANG, Department of Anthropology, Washington State University; Institute of Biological Chemistry, Washington State University

Ancient Cacao Recipes: An Experimental Approach to Identify Recipe Variation in The Archaeological Record
Recipes are highly personal forms of knowledge that reflect personal values, socioeconomic or political affiliations.
Therefore, understanding recipe variation found in archaeological samples can inform us about a wide range of factors
relating to past populations. Cacao and cacao-based beverages were highly valued by the Maya of Mesoamerica.
Residue analysis has primarily been used to identify cacao residues using a biomarker approach. Most of these studies
have not sought to identify other ingredients in cacao beverages. This paper presents the results of an experimental
cacao brewing study. Beverages were brewed with ingredients commonly found in cacao recipes including vanilla,
achiote, all-spice, and chili pepper. The vessels were analyzed using LC-MS. The study utilized both a biomarker and
metabolomics approach. The results of this study are promising and suggest that we can identify recipe variation using
a combined biomarker and metabolomics approach.

#### **JOHN T DORWIN**

#### **Eastern Washington University**

#### Remote sensing at the South Flying Goose Site 45PO435

In the summer of 2014, during the course of National Register evaluation of 45PO435, a site on the Kalispel Indian Reservation along the Pend Oreille River in the mountains of eastern Washington, an isolated small burned structure was located by means of magnetometry and ground penetrating radar. Its existence was confirmed by means of soil augering. Its dimensions were delineated by a combination of augering, excavation and electrical resistance. This paper discusses the contributions made by each of these techniques to create a stronger picture of the whole. Functionality, ethno-botany and geoarchaeology of the structure were explored by Molly Carney.

#### **CALI DRAKE**

#### **Edmonds Community College**

### The Role of Indigenous Knowledge in Observation and Service Learning

As a Cherokee Nation tribal member, Indigenous wisdom about Mother Nature and the ways of plants and animals accumulated by our ancestors is of sacred importance and relevant to dealing with the challenges and barriers that humankind is currently facing. Addressing environmental adaptation can be strengthened by developing skills in observations of the web of life, so important to Indigenous cultures. Participant observation and service learning can be useful tools in the application of Indigenous knowledge to modern-day problems for ecological projects, such as the LEAF School's monitoring of wildlife corridors in Japanese and Big Gulch for the City of Mukilteo and Snohomish

County. Current efforts include piloting the launch of Smithsonian Institution's eMammal, an open-source software, to document the effect of urban environment on wildlife distributions, populations and abundance and aid wildlife conservation in a joint effort between expert researchers and citizen scientists across the U.S. and worldwide.

#### EMILY DURA AND NADINE RUPPERT

#### Central Washington University and Universiti Sains Malaysia

#### Mother-infant interactions in a wild population of Southern pigtail macaques (Macaca nemestrina)

The Southern pigtail macaque (Macaca nemestrina) is an understudied species distributed within Southeast Asia. Data are lacking on how infants in this species acquire independence from their mothers. We investigated mother-infant interactions in a wild population to determine the infant's role in this relationship. We used focal sampling to observe infants over a 5-month period in the Segari Melintang Forest Reserve, Perak, Malaysia. Correlation and GLMM testing showed that as infant age increased, contact time with mothers significantly decreased. Mother rank, parity and infant self-directed behavior did not explain mother-infant contact trends. Infants are more responsible for a greater proportion of contacts broken from the mothers between 175-250 days old, which implies a distinct period of infant independence

#### **MARGARET DUVALL**

#### **Spokane City-County Historic Preservation Office**

#### Riverfront Park: A Journey Through the Decades

The City of Spokane/s Historic Preservation Office created a project website in order to highlight the extensive research done for the Spokane Parks Department by Fort Walla Walla Museum and Spokane Tribe of Indians Preservation Program archaeologists in plotting out the possibility of historic archaeological remains on the site of Riverfront Park in downtown Spokane. Riverfront Park is undergoing a \$60M redevelopment effort which involves major excavation of this extremely important "heart" of Spokane. The area includes Spokane Tribe traditional cultural properties such as the falls; the site of the founding of Spokane, the core of the industrial and governmental beginnings of the city; the epicenter of the railroads; and most recently, the site of the Expo '74 World's Fair. The website explores the history of this very specific area of the city decade by decade, complete with historic photographs and Sanborn maps laying out its development.

#### **BRIECE EDWARDS**

#### Relationships in Archaeology: Positive Outcomes from the Dittman Biface Cache (35ma375) Project

As professionals, we are all too aware of the quantity of resources on the landscape and the rates at which they are lost to looting, development, and economic progress. As a result, Relationships become an invaluable tool for identification and protection of cultural resources. The Dittman Biface Cache (35MA375) project exemplifies this often underreported instrument in the professional's toolkit. For more than a year the 35MA375 project has been the nexus of many Relationships. Based on the personal choices of the landowner, the commitment of many individuals to the profession, and the aspiration to recognize new Relationships, The Confederated Tribes of Grand Ronde has been supportive of this project. The 35MA375 project exemplifies the 'positive' Relationship outcomes necessary for the profession of archaeology to move into the next generation.

#### BRIECE EDWARDS, JESSICA CURTEMAN, JON KRIER

#### The Confederated Tribes of Grand Ronde

#### Cultural Practices as Contributing Attributes for Landscape Modeling: A Case Study in Tillamook Bay

Today's ever-diversifying development actions are encroaching on both the terrestrial and submerged loci of Oregon's coastal resources. As a result, there is a need for a model and analysis tool to incorporate cultural practice and other resources for inclusion in management plans. The relevance of such a model goes beyond its applicability to identify terrestrial sites, but can contribute to resources associated with paleolandscapes. By adapting and applying cultural practice-based information to an isostatic rebound and bathometric based paleolandscape terrain, is it possible to identify "high probability" use areas of long extant landscapes? A landform off-shore of today's Tillamook Bay provides an opportunity to develop and experiment with such a model. Through historic documents, oral histories, and stories the distribution of cultural resources are mapped and rated. The refinement of such a practice inclusive model may lead to avoidance and protection of both off- and on-shore cultural resources.

#### JUSTIN EICHELBERGER

#### Oregon State University and National Park Service

Socio-Cultural Identities of U. S. Army Commissioned Officers: The Negotiation of Class and Rank at Fort Yamhill and Fort Hoskins, Oregon, 1856-1866.

During the 19th Century the American West played host to the colonial expansion of the United States that resulted in a system of Indian reservations guarded by the U.S. Army. These forts became liminal environments were the Army operated both as the oppressors and protectors of indigenous peoples and as stages for the display and transmission of Euro-American socio-cultural ideals. Commissioned officers at these posts played an important role as actors in the drama of colonial westward expansion holding identities as both a frontiersmen and as bastions of 19th century American socio-cultural norms of social inequality. This paper examines the material expression of these norms as reflected in artifact assemblages recovered from six officer's houses at Fort Yamhill and Fort Hoskins. Analysis of these assemblages suggests that these officers were highly competitive individuals who were interested in displaying and affirming their identities as colonizers and as members of the socio-cultural elite.

#### SKYLER ELMSTROM

#### Western Washington University

#### A Survey of Fish and Wildlife: Japanese and Big Gulch 2016

As part of an ongoing project, students, staff, and faculty of the Learn-and-Serve Environmental Anthropology Field (LEAF) School with the support of volunteers and members of surrounding communities continue to monitor fish and wildlife at both Big Gulch and Japanese Gulch in Mukilteo, Washington as part of a partnership with the City of Mukilteo and Snohomish County Airport to restore and preserve each stream's salmon-bearing capacity. This year's efforts resume investigations of pre-spawn mortality and overall stream health through the lens of wildlife tracking and camera traps, in-stream salmon survey observations, chemical and biological monitoring, and spatial analysis. In 2016, 141 volunteers assisted with conducting wildlife surveys, monitoring water quality, and collecting geospatial data, and have underscored the importance of citizen science and the power of community colleges to foster community engagement to fill critical gaps in the assessment of salmon and steelhead habitat in the Pacific Northwest.

## MELISSA GOODMAN ELGAR, MOLLY CARNEY, ELIZABETH TRUMAN, WILLIAM DAMATIO, EMILY WHISTLER, KEVIN LYONS

Washington State University, Kalispel Tribe of Indians

Paleolandforms and landuse dynamics: regional analysis using multiproxy methods in the Pend Oreille Valley, WA

This project illustrates the potential of minimally-invasive field recovery techniques coupled with multiproxy geoarchaeological analyses to reconstruct landscape dynamics. Between 2012-2016, we analyzed onsite and offsite sediments from four sites along the Pend Oreille River on Kalispel Tribal lands to assess anthropogenic markers. Sediments were collected from excavation profiles or auger cores at small increments (2-3 cm). We assessed sediments for: 1) multielemental analysis by calibrated portable-XRF, 2) bulk sediment analyses including organic and inorganic carbon, pH, electrical conductivity, texture; and 3) microartifacts by dry sieving. This approach revealed trends in the paleolandforms where Native American ancestral communities lived that cannot be observed in the field. Human activities were primarily documented by organic enhancement and removal of topsoil (i.e., for construction). Modern sediments surface sediments indicate impacts of mining. Multiproxy geoarchaeology provides significant data recovery to augment site and regional studies, and can enhance cost savings when used with auger survey.

#### **NEAL ENDACOTT AND LUKE JONES**

#### **Edmonds Community College**

#### Little Swamp Creek Site: Exposing an Unpleasant History through Fried Chicken

Discovery of historical materials on the bank of Little Swamp Creek, Kenmore WA, (Site # 45KI1292) in July 2016 indicated they came from a now closed, nearby restaurant, The Coon Chicken Inn. These materials included items such as glassware, bottles, and platters dating from the 1920's until the restaurant closure in1949. One of the ceramic pieces exhibits a racist caricature that was considered socially acceptable for many in American society at the time. It was a signature logo for the Coon Chicken Inn restaurants. The restaurant closed in 1949 as a result of civil rights protests associated with the changing social climate following World War II. Edmonds Community College is using this collection to teach students archaeological cataloging, curation and analytical methods. It provides students with a hands-on learning experience about an unpleasant aspect of Washington's history though analysis of material remains.

#### **ALLISON FASHING AND DARCY WAYMAN**

#### University of Idaho

#### The Foodways of the Cyrus-Jacobs House and the Uberuaga Boarding House in Boise, Idaho

In 2012 the University of Idaho partnered with the Basque Museum and Cultural Center and Idaho Archaeology Center to do a short excavation of a well. The well was unexpectedly discovered during renovations of the Cyrus-Jacobs/ Uberuaga Boarding House in Boise, Idaho. The excavations generated over sixteen thousand artifacts, most of which had been previously analyzed. Left unanalyzed were the faunal remains from the excavations. This poster presents the results of the analysis of several hundred faunal remains which complete the analysis of the Cyrus Jacobs/ Uberuaga Boarding House collection, and tells us about the foodways of the Jacobs family and the Uberuaga boarding house residents.

#### HANNAH FERGUSON; ASHLEY M. MORTON, M.A., RPA

Whitman College; Fort Walla Walla Museum

I Forge On: Walkability and Experiencing Early 20th century Urban Life through Spokane's Expert Smithy
What was life like for the working class individual in turn of the 20th century Spokane? What kind of cultural meaning
can be understood from the proximity of a worker's living space to their work space and what can this say about the

broader experience of urban life? Recently, historical and archaeological exploration of Spokane's Riverfront Park revealed a ca. 1890-1913 blacksmith activity area (45SP794) associated with German immigrant Peter Sondgerath, proprietor of Spokane's Blacksmith Company. Given this prominent smithy of the Inland Empire—who had built the architectural ironwork for numerous principal Spokane buildings—was known to have lived at his workshop only in one instance, a walkability analysis was conducted on hotels and boarding houses Sondgerath occupied in relation to his workshop. Combining city directories and geospatial information systems (GIS) technology, this poster explores the social relationship this blacksmith had with an ethnically diverse and growing industrial city.

#### NICHOLE FOURNIER AND CARA MONROE

Washington State University and University of Oklahoma

A Preliminary Ancient DNA Analysis of Middle and Late Period Humans from Ryan Mound (CA-ALA-329), San Francisco Bay, California

This paper will present the results of a preliminary analysis of mitochondrial DNA from the third molar of 20 adult humans from the Ryan Mound site (CA-ALA-329) aimed at determining the degree of preservation before analyzing a large portion of the burial assemblage. Mitochondrial DNA was extracted from the molars using a slightly modified version of the protocol proposed by Kemp et al. 2007. A total of 15/20 individuals were assigned to a haplogroup, and 10/15 were assigned to a clade. Interestingly, a rare haplogroup C lineage defined by a mutation at np 16124 was found. Results show that this population is well preserved, suggesting that additional analysis will be successful. Further, the clades identified have meaningful implications for the Hokan-Penutian hypothesis.

#### **PARIS FRANKLIN**

#### **Pacific Lutheran University**

#### Conscientious Collaboration: Archaeological approaches as inspired by the Makah

Participation in collaborative archaeological research has been expanding since the 1960s. In this paper, I seek to demonstrate the value of collaboration by reflecting on some of the most productive approaches seen in the current literature on transforming archaeology. In addition, I emphasize the importance of involving local communities and living descendants in the development of research questions; the interpretation of the significance of artifacts; and the research dissemination process. By reflecting on my experiences in an on-site undergraduate course about the Makah and their purposeful engagement with the Ozette dig of 1970, I argue that while research collaborations between archeologists and non-archaeologist living descendants present certain challenges, the inclusion of the descendant communities in the research and dissemination process is mutually beneficial for knowledge production that is of interest to both parties. I conclude by providing an overview of my proposed graduate research project grounded in these collaborative approaches.

## ANDREW FRIERSON, JAMES BROWN, DOMINIC BUSH, WILL DAMITIO, NICHOLE FOURNIER, SAMANTHA FULGHAM, EMILY WHISTLER AND COLIN GRIER

#### Washington State University

#### Intra and Intersite Interpretations of Faunal Patterning at the Rock Creek Shelter Site, southcentral Oregon

This poster reports on results of an analysis of the faunal assemblage from the Rock Creek Shelter (35LK22) in the Warner Valley region of the Northern Great Basin. The site is a stratified rockshelter with dated cultural deposits that range from ca. 7490 BP to 740 BP. We identified and quantified the taxa and elements represented in the assemblage (n=1046), and recorded cultural (cut marks, burning) and taphonomic bone modifications (rodent gnawing, weathering). We present an intrasite analysis focused on variation in faunal assemblage characteristics among the three trenches excavated at the site to infer the organization of activities both within and immediately outside the rockshelter. We also

consider site function, addressing the degree to which the overall faunal assemblage conforms to expectations derived from different settlement/subsistence patterns posited for the region. With the extensive time span represented, we also consider change through time in the use of the rockshelter.

# ANDREW FRIERSON, KOREY BROWNSTEIN, SHANNON TUSHINGHAM, DAVID GANG Department of Anthropology, Washington State University; Institute of Biological Chemistry, Washington State University

#### Proteomic Residue Analysis of Stone Tools and Implications for Future Research

Identification of residues on archaeological material is a powerful tool in interpreting past human behaviors, particularly those that relate to the use of plants and animals. Proteomics, which uses nanoscale liquid chromatography combined with tandem mass spectrometry (nano LC-MS/MS) to identify and quantify traces of protein residues, is a method of analysis that has seen limited use in archaeology. For this study, the proteomics approach was used to analyze three replicated flake tools that were used to experimentally butcher cattle (80s taurus) meat as a way to assess the use of proteomics as a method for the analysis of residues on lithic materials. This conference paper will report the results from this study that demonstrated that proteomics analysis can be used to identify species specific protein residues bound to lithic material and can address some of the shortcomings of standard immunological methods.

#### TIFFANY FULKERSON, SHANNON TUSHINGHAM

#### **Washington State University**

#### Minding the Gender Gap: Publishing and Conference Trends in Western North America

Gender disparities in academic anthropology follow well-recognized inequities in the sciences. In this paper we review historical patterns in the publishing and conference presentation rates of different genders. We also examine trends in the professional affiliation of first author works. With its robust body of anthropological literature, the California, Great Basin, and Pacific Northwest regions provide a baseline for comparison between nation-wide trends.

#### JAKE A. FUNKHOUSER, JESSICA A. MAYHEW, JOHN B. MULCAHY

#### Primate Behavior & Ecology Program, Central Washington University

A Captive Ape Society: Social Structure and Dominance Hierarchy Analyses at Chimpanzee Sanctuary Northwest Captive sanctuary settings are a novel arena to investigate primate social networks and behavioral flexibility, which can then be used in an applied (advising management practices) and/or theoretical manner (examine evolutionary hypotheses of primate sociality). We investigated the social structure and dominance hierarchy of seven chimpanzees (Pan Troglodytes) at Chimpanzee Sanctuary Northwest, WA. Using focal-animal and instantaneous scan sampling, we collected 108.5 hours of associative, affiliative, and agonistic data from June to September 2016. Data were analyzed in SOCPROG to derive dominance hierarchies and network statistics for (1) the chimpanzee group and (2) the chimpanzee-human group. The results indicate that (1) human caregivers occupy more central positions than previously assumed and (2) conventional methods using single behavioral measures (e.g., agonism) to assess hierarchy may be inadequate in captivity. These conclusions add to the growing evidence of humans' influence on animal systems and question the methodological underpinnings of dominance theory.

#### **JULIA FURLONG**

**Eastern Washington University** 

Mapping Settlements and Landscapes along the Mainstem Columbia River in Central Washington through Aerial Imagery and Survey

The Wanapum reservoir pool level was lowered for Wanapum Dam spillway repairs from March 2014 until April 2015 exposing archaeological sites inundated since the 1960s. During this drawdown period, the drawdown zone was surveyed for cultural materials and monitored for erosion control. Chronology of documented temporally diagnostic projectile points/knives suggests human presence from ca. 13,000 cal B.P. to 150 B.P. The wealth of data garnered during the drawdown has the potential to expand our understanding of prehistoric settlement patterns along the mainstem Columbia River in central Washington. Data recorded by archaeologists using sub-meter accuracy GPS receivers, high resolution aerial photography of the drawdown zone, and LiDAR derived data is used to address settlement patterns and site density along a 28 km stretch of the Columbia River including West Bar, Crescent Bar, and sites 45KT27 and Sunset Creek (45KT28).

#### ALEXANDER GALL AND MICHAEL SMITH

Archaeological Services, LLC

How Do We Preserve Vulnerable Cave Sites? A Look Into The Horse Lava Tube System in Central Oregon.

Central Oregon is home to many lava tube caves that were used by indigenous people for a variety of purposes over thousands of years. As the region becomes more populated, these cave sites, particularly those on private lands, become more susceptible to damage from both inadvertent impacts and intentional looting. This paper examines one such cave site outside of Bend. In 2016, Archaeological Services surveyed a large parcel on the outskirts of the city, finding a cave that was not noted on maps for the area. It was evident that the cave contained a precontact site containing faunal remains, obsidian debitage, and a bone atlatl spur. It was also clear that the cave was being subjected to on-going looting. Further research showed that this cave site was investigated in the 1990s, but was mapped in the wrong location. Working with the project developers and the Confederated Tribes of the Warm Springs, the cave will be avoided. However, what are the long-term solutions to protecting these sensitive and vulnerable sites?

#### ANDREW GILLREATH-BROWN

**Washington State University** 

Agricultural and Social Landscapes Leading Up to the Depopulation of the Central Mesa Verde Region:

Archaeology with Future Implications

Ancestral Pueblo communities of the central Mesa Verde region (CMV) were heavily reliant on maize agriculture for their subsistence needs (AD 600–1285). Studies at smaller scales are needed to understand the relationship between Pueblo farmers and agricultural landscapes. Movements of small settlements across the landscape may seem inconsequential, but may presage larger changes if we know how to decode them. Variations in the size and location of farmland had known and significant consequences for local pre-Hispanic farming societies. This research underscores the likelihood that the depopulation of this area was, at least in part, due to a critical imbalance between food and people. Furthermore, the effects of shifts on societies known archaeologically and historically can help to predict what the effects of current and future scenarios might be on society. The archaeological record has time-depth, from which we can create an analog to understand present and future implications.

#### DANIEL GILMOUR AND DAVID ELLIS

#### Willamette Cultural Resource Associates

#### Wada, Wapato, and Western Stemmed: An Early Holocene Site near Burns, Oregon

In the fall of 2015, Willamette CRA conducted data recovery excavations at 35HA3293, an early Holocene site in Burns, Oregon. The site had been damaged by excavation of a utility trench through the site, and a damage assessment had recovered the fragment of a Western Stemmed point. Our excavations encountered a feature at 90 cm below surface, from which a charcoal sample yielded a calibrated radiocarbon date of approximately 10,200 BP. Two other charcoal samples from other site areas supported this age. A sample of feature fill produced evidence of use of serviceberries, chenopod or wada, and wapato. The presence of wapato in the Great Basin has rarely been documented. Geoarchaeological data indicate the early Holocene occupation was on an alluvial fan with nearby wetlands and not far from the shoreline of Pluvial Lake Malheur. The work at this site demonstrates the importance of deeper excavations to identify early Holocene sites.

#### ERIC GLEASON, RICK MCCLURE, MEGAN WONDERLY

#### Independent Researcher

#### Indian Rock Obsidian: Preliminary Investigation of Toolstone Sources in the Simcoe Mountains

In 1996 surface exposures of naturally occurring nodular obsidian were found near the summit of Indian Rock, the highpoint of the Simcoe Mountains in Klickitat County, Washington. The Indian Rock source is one of only a handful of obsidian toolstone locations identified in Washington, and one of several in the Simcoe Mountains. X-Ray Fluorescence analyses from two laboratories linked this source with artifacts from archaeological sites at distances of up to 100 miles from the source location, primarily to the west side of the Cascade Range. The context of the archaeological specimens indicates a temporal span of source utilization ranging from 6,000 rcybp to the late precontact period. The 2016 field reconnaissance at Indian Rock provided the first step to achieving the broader research goal of understanding the cultural and geologic context of the obsidian toolstone sources in the Simcoe Mountains.

## STAN GOUGH, THOMAS W. STAFFORD JR., EMIL KARPINSKI, CHARLES T. LUTTRELL, JERRY R. GALM, HENDRIK

Eastern Washington University, Stafford Research Laboratories Inc., McMaster University, Washington State Parks and Recreation Commission

#### Latah Mammoth Radiocarbon and DNA Analyses

A Latah, Washington (Coplen Spring) locality mammoth rib in the collections of the Conner Museum, Pullman yielded a radiocarbon date of 12,135 +/- 35 14C years B.P. (UGAMS-A24638), stable carbon and nitrogen isotope data, and mtDNA sequence data. Bones from multiple mammoth and other animals were collected from the Coplen Spring between 1876 and 1878. The collectors reported finding artifacts adjacent to the spring but their disposition is unknown and unverified. All mammoth bones in the Field Museum Latah Mammoth mount are from the Coplen Spring. Conner Museum mammoth rib data demonstrate contemporaneity of mammoth with the earliest human presence in the Pacific Northwest at Paisley Caves and as little as 102 calendar years before Manis mastodon hunting. Preliminary mitochondrial DNA sequencing places the Conner Museum specimen within Haplogroup F with Mammuthus columbi and possible hybrids.

#### **DENNIS GRIFFIN**

#### **Oregon State Historic Preservation Office**

#### In Search of Camps' Warner: Tracking US Military Presence in the Warner Valley, Oregon 1866-1874

Following the discovery of gold and growing reports of Indian trouble in eastern Oregon, the US Military established a series of four forts to protect settlers and miners flocking to this part of the state and to insure continued use of local

military roads. One of these forts, Camp Warner, served as the primary military fort in the Warner Valley from 1866 to 1874. Camp Warner actually consisted of two separate fort locations; old Camp Warner in use from 1866-1867, and new Camp Warner in use from 1867-1874. In its heyday, Camp Warner consisted of over 80 structures that housed over 270 men along with some officers' families and served as an important military outpost during both the Snake (1866-1868) and Modoc (1872-1873) Wars. This paper outlines recent attempts to relocate both fort sites, now located on both private and federal lands, and to determine their state of preservation. To facilitate the abandonment of Old Camp Warner to its new location to the west, a stone bridge was constructed across wetlands that were part of the Warner lakes. The site of this bridge was also relocated and evaluated.

#### **DENNIS GRIFFIN**

#### **Oregon State Historic Preservation Office**

Archaeology of the Oregon National Guard: A Search for Archaeological Evidence of Early Military Encampments in Oregon

Starting as early as 1843, militia laws were passed authorizing the forming of a battalion of mounted riflemen to protect local lands from invasion and local insurrection. With a growing concern over Indian conflicts, subsequent laws called for the building of blockhouses and arms magazines and the training of troops. Starting in 1865, cash payments were offered to induce volunteers to drill and to pay expenses for companies to parade and participate in regional maneuvers. In 1887, this militia was designated the Oregon National Guard. A recent search through Oregon military records has highlighted a minimum of 63 training opportunities at 34 different named camps between 1890 and 1939. This paper outlines the design and use of these period camps and the possibility of such camps being discovered in the archaeological record.

#### JONATHAN M. HALLER

#### Stateline GIS

#### Spokane's Historical Population: Making Those Pivot Tables Meaningful

Building upon the recent archaeological investigations in Spokane's Riverfront Park, this paper expands historical data compilation into larger sections of Downtown Spokane and synthesizes the population data through demography and spatial statistics. With a focus on perceptions of this historical urban environment as a temporary residence or staging area in the development of the region, this paper also demonstrates the lively and complex population that lived in the area and served as the foundation of the city that we know t

#### JONATHAN M. HALLER

#### Stateline GIS

#### Urban Un-Planning: Digital Exploration of Downtown Spokane's Progressive Era

Exploring 3Dtechnologies to reconstruct historical urban landscapes of Spokane's Riverfront Park following the recent archaeological investigations in Spokane's Riverfront Park, this paper discusses utilizing compiled historical population data and maps in conjunction with urban planning software to review the built environment of select portions of Spokane's downtown. By incorporating known construction details to influence a procedural 3D model generation of the historical downtown we can reconstruct the appearance of a diverse and cosmopolitan area that has gone under numerous and dramatic urban renewal projects. Pushing further, we can display this information in Augmented/Virtual Reality and create an interactive experience as community outreach. This paper aims to show: a means of preservation in a digital age, new methods of reconstructive analysis and a platform for public engagement.

#### **ELLEN HALLINGSTAD**

#### Western Washington University

Reconstructing faunal exploitation at the prehistoric Woodstock Farm site (45WH55), Whatcom County,

#### Washington

Mammal and avian remains were analyzed in order to reconstruct faunal exploitation patterns within prehistoric coastal midden site 45WH055 (2750-2450 BP) in Whatcom County, Washington. This research has two purposes: 1) to assess the consistency of this assemblage with cultural and ecological patterns of other Locarno Beach phase (3500-2400 BP) sites, and 2) to compare assemblages from previously identified activity areas within 45WH055 to determine how exploitation patterns differ between the thermal feature and bone processing areas of the site. These analyses rely upon the identification of specimens by 1) body portion (axial, appendicular, or cranial), 2) element, and 3) family. This research aims to augment the current body of knowledge surrounding hunting and butchering practices during the Locarno Beach phase, as well as provide an unprecedented analysis of intra-site faunal exploitation variation.

#### STEPHEN C. HAMILTON

#### Historical Research Associates, Inc.

#### Spatial Variability in Obsidian Procurement Patterns from Christmas Valley to Warner Rim

More than 1,000 obsidian and fine-grained volcanic artifacts from 19 archaeological sites studied as part of the PCDI Uprate project in south-central Oregon were analyzed using XRF trace element provenance analysis. A total of 56 geochemical groups were identified, of which 46 have known locations. Analysis of this large dataset is employed to describe lithic conveyance ranges, focusing on distance and directionality of toolstone procurement. The analysis does not account for diachronic change, but based on frequencies of diagnostic projectile points from the sites, much of the dataset probably consists of artifacts from the Middle and Late Holocene, corresponding to the middle Bergen through the middle Boulder Village periods. Results indicate toolstone source utilization was highly variable from north to south, and in the upland areas, patterning in source directionality appears to be largely influenced by utilization of the uplands by groups from the adjacent lowland settlement areas.

#### **DON HANN**

#### **Malheur National Forest**

#### The Limits of Material Culture for Determination of Ethnicity in Eastern Oregon Placer Mines

A suite of Asian ceramic and metal artifacts has been described as a "horizon style" indicative of the presence of immigrant Chinese laborers at sites in western North America. In the placer mining districts of eastern Oregon these artifacts have been treated as "ethnic markers" to distinguish immigrant Chinese mine operations from those of Euro-American miners. A comparison of historic mining sites documented on the Malheur National Forest with historic census and mine claim records suggests that reliance on this interpretation of the material culture greatly underestimates the number of immigrant Chinese miners and the scale of their placer mining activities. This has implications for studies which suggest limited assimilation by immigrant Chinese laborers based on their presumed reliance on imported Chinese goods.

#### CYNTHIA HANNOLD AND SAM RAYMOND

#### University of Idaho

#### A Comparison of Alcohol Consumption Habits at Historic Fort Boise

Archaeologists have regularly documented alcohol consumption at many military forts in the nineteenth century west. What is less understood is the variability of alcohol consumption among different groups within a military fort. This work investigates alcohol consumption patterns at Fort Boise. It is based on a comparison of multiple archaeological

assemblages including the bottle glass recovered from the Surgeon's Quarters (excavated in 2014) and a collection of bottles recovered from excavations in the 1970s and 80s. The intent is to summarize the types of alcohol consumed at the Fort Boise and variation in alcohol consumption between the Fort surgeon and "regular" military personnel.

# SYDNEY HANSON, SHANNON TUSHINGHAM, KOREY BROWNSTEIN AND DAVID R. GANG Department of Anthropology, Washington State University; Institute of Biological Chemistry, Washington State University

#### TExtraction of Rice Residues from Experimental Potsherds

This paper presents the results of recent research seeking to determine whether two subspecies of rice (japonica and indica) can be distinguished by their residues. Indica rice, domesticated in India, is the dominant subspecies grown and consumed in Thailand today. However, it is believed that japonica rice, domesticated in China, was the first domesticated variety of rice introduced to Thailand. The transition from indica to japonica rice cultivation likely took place in the Iron Age (500 BC–AD 500) as stronger trade relationships between India and Thailand were established (Castillo et al. 2015). The exact timing of this transition, however, remains unknown. In this study, japonica and indica rice residues were successfully extracted from experimental potsherds. Preliminary results indicate that these two subspecies leave behind distinct residues. The application of this method to archaeological potsherds may elucidate the timing of introduction of indica rice into Thailand.

#### PATRICIAS. HART AND IVAR NELSON

#### University of Idaho and Independent Historian

#### Impacts of the Civilian Conservation Corps in Idaho

The Civilian Conservation Corps, involving jobless young men from ages 17 to 25, was the most popular New Deal program during the Great Depression between 1933 and 1942. Over that period, it included some 92,000 enrollees and staff in 284 camps in Idaho, making the state the most densely populated CCC program in the nation. Its impact was widespread and deep, resulting in lasting impact on society and individuals. Hart and Nelson will discuss findings of a four-year and ongoing investigation of the human impact of CCC programs in the region. Based upon evidence from archives, museums, libraries and agency collections, including photographs, reports, newspaper articles, camp magazines, letters, interviews, and films, they will preview the forthcoming open access, 'born digital' online portal at the University of Idaho Library which will provide the public access to this unique moment in cultural and social history.

#### **NIKKI HART-BRINKLEY**

#### **Rouge Valley Council of Governments**

#### Digital Spokane and the Chinese Diaspora: A Spatial Dataset of Georeferenced Sanborn Maps, 1884-1925

To study Chinese diaspora throughout the Pacific Northwest during the Gold Rush period, researchers can reference more than 70 Sanborn Fire Insurance maps that were collected for the urban Spokane area for years between 1884 and 1925. The maps were scanned and then georeferenced using ESRI's ArcMap desktop software platform. Building footprints were digitized into a GIS feature and address information was recorded in the feature attribute table. Census, City Directory, and Chinese Exclusion Act data was then joined to the building footprint data. The resulting dataset has broad research uses and is available for download in spatial and tabular formats. The end goal of this project will produce an interactive 3D web map application with associated census data joined to building locations.

#### CYNTHIANN HECKELSMILLER

#### Washington State University

#### Exploring Age-Set Determined Domains of Plant Use in a Highland Maasai Village

Ethnobiological knowledge (EK) of plants and animals is acquired over an individual's lifetime according to environmental, behavioral, and cultural factors. Cultural factors such as dietary ideals and taboos dictate who can use resources like wild food plants in a society, and also can change from childhood to adulthood. These factors contribute to intra- and intergenerational variations in knowledge. This preliminary study explores the acquisition of edible wild plant EK among different age-groups in a Maasai village using interviews, free lists, and plant identification walks. The results suggest that there is a domain of wild plant foods that are specific to younger age-sets. Future research should follow-up on free list data and include more systematic naturalistic observations to elucidate plant use and knowledge transmission. Applications for understanding plant use in Maasai society include nutrition improvement initiatives and the preservation of traditional knowledge.

#### **DAVID-PAUL B. HEDBERG**

#### Portland State University

New Sources from the Archives: How the Letters of One Columbia River Indian Fishermen Complicate the History of Salvage Excavations at Wakemap Mound and other sites behind The Dalles Dam, 1950 – 1957.

Analysis of a substantial cache of personal correspondence from Wilson Charley, a Yakama Nation Tribal Councilman and fisherman, reveals his strategy to use archaeological site protections as a way to assert tribal sovereignty and stop The Dalles Dam. Before tribal consultation or the National Historic Preservation Act, Charley attempted partnerships with archaeologists working on the sites of his ancestors. Interested in a Celilo Falls National Monument, Charley reached out to individuals in the vanguard of American environmentalism as well as volunteer groups like the Oregon Archaeological Society. Ahead of his time, all these groups ignored him. However, his story is significant because it demonstrates that indigenous leaders were not passive protesters of the dam and proposed innovative strategies. Further, it also establishes a degree of culpability for those who ignored him and exposes contradictions in how individuals viewed human and non-human nature in the 1950s.

#### **GREGORY HEIDE**

#### **Colville National Forest**

#### Preserving our Heritage - Passport in Time Projects on the Colville National Forest

This poster will present a variety of historic structure renovations on the Colville National Forest through the USFS Passport in Time Program. These project have allowed the USFS to renovate and maintain some of the more unique structures for the far Northeastern corner of Washington State.

#### HILARY HEMMES-KAVANAUGH

#### **Central Washington University**

#### Comparison of Semi-Captive and Wild Gray-Shanked Douc Langurs' (Pygathrix cinerea) Activity Budgets.

In 2005 the Endangered Primate Rescue Center (Cúc Phương National Park, Vietnam) acquired 5ha of forest as a pre-release habitat for endangered primates. Our study assessed whether this site was suitable for the expression of grey-shanked douc (GSD) langurs' (Pygathrix cinera) wild behavioral repertoire. We observed four langurs living in the pre-release habitat from 16-10-03 to 16-12-02. Our observational methods were adapted from a previous study of wild GSD langurs (P.cinerea) (Long 2008). We used data Long collected from wild langurs to compare with data we collected from the study subjects. Members of both groups spent the majority of their time resting (semi captive=57%; wild=37%). For both groups, when feeding increased, resting decreased and maximum social behavior

(semi captive=1200h; wild=1100h) occurred after a resting peak (semi captive=1100h; wild=0900h). Our results indicate that the semi-captive space encourages natural behaviors of langurs living within it.

## LOURDES HENEBRY-DELEON, ANGELA NELLER, KATE VALDEZ, JACKIE COOK, TEARA FARROW-FERMAN, ROBERT TAYLOR

Central Washington University, Wanapum Heritage Center, Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Colville Reservation, Confederated Tribes of the Umatilla Indian Reservation, Nez Perce Tribe

#### Cultural Affiliation for Tiičáminsh Uytpamá Natítayt, the Ancient One, (AKA Kennewick Man)

The Ancient One (Kennewick Man) was repatriated in February under the Water Infrastructure Improvements Act of 2016. The Confederated Tribes of the Colville Reservation, Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes and Bands of the Yakama Nation, and the Wanapum Band of Priest Rapids (Claimant Tribes) have always and continue to assert that he is an ancestor and that they are culturally affiliated to him. This poster demonstrates the existence of a relationship of shared group identity which can be reasonably traced between the Ancient One and the Claimant Tribes. Biological data offers the most direct line of evidence in identifying the identifiable earlier group to which the Ancient One belonged and the present day affiliation of the identifiable earlier group to the Claimant Tribes. Biological traits recognized as representative of this earlier group include cranial morphology, stable isotopes values, and DNA data.

#### **CAROLINE HERRITT**

#### University of Idaho

#### Consumer Culture and Colonialism: Archaeology of Contact in the Northwest

The archaeology of Euro-American contact has not been well studied in the northwest. By looking at the consumer culture of fur trade forts, Christian missions, and indigenous sites; such as Fort Colville, Spokane House, South Dune, Spalding Mission, and Cataldo Mission via ceramic analysis, the nuances of race and class dynamics during this time period can begin to be uncovered and the history of this time period can be synthesized.

#### **DARRYL HOLMAN**

#### Department of Anthropology, University of Washington, Seattle

#### Effects of Famine on Deciduous Tooth Emergence in Rural Bangladeshi children

Effects of Famine on Deciduous Tooth Emergence in Rural Bangladeshi Children. Darryl Holman, Baishakhi Basu, Department of Anthropology, University of Washington, Seattle, WA. Emergence of the deciduous dentition is considered to be robust against moderate environmental insults. We examine the effects of nutrition and other covariates on the timing of deciduous tooth emergence in a sample of 397 rural Bangladeshi children born before, in utero during, and born after a severe famine. Children were examined monthly for up to 3 years, typically starting from birth. Hazards analysis quantified effects of famine and other covariates on emergence of the 10 left deciduous teeth. Relative to children born after the famine, children born up to a year before the famine showed significantly delayed emergence in 6 of the 10 teeth. Children who were in utero during the famine exhibited few effects on tooth emergence, suggesting a protective mechanism through maternal buffering.

#### **DANA HOLSCHUH**

#### Archaeological Services, LLC

#### Connectors to the Past: Two Historic Bridges in Southwestern Washington

Every bridge has a story and this poster presents two distinct examples of NRHP-eligible historic bridges in southern Washington and the unique stories uncovered while documenting and evaluating these structures. BNSF Railroad

Bridge 81.4 over the Cowlitz River was recommended as eligible for the NRHP under Criterion A, for its association with the history of the Northern Securities Company, and the growth and collaboration of the railroads involved leading up to, and following the Northern Securities Case in 1904. This bridge also has engineering significance under Criterion C as an intact example of a two-span Pennsylvania (petit) Truss using pinned connections. The second bridge, which carries NE Etna Road over Cedar Creek in northern Clark County, was recommended eligible under Criterion C, for embodying the distinctive characteristics of a type, method of construction, and the work of a master engineer Homer M. Hadley.

#### **CRAIG HOLSTINE**

#### Washington State Department of Transportation

#### The East Trent Avenue Bridge: 5 Spans and 107 Years on the Spokane River

Spokane has been called the "City of Bridges," for the number of structures crossing the river that shares its name. That number increased rapidly in the city's early years when timber and steel bridges failed at alarming rates. Bridge replacements became rare events after reinforced concrete construction began in 1907. The East Trent Avenue Bridge, a five-span earth-filled concrete arch, has carried traffic since its completion in 1910. Currently classified "structurally deficient," the bridge is nearing the end of its service life. This presentation addresses preservation challenges, replacement design options, legal compliance requirements, and the role of "consulting parties" in those efforts.

#### ROBERT J. HOLSTINE AND MEGAN A. PARTLOW

## Central Washington University, Cultural and Environmental Resource Management Program, Department of Anthropology

#### Vertebrate Faunal Remains from the Anderson Creek Site (45KP233)

The faunal analysis of the Anderson Creek Site (45KP233) revealed a complex assemblage of vertebrate remains. The six analytical units yielded a total NISP of 15,086 vertebrate remains, including a variety of mammals, dominated by elk and deer, plus a trace of birds and snake, but no sea mammal or turtle. Fish remains dominate, particularly salmon, with significant numbers of small flatfishes, spiny dogfish, sculpin and surfperch. There are few herring remains (1% of identified fish) in the sample, mostly derived from 1/8" screening. A pilot study of 1/16" screen sample from one excavation unit did not indicate a significant problem from screen size. For example, herring composed 0.2% of identified fish bones in the 1/8" fraction and 2% of the combined 1/16" and 1/8" fraction from this unit, implying that herring do not compose a significant proportion of fish remains even with the finer screen.

#### **LORELEA HUDSON**

#### **SWCA Environmental Consultants**

## Expressions of Ethnicity in a Modern World, Archaeological and Historical Traces of Pre-WWII Japanese-American Culture

Artifacts and structures produce data for historical archaeology. They can be used to construct chronologies, explore social arrangements, and identify function and ethnic groups. Japanese men came as laborers to the Pacific Northwest in the late 19th century, working in logging camps, on the railroad, and in other industrial settings. By the early 20th century, Japanese families (re)turned to farming as they sought greater economic opportunity. Two such first generation Japanese families, the Fukudas and Horis, were independent farmers and tenants on the Neely Farm in the White River Valley of King County. The most prominent signature of this occupation is a bathhouse, or furo, and associated artifacts. While nearly three quarters of the state's Japanese-American farmers were in the White River Valley, only one bathhouse or furo has been identified to date. This paper explores the potential for identifying other such structures and archaeological deposits in agricultural and industrial settings in the region.

#### **MACKENZIE HUGHES**

Western Washington University

Quartzite Artifact Analysis at Woodstock Farm, Chuckanut Bay, WA

The purpose of this investigation is to gain a better understanding of the use of quartzite as a raw material for tool production during the Locarno Beach phase at the site of Woodstock Farm, Chuckanut Bay, WA (45WH55). Characteristics of quartzite, including hardness, grain-size, irregular intrusions and planar formation, make it more difficult to successfully knap compared to other raw materials abundant in the area. The quartzite artifacts from this site were analyzed for size, tool type, grain size, refit, and distribution throughout the proposed activity areas to determine the chaîne opératoire regarding quartzite use during this phase. Results from this investigation will yield important information to reconstruct cultural practices on the northwest coast during this time period.

#### **JORI HURST, DESSA MEEHAN**

Western Washington University

Analysis of Lithics from Bone Processing and Lithic Tool Production Units at Woodstock Farm (45WH0055)

This project, titled "Analysis of Lithics from Bone Processing and Lithic Tool Production Units at Woodstock Farm (45WH0055)," analyzes lithics excavated from site 45WH0055, directly on Chuckanut Bay, Bellingham, Washington. 45WH0055 was a highly utilized Locarno Beach Phase settlement (3500-2400 BP). The goal of our analysis was to determine if Ian Lewis' 2013 thesis classification of activity areas was supported by type, quantity, and distribution of lithic artifacts. He hypothesized that two different activity areas on the site were used for bone processing and lithic tool production with very little crossover. A separate goal of this project determined if the bone processing assemblage was most likely to be for butchering or bone tool production, a distinction not made in Lewis' thesis. We analyzed each artifact based on technological attributes reflecting degree of modification and reduction stage; all lithics collected were classified based on their presence or absence of human modification.

#### **MATT HUSAIN**

Community, Culture, and Global Studies, The University of British Columbia, Canada

"Humanity is Wonderful, if only I Could Encounter some": Perspectives of the South Asian Economic Diaspora in the Southern Mediterranean

My paper examines the illegal migration flows out of South Asia and how threads of kinship, reciprocity including gift-giving, and affiliations develop a trans-alliance linkage between illegal migrants and/or refugees living in developed economies of the Southern European Union, such as Athens. My paper investigates two interrelated objectives: 1) by examining the social and economic factors and legal structures that motivate migrants to relocate in order to remit money back home, and 2) by documenting how rural South Asian migrants navigate the informal migration routes to the Mediterranean and connect with other migrants as they travel from South Asia. By highlighting the migrant's point of view, my research findings lend critical understanding to the relationship between migration and transformations of capitalism, poverty, and security issues, and thus strengthens global governance policy and practice frameworks. The findings also expand our understanding of how rural communities in South Asia interpret transformations in capitalism and are subsidized, in effect, by remittance earnings. The findings also help to understand the characteristics of the South Asian enclaves in a specific setting in the EU, such as their experiences with exploitation and social injustice, and their ability to establish cohesive communities while attempting to integrate into mainstream culture. Finally, my paper explores how effective policy interventions towards migration governance can be articulated with a better understanding of state agendas and migrant responses to social causes and motivations that drive individuals and families to migrate.

#### JANE HUTCHINSON

#### **University of Washington**

#### Community and Conflict: Tales of my College Career

Since 1984, Washington State Community Colleges have made a difference in my personal direction and career path through volunteer work, work study programs, and mentor/mentee relationships. Across the past thirty-three years I have attended five different campuses in the Puget Sound area and, no matter what stage of life I am in, the diverse community and course offerings these campuses provide help to propel me forward on personal and professional levels every time I return. From the Seattle Mayor's Office to a wetland in Granite Falls, I'll share highlights of my research and experiences with civic engagement and how it's led me to where I am today working with wildlife and conflict around Washington State.

#### RYAN IVES

#### Eastern Washington University Archaeological and Historical Services

The Preservation of Perishable Foods: Results of Recent Excavations in an Ice House and Root Cellar, U.S. Army Fort Walla Walla (45WW341).

Recent excavations within the root cellar and an ice house on the grounds of the historic U.S. Army Fort Walla Walla illustrate changes to perishable food storage preservation techniques used by the U.S. Army during the later years of Fort Walla Walla. These structures served as collective storage for naturally produced ice from the nearby ice pond as well as cold storage for root crops. Technological advancements in the mechanical production of ice at around the same time as the construction of these structures changed access to these seasonally scarce resources.

#### **DENNIS L. JENKINS**

#### Museum of Natural and Cultural History

#### Radiocarbon Dating at the Paisley Caves

Radiocarbon dating has played an enormous role in establishing the Paisley 5 Mile Point Caves site as one of the premiere pre-Clovis sites in the Americas. There are currently 241 radiocarbon dates from this site. The process of accurately dating the natural and cultural deposits of the site has been an intense exercise in the application of the scientific method. This paper examines the categories of materials dated, the reasons for their selection, and implications of their results.

#### **HOLLY JOHNSON**

#### **Eastern Washington University**

#### Commercial sex workers and the HIV/AIDS epidemic

As defined by the Department of State (DOS) commercial sex refers to any sex act on account of which anything of value is given to or received by any person. Using this definition that I will also use throughout my research. In recent years it has become clear that in many states throughout the world commercial sex is playing a significant role in nourishing and even escalating the HIV epidemic. If given the opportunity to present this research I would investigate this relationship between commercial sex workers and the HIV epidemic in various different states, such as; Cambodia, China, Nigeria and El Salvador. Within my research I would like to include the data and prevention programs from the World Health Organization (WHO). I would also like to research the background of some commercial sex workers and make connections between socio-economic status of the individual as well as the state they are residing in. This research would be an investigation into the connection between commercial sex workers and the HIV epidemic; by no means do I want to blame anyone group or state for encouraging the HIV epidemic. HIV/AIDS while more common place for developing states is still a medical issue within already developed states including Europe and the United States.

#### JEFFREY CORTLUND JOHNSON

#### **Eastern Washington University**

#### The Gundlach Collection: A Large Sample of Projectile Points from the Upper Pend Oreille Watershed

The intent of this project is to present a large dataset of projectile points from the Albeni Falls Reservoir by their geographic and temporal distribution. This dataset will provide stylistically comparable projectile point forms and their relationship to the local and greater Columbia Plateau culture area. To begin building this database, analysis of the Gundlach collection which contains a large amount of projectile points (n=462), spanning from Albeni Falls along the river to Lake Pend Oreille, will be used. This former private collection was donated to the Kalispel Tribe of Indians with locational information. While specific deposition information is not available, the stylistic phenomena that occur within the collection are temporally sensitive and will be of comparable use to archaeologists working in the region

#### TRISHA JOHNSON

#### Mapping Traditional Cultural Plants on the Colville Reservation.

The Traditional Cultural Plant Project has been gathering information on important traditional plants since 2013. Inventories include size, health and phenology of populations, GPS coordinates and elevation, aspect, slope, general soil characteristics, landmarks and associated plant communities. Impacts from fire, grazing, logging and invasions of noxious weeds are recorded. We also have a large collection of photographs to accompany the database, and are starting to generate GIS layers and maps. Although the Colville Confederated Tribes restricts access to the exact locations of these cultural plant populations, maps can include many other features as layers, including soils, watersheds, the boundaries and intensities of fires, and major vegetation types. Story-maps take mapping a step further, offering additional information and versatility through the inclusion of photographs and other graphics, tables, written descriptions, and more. These maps can be shared as web pages or presentations, providing detailed information on important plants and inviting collaborations.

#### GRETCHEN KAEHLER AND MICHAEL HOUSER

#### Department of Archaeology and Historic Preservation

#### District or Distraction? Identifying and Evaluating Archaeological Districts

Identification and NRHP evaluation of Archaeological Districts can be difficult because the focus is often on individual archaeological sites. In this paper we offer some guidance on identifying archaeological districts using the Columbia Hills Archaeological District (CHAD) as an example. We also discuss some methods of NRHP evaluation of archaeological district that do not rely extensively on "the archeological criterion," Criterion D.

## CHRIS KAISER, JOSEPH SEELATSEE, MELVIN LUCEI, JASON BUCK, MALCOLM ALECK, CLINT WILTSE

#### **Grant County PUD**

#### The Wanapum River Patrol

The Wanapum River Patrol keep constant watch over the ancestral lands of the Wanapum People along a stretch of the Columbia River in Washington State from Richland to Rock Island Dam near Wenatchee- a distance of approximately 110 miles (about 177 km). Locations of significance to the Wanapum are closely monitored in order to protect those places from various natural and anthropogenic processes as well as looting and vandalism. River Patrol and Grant County PUD Cultural Resource staff work in cooperation with local, state, and federal law enforcement, land managing agencies and various tribes to prevent and investigate violations of federal and state cultural resource law within the Priest Rapids Hydroelectric Project lands as well as those lands affected by normal hydroelectric operation. Through public involvement and understanding, and with the Wanapum River Patrol constantly watching the landscape, the cultural resources in this region are better preserved for generations to come.

#### KASSAHUN KEBEDE

#### **Eastern Washington University**

#### Gender and Generations among Ethiopian Diaspora in the Washington, DC Metropolitan Area.

The paper discusses generational shifts in gender relations among first and second-generation Ethiopian-Americans in the Washington, D.C., metropolitan area. Using extensive structured and unstructured interviews, I identify three generational units in terms of their perspectives on gender status and role in the host land. Hence, some the first generation women and men affirm patriarchal traditions at least in the domestic spheres while a significant group of the first generation and almost all second-generation Ethiopian immigrants challenge the authority and control that characterizes the traditional roles and relations. Such changes resulted in strains, conflict and even family breakups within diaspora households. In this paper, I particularly highlight how women's increased access to financial resources, the presence of protective social institutions, and the everyday practicalities of living in the new social space motivate them to contest and even change patriarchal traditions.

#### **BRIANNA KENDRICK**

#### University of Oregon, Museum of Natural and Cultural History

#### Archaeoparasitology of the Paisley Caves

Parasites egg sacs from coprolites recovered from archaeological contexts can often offer unique views into the diets and health of early humans. Excavations of the Paisley Caves site of Central Oregon have resulted in the discovery of human coprolites dating back approximately 14,300 cal. BP years ago. In spring 2016, thirty coprolites and their corresponding sediment samples from Paisley Caves were processed for pollen. Portions of the coprolites separated from the main coprolite matrix included bone, fur, macrobotanicals, and amorphous plant materials. These remaining materials were stored in double-distilled water and refrigerated for later analysis. Microscopic examinations of the remaining coprolite materials is showing the presence of parasite egg sacs. Here we report on current research on these parasite egg sacs, what we have accomplished, and what we hope to achieve in the near future.

#### **LUKE KERNAN**

#### University of Victoria

#### Somatic Shockings across Ailment Narratives: Lessons from the Sacred Geographies of an Indigenous Spirit-World

Aboriginal Australian stories have a deep sense of history and myth; they captivate and express a unique worldview—each narrative manifests the applied wisdom of traditional understandings of illness embedded within local land and biology in confronting ailment "Dreamings." These experiences of "the sacred" encode as deep philosophical concepts—but also warn adherents about how cultural illnesses infect the living land as they become symbolically translated through human suffering. These narratives generate concepts of illness and give insight into the etiology of disease and the patternings of cosmology. This paper will explore and theorize how ailment Dreamings actively shock self-awareness into embodied-subjective selves by using a combination of fieldwork data, primary accounts, and secondary sources from the Wadeye region (NT, Australia) to examine how these spiritual and physical phenomena manifest into "reality," ruminate within peoples' thoughts, and viscerally alter perceptions about the lived world and its poetic narration.

#### ROGER KIERS

#### **Washington State Department of Transportation**

#### Anderson Creek in Context: Setting, Methodology and Stratigraphy at 45KP233

A proposed culvert replacement prompted data recovery excavations at archaeological site 45KP233, which sits at the State Route 16 crossing of Anderson Creek on the southern shore of Sinclair Inlet, an arm of Puget Sound. The

site is near the southern edge of the band of uplift associated with a large earthquake on the Seattle fault, which uplifted marine terraces around Sinclair Inlet roughly 300 years prior to initial site occupation. An excavation block of nine square meters at the water's edge presented unique logistical and methodological challenges, but revealed stratified site deposits including an initial shell-free component, shell midden deposits, and a post-midden historic layer. Although few sites have been previously identified and excavated in the vicinity, the rich ethnographic and historic context demonstrate the importance the area has held for generations.

#### **ROGER KIERS AND SCOTT WILLIAMS**

**Washington State Department of Transportation** 

The Non-Faunal Artifact Assemblage from Anderson Creek (45KP233)

Data recovery of multiple components at site 45KP233 yielded a small but interesting sample of lithic artifacts, bone tools, and historic objects. Stone is most conspicuous in the lowermost shell-free component. Debitage and formed tools indicate that late-stage shaping or sharpening of stone tools occurred during the occupants' seasonal encampments, with at least one episode of obsidian reduction represented. Sandstone abraders and several bone points suggest that wood and bone tools may have played a more important technological role than chipped stone at the site. Historic artifacts from the uppermost midden and post-midden deposits suggest primarily Native American occupation rather than Euro-American, but the historic component does indicate a post-contact change in site use. Data recovery findings from this small hunter-fisher-gatherer camp are summarized, with an eye toward future work.

#### ERIKA RAE KING

**Central Washington University** 

'Lava, Tapa, Tira, Voltea': An Analysis of Discourse and Practice Surrounding Mosquito-borne Illness in Pisté, Yucután

This paper explores disease and the discourse related to treatment of Dengue in Pisté, Yucatán, and a medically pluralistic sociocultural environment. It addresses what kinds of discourses are constructed, by whom, and how individuals respond to the evolution of the sociocultural landscape in regards to environmental risk. How is discourse constructed in various circles, between clinic workers as well as former patients, family members, and the general public? From this analysis I draw conclusions about how discourse is both indicative of how people in Pisté construct medicine, treatment, and environmental risk, as well as how this reflects a global conversation about these topics.

#### **ROXANNA JANE KING**

Washington State University

A cross-cultural analysis of how children learn about witchcraft and sorcery

The purpose of this research is to investigate the modes and processes of social learning involved in the transmission and acquisition of witchcraft and sorcery. Much literature exists on the development of reasoning in natural domains (Carey 2009; Kuhn 1989; Wellman & Gellman 1992) and causal explanatory reasoning (Frazier, Gelman, & Wellman 2009; Lombrozo 2006; Wellman 2012) but there are few sustained, systematic explorations of reasoning in supernatural domains (Legare et al. 2012). Following the approach outlined by Garfield et al (2015), this study relies exclusively on the electronic Human Area Relation Files to investigate the social learning of witchcraft and sorcery cross-culturally. This research addresses debates over when children acquire religious knowledge and from whom they acquire this knowledge. Preliminary results suggest witchcraft and sorcery are primarily learned in early childhood. Parents and older generations are instrumental in transmitting knowledge and practices associated with witchcraft and sorcery to children.

#### PETER KNUTSON

#### Seattle Central College

#### Art and Anarchy in the Community College

In a downwardly mobile world of no guarantees, false promises of progress and inescapable debt, classical anarchist works speak to community college students with an existential relevance. Since the 1999 WTO demonstrations the most popular coordinated studies class at Seattle Central College has been "Art and Anarchy," a transculturative offering which juxtaposes elements such as Butoh and Dada with existential critique in the style of Bakunin, Zamiatin and Ai Wei Wei. As was characteristic of Occupy, horizontal approaches to community and learning effectively spark reflection on daily life amongst these economically marginal students.

#### JON KRIER, KATHRYN NUSS

#### **Oregon State University**

#### Utilization of Multibeam Sonar Data for Modeling Submerged Areas of Archaeological Interest

Due to rising sea levels since the last glacial maximum (LGM), evidence of early human presence along the Oregon Coast has been submerged. The goal of this project is to create higher resolution bathymetric digital elevation models (DEMs) using multibeam sonar data available from the National Oceanic and Atmospheric Administration (NOAA) for two areas of interest along the Oregon Coast chosen for their archaeological potential. Using currently available data, resulting bathymetric DEMs had limited applicability. This study expands the quality of data available for current analysis by archaeologists and provides a framework for further research. More complete bathymetric surveys are needed to better assess archaeological site potential on the Oregon Coast.

#### JENNA LECATES, RAY VON WANDRUSZKA

#### Department of Chemistry, University of Idaho

#### Chemical Analysis of Mysterious Finds

Excavations by historical archaeologists often produce items that defy identification. Sometimes the artifacts are small and fragmented, including scraps of metal, shards of glass, and pieces of pottery. Often they are (almost) empty containers of generic appearance, or artifacts and materials that were initially misidentified. Attempts to solve the mystery through chemical analysis can be both thrilling and frustrating. The thrills come when there is a Eureka! Moment where the evidence comes together to reveal the identity of the object. Frustration may set in when the measurements are inconclusive, or a seemingly promising materials turn out to be only dried mud. Our laboratory has conducted hundreds of analyses of such mysterious finds. The acquisition of artifacts that are worthwhile but puzzling to historical archaeologists, the approach to the analyses, and the chemical detective work that follows, are best described through examples of recent investigations.

#### JORDAN LEVY

#### Pacific Lutheran University,

## Teaching Applied Anthropology in the Era of Donald Trump: Reflections on Collaborative Research with the Washington Fair Trade Coalition.

Grounded in literature on place-based course designs, this paper explores approaches to teaching applied anthropology through qualitative team-based research projects in the Tacoma region. I explore some of the challenges and benefits of designing an undergraduate course where students conduct a collaborative research project with a community partner, and examine the significance of choosing the Washington Fair Trade Coalition to research local perceptions of trade agreements during the first five months of the Trump Administration. For this project students have been involved in the entire rapport building and research design processes – developing research questions; determining

which populations among whom to conduct anthropological research; and how to disseminate research results – alongside the WAFTC and instructor. I argue that while teaching applied anthropology through hands-on projects with community partnerships increases faculty workload, when institutional support is in place, such approaches to experiential learning can produce fruitful results for all parties involved.

#### IAN RICHARD LEWIS

Western Washington University; Seattle Pacific University

Archaeology in the Classroom: How might I use this tool to get rid of the ooey-gooey, bloody bits to make new clothes?

Anthropology and archaeology lend themselves well to incorporation into the STEAM push in many public school programs nationwide. After all, the study of humanity and its long path has certainly involved much Science, Technology, Engineering, Art, and Math. As a professional archaeologist, as well as an intermediate/middle school history teacher, I have found that the use of archaeology in the social studies classroom, as a medium for explaining required standards and texts, both captivates students and engages them in critical thinking and inquiry, in-depth discussion, problem-solving, and hypothesis creation. Also, seventh graders simply appreciate smashing hammer and anvil stones, scraping and cutting leather hide to bits, and pulping cedar with cobble choppers. In another context, art, the exploration of artifacts allows for practice of concepts such as lines, shading, and texture, as well as realism, to name but a few.

#### **CAITLIN LIMBERG**

#### **Central Washington University**

#### Paradigmatic Lithic Classification at Different Site Types on the Slopes of Mount Rainier

Under the existing theoretical model, rockshelter sites on the slopes of Mount Rainier were used repeatedly and were used for a more limited activity set than open-air sites found on the mountain. Rockshelter sites are thought to be places of short-term occupancy consistent with hunting and/or overnight residence activities. This comparison will focus on the distribution of functional and technological traits exhibited by lithic assemblages to determine if rockshelter lithic assemblages are representative of a truncated range of variability compared to open-air site assemblages. These similarities and differences are compared to see if they are consistent with the expectations from the site type's model.

#### **ERIN LITTAUER AND MEREDITH AUSTIN**

**Washington State Department of Transportation** 

Analysis of Invertebrates from Anderson Creek (45KP233): A study of hard and soft substrate species of the intertidal zone on Sinclair Inlet

Shell midden deposition along the bank of Anderson Creek on Sinclair Inlet began shortly after 700 years ago and continued episodically into the historic period. The primary midden deposit, identified as Layer 6, was rarely thicker than 15 cm, but evidence of three sublayers observed during the data recovery excavation suggested changes in midden composition over time. Analysis of invertebrate samples collected during initial site testing had indicated a heavy reliance on hard substrate species, most notably gastropods not readily available from the adjacent intertidal zone. Following data recovery efforts, detailed quantification and analysis of invertebrate samples from Layer 6 provided additional insight on the apparent trend or preference for hard substrate species. Evidence of a sparser, historic midden deposit, Layer 4, indicates continued shellfish exploitation into at least the late nineteenth century.

#### JAMIE LITZKOW, ANNE BOYD, RICHARD BAILEY, AND LINDSEY EVENSON

#### **Bureau of Land Management**

#### Vanishing Images: Finding and Saving Pictograph Sites

There are many ways archaeologists discover pictographs in the field, the main one (obviously) being visual recognition; but what is a researcher to do if the lighting isn't right? Or pictographs are badly faded and covered in lichen and moss? In most cases, undocumented rock art is discovered quite serendipitously as an archaeologist scans cliff faces and the walls of rockshelters. A lot of conditions have to be just right, however, for badly-faded pictographs to be recognized in the field. There is little doubt that even the most thorough archaeologist could be missing important images due to bad lighting, shadows, or poor visual acuity. This presentation highlights the dramatic results that can be accomplished by recognizing areas with a high probability for rock art, photographing potential panels, and applying pictograph enhancing software to bring even the most faded images back into the light of day. Specific examples are provided from a previously unrecorded pictograph site in the Channeled Scablands of Eastern Washington.

#### JAMIE M. LITZKOW AND LINDSEY M. EVENSON

#### **Bureau of Land Management and Transcon Environ-mental**

#### Recognizing Ethnicity at Historic Placer Mining Sites in the Pacific Northwest

Not all placer mining sites are alike. Research conducted over the last twenty years has recognized the potential for placer sites to complete the historical record by addressing questions of population growth, ethnic relations, and socioeconomic pressures. This is especially true in the Pacific Northwest, where the earliest population booms were often fueled by a frenetic search for wealth and independence. The recovery of gold in the region's vast Columbia River drainages drew California 49ers, Chinese, and other groups into a complex political environment. By the time placer deposits were discovered near Fort Colville in 1855, international dramas were already playing out between Native Americans, First Nations peoples, and the U.S. and British governments. This presentation summarizes relevant socioeconomic and political themes, and offers methodologies that can be used to recognize, interpret, and protect placer mining sites with the potential to yield data important to illuminating the role of ethnicity in our local mining history.

#### KIRSTEN LOPEZ

#### **Oregon State University**

#### Archaeology in the 21st Century: Public, Politics and Science

Cultural Resource Management is important in the utility of client compliance and ethics, the value of which is at risk of being challenged. History has shown that archaeology as a field of inquiry has pushed modern understanding of human variation in ways that have changed concepts of human history, North American prehistory, and race. Almost two decades into this new millennium, we are confronted with questions about how we fit into the world we inhabit today—political movements swirl around us as we continue our scientific pursuit and serve clients with much needed compliance contracting—all while our work and message seems lost. This paper brings archaeology to issues of race, class, and climate upheaval, exploring how some recent events such as the Malheur Occupation and Dakota Access Pipeline have pushed archaeology into the public eye, and political arena.

#### LILY LOUCKS, SAFFRON KRUSE, VINCENT WILSON

#### University of Idaho

#### The Tools of James Castle's Art

James Castle was a self-taught artist native to Idaho, whose works were shaped through the experiences of his childhood and adult life. By creatively applying the materials and resources around him, Castle sought art as an outlet and means

of non-traditional communication. The James Castle Project of 2016 was an archaeological collaboration to excavate a portion of his original house site. This poster presents an overview of the materials recovered archaeologically that were Castle's art making tools. This can give greater insight to his creative techniques and how the materials he used reflected his physical surroundings.

#### PAT LUTHER AND THOMAS MARSH

#### Museum of Natural and Cultural History - University of Oregon

#### Above it All: Aerial Imagery Support of Archaeological Research in the Fort Rock Basin, Oregon

Aerial imaging using drone technology has rapidly become less expensive and more accessible to researchers in recent years. Our goal is to share the accessibility of this exciting technology with researchers, as well as to highlight our work in support of Dennis Jenkins and his ongoing research in the Northern Great Basin using aerial imaging taken during the 2016 summer archaeological field school season at the Connley Caves and at Silver Lake, Oregon. High resolution photography was used to map the sites and the ongoing archaeological investigations occurring there. These photos will serve later research purposes, as well as future research planning, activity reporting and archival purposes.

#### **CHARLES T. LUTTRELL**

#### Washington State Parks and Recreation Commission

#### Palouse Falls - Almost Sibling to Snoqualmie Falls Hydro

The official Washington State cataract is 198 feet of natural majesty in an arid and isolated scabland environment. Little known to most Pacific Northwest historians, tribal interests, and Palouse Falls State Park visitors, at least three schemes were put forth in the twentieth century to harness Palouse Falls for hydroelectric development. Two pre-1910 proposals powered rural electric railways. A third plan during the Reagan Administration would have supplemented public power in Franklin County. The impressive setting of this eastern Washington waterfall is yet preserved, but only by surprising events that thwarted earlier would-be entrepreneurs.

#### **KEVIN J. LYONS**

#### Kalispel Tribe of Indians

#### Assuring that the Public Good is Sustainably Served in Public Archaeology

Public Archaeology as a process, rather than as products, has long been held as a National priority. But of late we, the servants of that public trust, witness the capricious appetites of the few tolerated by a feckless many attempt to undo that trust in an effort to make "America [exclusive] again". As a generation of civil service earns its honorable retirement, let us not forget the good they have provided or the mantle of responsibility that remains. From them we have learned the importance of the ethical conduct of research, the fair treatment of our peers, and the transparent sharing of knowledge are the loadstone against which we test the goodness of the process through its products. Though much has been achieved much more still remains in the delivery of our service. If these are indeed the days of a crisis, then let us not waste this opportunity.

#### HANNAH MACINTYRE

#### **Washington State University**

#### Cultural and Social Biases in Educational Access for LGBTQ Public School Students

This study is an attempt at consideration and evaluation of the educational access of LGBTQ students, and the cultural and social influences in the Dallas-Fort Worth Metroplex area. It is largely shaped through the theoretical framework of Judith Butler's Performance Identity Theory, with the linguistic aspects expanded through the consideration of the Sapir-Whorf Hypothesis. It utilizes a multifaceted approach, covering 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 the north Texas, Dallas-Fort Worth Metroplex. The statistical evaluation replicates a national study (Fetner and Kush, 2008) to test the model's viability and utility at a micro level, in the southern region. The study concludes with recommendations for future analyses as well as policy revisions and reforms.

#### MARYANNE MADDOUX

#### **Oregon State University**

#### Diversification in a Time of Adversity

The Wing Hong Tai/Hai Company was a mercantile, laundry, and gaming house in The Dalles, Oregon which operated through the late 19th and early 20th centuries. During the Chinese Exclusion Era (1882 -1943) racial tensions and constantly changing laws impacted the daily lives of Overseas Chinese individuals in the Western United States. As foreign business owners the Wing Hong Tai/Hai Company partners faced obstacles which impeded their economic success in The Dalles. Despite historical documentation that originally depicted the business as a laundry, the Wing Hong Tai/Hai Company partners provided varying services depending on their financial needs and the demands of their customers. As innovative entrepreneurs the partners circumvented scrutiny and legal pressure by diversifying their business. The experiences of the Wing Hong Tai/Hai Company partners are recorded within historical documentation, the archaeological record, and the extant environment.

#### **MAURICE MAJOR**

#### Washington Department of Natural Resources

Wherever They're Naming a "There" of Theirs: Native place names, landscape features, and refining archaeological expectations in a sea of "high risk."

Washington's current archaeological predictive model classifies wide buffers inland of coastlines and around rivers and streams as "high risk," but we know that humans prefer particular habitats and that Northwest Tribes developed deep cultural relationships with certain landscape features. Native place names have been used to identify specific archaeological sites, but looking beyond that, physical attributes of named places on the Pacific Coast and mid-Columbia River show that archaeological potential changes with the terrain and environment of marine coasts and rivers, and that as distance from the water's edge increases, the archaeological record diminishes or changes in ways eluding the model. Landscape features identified by this analysis are proposed as a means to assess archaeological potential and suggest likely feature types. I wish to thank the Quileute Tribe and Confederated Tribes of the Umatilla Indian Reservation for their generosity with their cultural heritage.

#### **OLIVIA "MORGAN" MANUSIA**

#### **Eastern Washington University**

#### Research in Identity and Video Games

This research explores how socially privilege or marginality affect the way players interact with and think about single player role-playing games. There is little research done about these issues in single-player role-playing games; this study aims to help close that gap. Players' social identity and life experiences shape their experiences of the stories and themes in video games. This research builds on an exploratory project I did which suggested that an individual's social identity has an effect on how players think about choices and non-player characters in Fallout 4. This study uses semi-structured interviews, both in person and over Skype with players to explore dialogues and discourses about these issues in relation to the Dragon Age series and the Mass Effect series. Through these interviews this project brings to the forefront counter-narratives from those who are not portrayed positively, frequently or accurately in video games.

#### **KENDRA MARONEY**

#### Kalispel Tribe of Indians

#### Ground Penetrating Radar at 45PO153: Stratigraphic Analysis

Ground penetrating radar (GPR) was conducted at residential site 45PO153 along the Pend Oreille River in the spring of 2016. GPR was first used as a reconnaissance survey tool to identify possible areas of interest for excavation. It is a tool often used to recognize subsurface anomalies or targets to be further analyzed through excavation. This survey method can be particularly useful for the identification of substrate changes, as might be observed with house floors or cooking features. After the GPR survey was completed, four test unit blocks were excavated in the area. The GPR data was reexamined so that GPR profiles could be correlated to the excavations. The radar profiles were aligned with the excavation units, and directly evaluated with stratigraphic profiles. This re-entry to the data allowed for ground truthing of our remote sensing method and a different perspective on real substrate changes.

#### **RACHAEL MARTIN**

#### **Central Washington University**

#### SQUIRREL! An Experiment on Mammal Bone Decay in Acidic, Alkaline, and Neutral Solutions

This experiment modeled mammal bone preservation in extreme pH value soils. The preservation process was simulated using liquid solutions of vinegar (pH 3) and ammonia (pH 11) to represent low and high a pH values, while tap water (pH 7) was used as a control. Two femora from each of three ground squirrels were placed in the three solutions for 23-hour periods over 13 days, weighing them daily. All bones lost weight over the course of the experiment, with the acidic solution showing the most weight loss. Weight loss in alkaline solution was not much different than loss in neutral water. These results are similar to prior experiments showing greater bone decay in acidic soils.

#### **NATHAN J. MAY**

#### University of Idaho

#### Constructive Play: Fort Boise, Archaeology, and Children's Toys

This paper examines children in the archaeological record in a military context during the Victorian age in the United States. The objective of the paper is to identify children and adolescents' to the archaeological record (whether the toys were commercially manufactured or were homemade objects of amusement), and to describe the relationship children had to these toys as instruments of instructions. In addition, this paper will be drawing evidence from the University of Idaho led 2014 excavations of the Surgeons Quarters at Fort Boise.

#### **BRANDON MCINTOSH**

#### Department of Anthropology, Washington State University

## What Doña Ana Phase and Modern Jackrabbits (Lepus californicus) Can Tell Us About Climate Change in the Southeastern Southwest

This paper documents the environmental conditions of the Tularosa Basin/Hueco Bolson during the Late Formative Period in the Jornada Mogollon Region of the U.S. Southwest by comparing stable carbon isotope values of black-tailed jackrabbits (*Lepus californicus*) from archaeological site LA 12361 to modern jackrabbits in southern New Mexico and west Texas. Recent research by Smith and his collaborators show that carbon isotope values of jackrabbit bone collagen produce an effective proxy for plant communities, and by extension environmental conditions, within which these herbivores foraged. It is possible not only to understand jackrabbit diet and environmental conditions in prehistory, but also to compare dietary and environmental proxies with modern jackrabbit carbon values to document environmental change since the 13th Century. Additionally, a discussion of stable hydrogen isotope analysis for differentiating between C4 or CAM plants in jackrabbit diets will be presented as a method to increase interpretive precision of environmental variability.

#### DANIEL MEATTE AND SCOTT WILLIAMS

#### Washington State Parks and Washington State Dept. of Transportation

#### CAVEAT EMPTOR: A History and Technological Analysis of the Rutz Clovis Point

On Nov. 9, 2013, the final gavel fell at auction of the Rutz Clovis Point from East Wenatchee, Washington. Its selling price at the Morphy Auction House in Denver, Pennsylvania, was \$276,000 - the most ever for a single prehistoric stone artifact in North America. It may also have set a new record for stretching the truth. The Rutz Clovis Point appears in a number of professional publications about Clovis-age assemblages and technology. Yet, it has never been adequately described, its provenience documented, nor any technological analysis of it undertaken. This paper traces the history of the Rutz Clovis point since its reported discovery in the 1950's. It then compares this history with the results of a technological analysis of the point. We conclude the point is a fake or a prehistoric biface recently modified into the shape of an oversized Clovis point.

#### **SHANNON MEYER**

#### University of Washington-Anthropology Honors Program

#### Complicated Autonomies: Disability, Family, and Medical Decision Making

Complicated Autonomies: Disability, Family, and Medical Decision Making looks at the ways in which complex interpersonal relationships between medical professionals, family members, and disabled persons affect the medical care received by people with disabilities. It explores power and control, both in the context of family and clinical environments, looking at how the cultural construction of disability plays into the practice of medical decision making, and ultimately their effect on the enactment of medical care for people with disabilities throughout their lives. Through interviews and focus groups, this project works to create narratives, and explore how these narratives interact, using a critical feminist disability studies lens. These complicated autonomies, influenced by sociocultural conceptions of disability, dynamics of family interaction, and perceptions and practices of medical professionals become the lived experiences of disabled people, and fundamentally altering the ways in which they receive care.

#### **MINA MINA**

#### **Edmonds Community College**

#### Humanizing Narratives to Bring About Holistic Understanding of the Past: An Oral History Project

Growing up as a member of an Egyptian minority, I have been oriented with stories that give a different perspective on Egypt's history -- one that raises attention to a history of oppression. For the past five years, my interest in gathering such stories has led to undergraduate research on Coptic identities at the U. of Washington and then motivated me to return to Edmonds CC to assist with a local oral history project. This project, initiated by Dr. Thomas Murphy, empowers different, local communities to tell their own history, and to give the students an opportunity to conduct anthropological studies through interviews. In conducting oral histories, the complexity of in-person communication produces a dynamic account, which allows a personalized history that future generations can value and relate to, and one that allows future analysts to hear the life stories of the history creators that propelled their actions.

#### MARCI MONACO AND MEGHAN JOHNSON

#### **Archaeological Investigations Northwest**

#### Dittman Biface Cache Simulation: Caching a Database for Future Studies

Experimental replication of the bifaces recovered from the Dittman Biface Cache site (35MA375) located near Salem, Oregon, provided information to help answer lithic technological questions. This study attempts to determine possible reduction strategies and technologies employed in the manufacture of obsidian bifaces through the examination of experimental debitage. The author's simulated reduction of the bifaces recovered at the Dittman site in two phases.

Phase one consisted of the initial reduction; recreating what occurred at the quarry. The individual reductions were timed, collected, and analyzed. In phase two, the authors reduced bifaces using two reduction techniques; core reduction with the focus on producing usable flakes and bifacial reduction with the intent of producing a percussion bifacial tool blank. The debitage was analyzed to identify platform attributes, dorsal scars, curvature, shape, and size of flakes. Our goal was to determine how the bifaces were made and for what purpose they were used.

#### **MARCIA MONTGOMERY**

#### CH2M

#### Managing Historic Properties in Spokane's Riverfront Park

Spokane's Riverfront Park is on the site of the 1974 World's Fair. The environmental-themed event became a platform to reclaim Havermale Island and other industrial areas surrounding the Spokane River for post-fair use as a park. Reclaiming this land as a park was a concept first introduced decades before by the Olmstead Brothers. After the fair, the City redeveloped the Expo '74 site opening Riverfront Park in 1976. In 2016, Expo'74-related resources were determined eligible for listing in the National Register of Historic Places as a historic district for their exceptional importance. The identification of this less than 50 year old historic district occurred after the development of the City's Master Plan (2014). This presentation describes the identification and preservation planning process developed by CH2M in collaboration with the Spokane City Parks Department and Spokane Historic Preservation Office to integrate historic preservation planning into the park's future.

#### **ASHLEY M. MORTON**

#### Fort Walla Walla Museum

#### Archaeological Investigations into Spokane's Riverfront Park

Led by Fort Walla Museum's Heritage Research Services and the Spokane Tribe of Indians Preservation Program, two archaeological surveys to date have been conducted in Spokane's Riverfront Park in fulfillment of a SEPA review and DAHP archaeological excavation permit to support the City of Spokane Parks and Recreation Departments Riverfront Park Redevelopment Project. This paper discusses methods and findings while surveying and testing in the park's Gondola Meadow and around the Looff Carousel. Discussion will focus on the identification of two historical-period sites and one National Register eligible feature, a ca. 1890-1913 blacksmith activity area (45AP794).

#### ASHLEY M. MORTON

#### Fort Walla Walla Museum

## Before the Riverfront Park: Historical Research into Early Modern Spokane's Development and Settlement in and Around the Falls

This paper explores historical research results from a detailed assessment on the archaeological potential in Spokane's Riverfront Park conducted for the City of Spokane's Parks and Recreation Department. Numerous records, from the decennial federal census and city directories to historical Sanborn Fire Insurance maps, were compiled to reveal the park was once home to a dynamic, ethnically and socially diverse group of people amidst an industrially and commercially mixed landscape. From mills and railroad depots to hotels, saloons, city government buildings and a Chinatown, we'll explore early modern development surrounding the Spokane Falls.

#### **JOSH MOSS**

#### SWCA Environmental Consultants, Portland

#### Refining an Automated Model for Basic Landform Classification

A geomorphologic landform classification is useful as a broad mapping guideline for a variety of land use and environmental planning applications, with a variety of specific uses within the fields of archaeology and anthropology. Existing automated models based on Digital Elevation Models (DEMs) are not available as tools compatible with ArcGIS and they introduce errors into the classified landform layer. This paper will present an improved method of classifying landforms from DEMs as well as a tool for ArcGIS that is optimized for functionality based on an original Python script. The improved model will be verified by comparison with landform classification conducted through photographic interpretation.

#### **AMELIA MARCHAND**

#### Colville Tribes

#### Efforts of Environmental Justice and Regulation on the Colville Indian Reservation

Environmental regulation within Tribal jurisdictions is an ongoing effort to speak and educate professionals in a cross-cultural manner. Implementing compartmentalized regulations upon societies whose culture is holistic and place-based is challenging, with efforts to raise cultural awareness and respect tribal traditions rewarding experiences. This discussion will view aspects of anthropology and the intersecting facets of climate and environmental justice, federal Indian law, cultural resources, and civil rights on the Colville Indian Reservation. Examples of current work projects on food sovereignty and climate change from the perspective of an environmental regulator – who is a Tribal woman – will be shared.

#### THOMAS MURPHY

#### **Edmonds Community College**

#### All of our Relations: Indigenizing Bioanthropology and Archaeology

As a cultural anthropologist teaching bioanthropology and archaeology, I have employed various strategies for bringing social and environmental justice into the pedagogy of the biological sciences and field archaeology courses. Over the past two decades collaborations with Coast Salish tribal communities and municipal governments have enabled conversion of lecture-based bioanthropology courses into lab and field-based experiences through which students support the work of local tribes and municipalities in the application of traditional ecological knowledge to sustainability challenges in their own neighborhoods. Field courses in human ecology and archaeology provide more intensive experiences for students to work alongside tribal elders and municipal staff. Highlights of these partnerships include archaeological and ecological projects that helped bring salmon back to Japanese Gulch, near the site of Point Elliott treaty; construction of stalijxwáli (Place-of-Medicine) Ethnobotanical Garden and q'wəld'ali (Place of the Cooking Fire) Cultural Kitchen; and field schools in support of Tribal Canoe Journey.

#### JESSICA A. MYLAN

#### Western Oregon University

#### Sustainable Tourism in Costa Rica: Aligning Tourists' Interests with Local Development

One quarter of Costa Rica's export income comes from ecotourism which is the country's most prominent form of tourism. This poster showcases the local tourist attractions, landscapes, and services eco-tourists utilize during their travels to Costa Rica. It draws on pictures, participant observation, and oral interviews to highlight the major attractions and interests of locals in Tárcoles, Carara National Park, and Jaco along the Pacific Coast. It also illustrates the ways in which tourists traveling to Costa Rica can benefit the lifestyles of the community through the promotion of

its members' human welfare through a sustainable use of the natural environment. It argues that there are opportunities in Tárcoles for the community to take advantage of the tourists visiting nearby attractions and also develop sustainable services that preserve the environment and create economic benefits for locals.

#### **AARON NAUMANN**

#### **Confederated Tribes of the Colville Reservation**

Intro to Tribal Sovereignty, Capacity Building and supporting Native American Self-Determination thru Cultural Resource Management

The interaction between Native American tribes and the United States government has been predicated on nation-to-nation recognition, as witnessed through the presence of such instruments as treaties. Unfortunately, these relationships have been far from equitable. The federal government's legal and moral imperative stemming from the recognition of its historic and continuing affliction of injustice is partly captured in its "federal trust responsibility" to Native Americans. These responsibilities have been codified over the last forty years into directives instructing federal agencies to provide Native American tribes the necessary resources to build capacity in support of self-determination. While mostly this concept is discussed at the governance level, it is actually meant to be applied at all levels including the management of cultural resources. It on the basis of these directives that Lawr Salo has operated, and it is hoped through his example others can find inspiration to continue this important work.

#### AARON J. NAUMANN OR JACQUELINE M. COOK

#### Introduction to the Confederated Tribes of the Colville Reservation, History/Archaeology Program

The Confederated Tribes of the Colville Reservation consists of the Wenatchi, Entiat, Chelan, Methow, Moses-Columbia, Sanpoil, Nespelem, Okanogan, Lakes, Colville, Palus, and Chief Joseph Band of the Nez Perce. This presentation provides an introduction to the history of our people and the work being done at the Colville Tribes' History/Archaeology Program.

#### TRISH HACKETT NICOLA

#### **Family Traces**

#### The Chinese in Spokane's Riverfront Park Area

The Chinese Exclusion Act was enacted to limit the number of Chinese, specifically laborers, from entering the United States and to keep those already here from becoming naturalized. It was in effect from 1882 to 1943. This legislation created thousands and thousands of files on Chinese whether they were born in the United States or immigrants. Many of the Chinese who lived and worked in Spokane's Chinatown are included in the Chinese Exclusion Act case files at the National Archives in Seattle. The files contain biographical information and usually a photo. Because Caucasian and Chinese witnesses were required for testimony, the files can contain the information on the working relationships between the White business owners and the Chinese and their families. This presentation will explain the Act and present examples of Spokane's Chinese community and their interactions with their White neighbors.

#### **CHRISTOPHER NOLL**

#### Idaho Archaeological Society

Low Density Doesn't Mean Low Value: Evaluating the Significance of 10CR179, a Low Density Site in the Mountains of South-Central Idaho

In 2016, Versar conducted a survey and site evaluation project along Sage Creek, in the Lost River Valley of south-central Idaho. Subsurface survey revealed a low density scatter of chipped stone tools and debitage. Despite the low quantity of identified artifacts, they exhibit a high degree of raw material variability. A temporally diagnostic projectile

point fragment indicates that the site was occupied between 700 and 150 years ago. Analysis of the assemblage identified indications of horizontally discrete tool maintenance areas. Based on the raw material pattern, age, and probable activity at this site it was likely an integral part of a seasonally organized resource procurement system. The site serves as an important example of a key piece of the subsistence system that can only be recognized through careful analysis of a unique, but low density, artifact assemblage.

#### PATRICK O'GRADY, PH.D.; SCOTT THOMAS, M.A.; CAROLYN TEMPLE, M.A.

University of Oregon Museum of Natural and Cultural History; Burns District Bureau of Land Management Broadening the Focus: A Look at the Paleoamerican Surface Assemblage at Rimrock Draw Rockshelter (35HA3855) in Relation to the Burns BLM District at Large

The Burns District Bureau of Land Management and the University of Oregon Archaeological Field School have been conducting surveys at Rimrock Draw Rockshelter and surrounding environs since 2005, often in collaboration with volunteers from the Oregon Archaeological Society. These efforts have resulted in the recovery of over 75 temporally diagnostic Paleoamerican artifacts in the vicinity of Rimrock Draw. Survey and inventory by BLM agency personnel in other portions of the Burns District has yielded approximately 1400 more, with some portions of the district producing significantly higher numbers than others. This presentation will touch upon relationships between the surface archaeology of Rimrock Draw in comparison with patterns for Paleoamerican sites elsewhere on the district, examining the frequencies of point types, breadth of obsidian source use, temporal indications as expressed through obsidian hydration, and upcoming research plans.

#### **MARGARET O'LEARY**

#### Western Washington University

#### Analysis of Bone Marrow and Grease Extraction at Site 45WH055

Bone marrow and grease extraction provides an invaluable nutritional resource for human populations. This study analyzes bone fragmentation to determine extent of marrow and grease extraction from mammal and bird remains at a coastal Late Locarno Beach Phase site, 45WH055. Traditionally, studies on fragmentation focus on identifiable elements and tend to ignore indeterminate fragments (Outram 2001). 45WH055 is highly fragmented, making it difficult to determine element or species for the majority of material. Adapting methods developed by Outram, I examined cancellous versus diaphysis bone, longest length of individual fragments, and the distribution of appendicular, axial and cranial bone to reveal how indeterminate fragments can illuminate the extent of bone processing. The study of marrow/grease extraction through fragmentation patterns demonstrates the importance of bone fat as an essential resource during the Late Locarno Beach Phase. Additionally, this study demonstrates that indeterminate fragments can bolster a traditional faunal analysis.

#### **TABITHA ORMAECHEA**

#### **Eastern Washington University**

#### Forced Sterilization in Australia and the Question of Human Rights

Forced sterilization is and historically has been a political tool used as a means of regulating the growth of the "undesirable" populace in an effort to improve their race. The global eugenics movement of the early twentieth century was heavily influenced by the ideology of Australia. Through the years those who have been targeted have varied based on the interests of the Australian government. The paper analyzes the historical framework of this practice and how this practice has evolved into a globally contentious human rights issue. Forced sterilization is a practice that has been condemned by nearly all developed nations, NGOs and the UN yet Australia continues the usage of this practice. These various political actors cite this practice as a blatant human rights violation and have taken many steps

to stop the use of forced sterilization. In this paper I present the exploration of the differing philosophies and analysis of the actions by the various global political actors in an attempt to terminate the use of this sordid political tool. My paper also include the Australian government's reactions to these condemnations and how the government justifies the continued use of this controversial political practice.

#### MAKAELA O'ROURKE; SCOTT THOMAS

Museum of Natural and Cultural History, University of Oregon, Burns BLM

Pottery at Skull Creek Dunes, and its Implications for Pottery Tradition in Southwestern Oregon

Prehistoric pottery is rare in Oregon, and the presence of pottery at the Skull Creek Dunes site in Catlow Valley of Southern Oregon is potentially important. This paper builds on the previous excavation and research by Scott Thomas of the Burns BLM and describes the pottery and work done on it since. These sherds represent one of the oldest pottery traditions in Oregon, and were likely made on site. Initial dating places the site around 1250 CE. In addition to the sherds, small possible gaming pieces and fired clay cones were also discovered at the site, as well as lithic and faunal components. Although previously thought to be Shoshone due to an associated site, this paper also explores the possibility of a Fremont origin for this pottery.

#### THOMAS OSTRANDER

#### **Environmental Science Associates**

#### N=1: The Power of Charismatic Artifacts

Modern archaeological research favors quantitative analysis of large statistically significant data sets. Singular artifacts are often relegated to obscurity in the site catalog. While data driven analysis has revolutionized the field, charismatic artifacts (i.e. artifacts capable of evoking a human connection to a time, place, or event) are a tool that cannot be discarded. They present the most direct opportunity to actively engage the public, conveying a sense of place and providing a relatable human connection to our ancestors – crucial elements in fostering a respect and interest in heritage. This talk will focus on four such charismatic artifacts (a chisel, a shoe, a doll, and a bone) that greatly facilitated the interpretation of the sites they were recovered from. This talk will use these examples to show how charismatic artifacts can best be integrated into archaeological reports to provide independent talking points for more effective media and community engagement.

#### THOMAS OSTRANDER, AJA SUTTON, AND MICHAEL BEVER

Environmental Science Associates, Unaffiliated, Environmental Science Associates

A Case Study Evidencing Precontact Reinterment of Inadvertently Discovered Human Remains.

In 2015, a burial containing the ancestral remains of an adult male was inadvertently discovered in the Bay Area town of Hillsborough, CA, within a large shell mound; site CA-SMA-78. The site contains a significant number of intact burials and scattered remains within and below a thick midden. A pit feature with blackened bone and charcoal was found adjacent to the facedown partially intact skeleton. Analysis of the pit's contents revealed butchered elk bone and the majority of the adult male's lower limbs. Precontact disturbance of burials within a heavily utilized site is not unusual; however, relocation, low heat burning with faunal material, and subsequent reburial, has not been previously observed and appears to be evidence of ritualized reinterment. This burial provides a rare view into precontact treatment of inadvertently discovered bone, suggesting that past peoples in this geographic area may have held physical human remains in reverence.

#### TERRY L. OZBUN AND JOHN L. FAGAN

AINW (Archaeological Investigations Northwest, Inc.)

#### Reading Flakes and Flake Scars

Reading the ancient language of lithic reduction technologies from archaeological assemblages of flakes and flaked-stone tools reveals cultural information about the people who made them. For archaeologists, lithic literacy begins with understanding the basic anatomy of flakes and flake scars. Variability in the expression of this basic anatomy directly reflects past cultural choices of people practicing a technological tradition. Direct analogy through experimental flintknapping and stone tool use provides a basis for understanding the range of technological choices available at each step of a complex process. Practiced flintknappers learn to recognize the structure of a technological system, including its failures and successes, indelibly written into the attributes of flakes and flake scars. We propose a framework for combining analyses of flake attributes, types, and assemblages for an anthropological understanding of lithic technologies.

#### KIRK PACKWOOD

#### **Independent / University of Montana**

#### Superstructural Fluctuations: The Cult of Kek, Memes, and the 2017 Presidential Election

Orthodox interpretations of base-superstructure theory posit that transformations in the economic base of a society must be reflected in the superstructure. The world's first significant online religion, The Cult of Kek, emerged organically in 2015 among the Alt-right in large part to promote the election of Donald Trump to the United States presidency using modern Internet memes. Memes are defined and bounded replicating units of cultural information which in the modern era have become extremely popular as a method of passing humor - often mixed with and related to political beliefs. Firsthand ethnographic work within the Cult of Kek suggests memes have the power to alter the political landscape significantly. The extremely odd emergence of the Cult of Kek was made possible by a shifting of the economic base of Western nations toward a digital information-based economy.

#### SARA E. PALMER

#### Washington State Department of Natural Resources

#### Using LiDAR Data for Archaeological Recon: Tips and Tricks

As Washington state LiDAR data comes online for public use, you'll want to make this powerful tool part of your archaeological survey kit. Learn some field-tested techniques for LiDAR use and get an update on DNR's plans for upcoming LiDAR data releases.

# ANWESHA PAN, DARRYL HOLMAN, YESENIA NAVARRO, BAISHAKHI BASU, CARA SKALISKY, AND KATHLEEN O'CONNOR

#### Department of Anthropology, University of Washington, Seattle

#### Effects of reproductive hormones on pregnancy-related sickness in rural Bangladeshi women.

We examine the association between reproductive hormones and nausea, vomiting and dizziness in pregnancy. Twice weekly interviews and urine specimens were collected from 203 women across pregnancy. Repeated measures logistic regression estimated the effect of urinary concentrations of estrone conjugates (E1C), pregnanediol-3-glucuronide (PDG) and human chorionic gonadotropin (hCG) on the probability of each symptom, after controlling for age. Increased concentrations of E1C were found to reduce all three symptoms. Higher hCG concentrations increased the probability of nausea and vomiting. Older women were less likely to experience nausea and dizziness. Overall prevalence's of nausea and vomiting are low compared to other populations. The dizziness symptom paralleled the timing of nausea and vomiting in pregnancy, but occurred at higher frequencies.

#### **MADILANE A. PERRY**

And the Dig Goes On, and On and On...

Archaeological site 45FE71 on northeastern Washington State's Curlew Lake includes an original homestead cabin which is the oldest and the only homestead-related structure on the lake. By the mid1990s it was obvious that the cabin's continued survival required replacement of the failing 1953 foundation. The site includes homestead and mid twentieth century material as well as earlier aboriginal components. The necessity of disturbing this material to replace the foundation led property owner and archaeologist Madilane Perry to attempt excavation for the foundation replacement as a controlled archaeological excavation. From the initial 1994 soil auger tests to the ongoing work along the cabin's interior walls, the excavation has continued as time and funds became available. Excavation and analysis are incomplete but some possibly useful information, including what appears to be the first radiocarbon date from the Curlew Lake Basin, has been produced.

#### MARY PETRICH-GUY AND RENAE CAMPBELL

University of Idaho

James Castle House Archaeology Project: Public Place in a Small Work Space

Self-taught artist, James Castle, lived his entire life in Idaho (1899-1977). From a young age, he created his works from everyday materials, such as mail, matchboxes, pages of siblings' homework, and found or made objects. Castle moved to Boise with his family in the 1930s. While at this house, he used a converted chicken coop/shed as a private workspace and residence for many years. In October 2016, archaeologists from the University of Idaho (UI) collaborated with the James Castle House, Boise City Department of Arts and History, Boise National Forest, Idaho Archaeological Society, and Versar, Inc. to investigate Castle's shed workspace in hopes of better understanding the context of James Castle's life. During a one-week public archaeology project, UI staff, Idaho students, and pubic volunteers conducted field investigations of the former Castle property, and excavated in and around Castle's primary workspace, the shed.

# LORI PHILLIPS, STEVEN HACKENBERGER, SHANNON TUSHINGHAM, KOREY BROWNSTEIN, AND DAVID R. GANG

Department of Anthropology, Washington State University; Department of Anthropology, Central

Washington University; Institute of Biological Chemistry, Washington State University

Title: From their Pipes to Curicaueri: Tobacco Use Among the Ancient Tarascans

Residue analysis has been used within Mesoamerican archaeology to look at topics ranging from ceremonial usage of cacao to the chemical composition of Maya Blue pigment. Surprisingly little research has been conducted on the usage of medicinal or ritually smoked plants despite the fact that iconographic and ethnographic accounts describe the importance of smoking, specifically tobacco, among the Maya, Aztec, and other indigenous groups. We investigated this topic by examining tobacco use among the ancient Tarascan's through residue analysis of experimental and archaeological pipes. This research not only adds to our knowledge of Mesoamerican ritual and medicinal practices but also to the growing literature of indigenous uses of psychoactive plants.

#### LORI PHILLIPS, ERIN THORNTON, KITTY EMERY, AND CARLOS PERAZA-LOPE

Department of Anthropology, Washington State University; Florida Museum of Natural History, University of Florida; Centro Instituto Nacional de Antropología e Historia

Talking Turkeys: Stable Isotope Analysis of Turkeys from Postclassic Mayapán

The ancient Maya utilized two species of turkeys: the Ocellated Turkey (Meleagris ocellata) native to the Yucatán Peninsula, northern Guatemala, and northern Belize and the Common Turkey (Meleagris gallopavo) from Central

Mexico. The exact timing of Common Turkey domestication and its introduction to the Maya area is unknown, although evidence from the Preclassic exists. The Ocellated Turkey was never domesticated but many scholars have proposed it may have been managed by the Maya. To understand the human–turkey relationship, particularly management strategies and contextual usage, we used stable carbon and nitrogen isotope analysis of turkey remains from the Postclassic site of Mayapán. Our results show the presence of both species; however, isotopic analysis reveals a difference in diet between the two, interpreted here as a difference in animal management strategies. In this paper, we discuss these isotopic differences and the implications they have for understanding ancient Maya human and animal relationships.

#### **DANIEL J POLITO**

#### University of Idaho

#### Lithic Debitage Analysis of the Kelly Forks Work Center Site (10CW34)

Lithic debitage analysis can be key to understanding the past lifeways of hunter-gatherers, especially those behaviors related to site activities, mobility, exchange, and settlement patterns. Lithic debitage is the direct result of discrete episodes of human behavior and is most likely deposited into the archaeological record at the location of the enactment of these manufacturing and curation activities. The Kelly Forks Work Center site (10CW34) in the Clearwater River National Forest is an ideal site to analyze the lithic debitage to investigate these lifeways (n=16,252). Twenty-six radiocarbon dates, ranging from 13,740 to 280 cal. BP, documented recurring occupations of the site beginning in the early prehistoric period and continuing through the middle and late-prehistoric periods into historic times. An aggregate and attribute analysis of this debitage assemblage was performed to infer the aforementioned behaviors and their significance to the site and region as a whole.

#### **JOHN POULEY**

# "Please Contact Me If This Is of Interest to You" An Introduction to the Dittman Biface Cache (35ma375), the First Recorded Biface Cache in the Willamette Valley

During a summer landscaping project, a Salem, Oregon area landowner encountered the first biface cache discovered in the Willamette Valley. At the time, the landowner was unaware that his weekend project would attain notoriety across the state, country, and even abroad. Due to his stewardship, and willingness to report his find, university, tribal, federal, state, and contract archaeologists from throughout the northwest collaborated, donating their time and services. Of approximately 32 biface cache sites in Oregon (of ≈40,000 sites), 35MA375 is possibly now the most well documented. The site possesses the ability to contribute important information on prehistoric trade routes, trade items, and insight into how the landform was utilized by the Santiam band of the Kalapuya. The initial contact between the landowner and the State Historic Preservation Office and a brief summary of the subsequent events that transpired are addressed in this introduction to the Dittman Biface Cache (35MA375).

#### **JOHN POULEY**

#### The "Value" Of the Dittman Biface Cache (35ma375): Public Outreach and Archaeological Awareness

Investigating the Dittman Biface Cache (35MA375) attempted from the onset to include public outreach and archaeology awareness. The landowner, who is a teacher, used the archaeological excavations on his property as a fieldtrip opportunity for his students. Oregon Public Broadcasting (OPB) sent a reporter to record the story. Oregon Parks and Recreation Department (OPRD) sent communications staff to collect video, photos, and information for a later press release. The media exposure covered all of Oregon, most of the United States, and was even referenced in a London news broadcast. Numerous landowners across Oregon contacted SHPO after hearing about the site through one form of media or another, to report archaeological sites on their property, or, if they had a collection of artifacts

that they wished to return to an area tribe. Additional public outreach is planned regarding some of the amazing background research associated with the landform containing the site.

#### JOHN POULEY AND MATTHEW DIEDERICH

#### **Oregon SHPO**

Revisiting Eligibility Trends of Archaeological Sites in Oregon 2012-2016: A follow-up to the 2012 NWAC presentation

In 2012, archaeological site eligibility recommendations and determinations from 1966-2011 were presented at the Northwest Anthropological Conference in Pendleton, Oregon. Regional and temporal patterns as well as suspected biases relating to site type or age (e.g., prehistoric or historic) were addressed. In 2017, data from the last full five years (2012-2016) are compared against the patterns identified in 2012. The comparison will address whether the same patterns persist, or if different, due to what potential causes.

#### MICHELE PUNKE

#### Historical Research Associates, Inc.

Holocene-Age Archaeological Site Potential and Preservation in Sediment Traps of Central Oregon

Sediment accumulation in the uplands of the Plateau and Great Basin is discontinuous and often unpredictable. This paper discusses areas of sediment accumulation at archaeological sites in the uplands of central and north-central Oregon as they relate to early human occupation of the area and preservation of the archaeological record.

#### **DAVID G. RICE**

Senior Archaeologist, Us Army Corps of Engineers (Retired)

A Paleoindian Archaeological Assemblage from A Late Pleistocene Flood Deposit Derived from The Last

Channeled Scabland Floods Across the Columbia Basin in The Horse Heaven Hills, Benton County, Washington In 1978 an unusual discovery of artifacts from a unique setting was made during archaeological monitoring for ground disturbance at a housing development on private lands in the Horse Heaven Hills near Richland, Washington. An assemblage of 24 associated lithic artifacts was recovered from a late Pleistocene high-energy turbidite flood deposit, redeposited from receding glacial Lake Lewis, at a time when there was a considerable lake stand behind Wallula Gap in the Pasco Basin of eastern Washington. The enclosing sediment contained rhythmite geological features that correlate to the events of multiple channeled scablands flooding (commonly known as the "Lake Missoula Floods") across eastern Washington during the late Pleistocene. After more than 40 years of searches across the Columbia Basin by several researchers, it is now confirmed that the last Missoula floods were witnessed by native indigenous peoples, who may have died from the catastrophic and sudden effects. The 24 lithic artifacts include a variety of chipped and ground stone tools related to an early, pre-Clovis, expression of the Western Stemmed Point Tradition. These waterborn specimens bear evidence of edge damage and water polish effects from the impact flood, as well as having been redeposited later from lake shore slumping from receding waters. Stratigraphic associations, dated by others, place limiting dates for this artifact assemblage as early as 15,400 calendar years B.P. to as late as 13,300 calendar years B.P.

#### **KATIE RICHARDS**

Washington State University

In Search of Chocolate in the American Southwest: Residue Analysis of Ceramics from an Early Pueblo I Site in Southeastern Utah

Alkali Ridge Site 13 is one of the largest and earliest known Pueblo I sites in the American Southwest. Located in southeastern Utah, the site was originally excavated by J.O. Brew in the early 1930s. Recent residue studies on

pottery from Site 13 have shown surprising evidence for cacao at this early site. If correct, this would push back the earliest evidence for cacao in the northern Southwest by hundreds of years; however, the vessels tested have resided in museum collections for over 80 years, and there is a concern with possible contamination. Recent excavations at Site 13 in 2012 and 2013 have provided new and more controlled datasets to test for cacao residue. These newly excavated sherds were tested for cacao residue using UPLC-MS, and while none of the biomarkers of cacao were found, there is evidence for nicotine at this early Pueblo I site.

#### KIM RICHARDS

#### Eastern Washington University,

#### The Tale of Two Cities

Academia has wrestled with the concept of objectivity since its inception. It assumes that we as researchers are somehow above human emotion and are able to remove ourselves from our own epistemologies and bias. Even as the Holy Grail of objectivity begins to crack and crumble it continues to shape the way we interact, work with, and even find our research topics. Today many think of research as a buffet, in which we have endless options, where we can choose to do what we want, with whom we want and the only consequence will be bad indigestion. Yet, there is a growing number of researchers who are guided by the needs and desires of community, where research can me revitalization, healing and even decolonization.

#### DR. KALI ROBSON

#### Mapping Traditional Cultural Plants on the Colville Reservation.

Are traditional cultural plant populations being damaged by the droughts, wildfires and ferocious storms that accompany climate change? Are the plants doing well in spite of this, or do some need protection, or even restoration? To answer these questions, we must ask the plants. In 2016 the Traditional Cultural Plant Team began monitoring some of the best-known and most important herbaceous perennials, including bitterroot, Indian potatoes, camas, and more. We selected known locations for these species and established permanent 25-meter transects through representative populations. Ten one-square-meter plots were randomly selected from along each transect, and the percent cover for all plant species (including weeds), plus non-living variables, were estimated for each plot. For the focus species, we collected demographic data, counting individuals within each plot. When possible, we separated numbers of mature individuals from juveniles, or counted flowers on each plant. Additional years of monitoring are needed to capture trends.

#### ADAM N. RORABAUGH

#### After the Burn: 2016 Northstar and Tunk Block Post-fire Site Assessments.

The CCT History/Archaeology Program conducted pedestrian survey to assess fire damage for archaeological sites impacted by the 2015 Northstar and Tunk Block Fires within the boundaries of the Colville Indian Reservation. 183 sites were evaluated for impacts caused by fire, fire suppression, or rehabilitation activities. Field effort primarily consisted of pedestrian survey. Evaluated sites ranged from precontact and historic sites and also included rock features, cairns, and culturally modified trees. Part of the field effort also included data recovery excavations of two historic archaeological sites: the Bungalow Dance Hall and Omak Bell sites. This paper discusses specific case studies of adverse site impacts from the fires including rock imagery affected by spalling, historic structures impacted by fire, sites affected by erosion due to vegetation loss, and features impacted by fire suppression dozer lines. Additionally, the aforementioned data recovery efforts at the two sites adversely impacted from the fires are discussed.

#### ADAM N. RORABAUGH

#### **Colville Confederated Tribes**

#### **Omak Bell Site Excavations**

The CCT History/Archaeology Program did a total station survey and excavation of the historic Bell property as part of the 2015 Tunk Fire damage assessment. Excavations of the structure revealed that fire damage was limited to surface deposits, but there were disturbed artifacts from the dozer line. Excavation revealed erosional sedimentary deposits over a collapsed roof and floor of the structure. A total of 1031 historic artifacts were recovered. The assemblage primarily consisted of bottle glass, nails, and metal fragments. In addition, 74 faunal remains were recovered, the majority of which (N=42) were from an articulated juvenile *Canis familiaris* burial. Two distinct temporal components were observed, the earliest being the occupation of the structure followed by later use as a historic dump and hunting area. Future efforts at this site may shed further light on the early development of Omak, specifically the relationship between early homesteads and the Biles-Coleman railroad.

#### ADAM N. RORABAUGH

#### **Colville Confederated Tribes**

#### Results of the 2016 Bungalow Dance Hall Excavations

The CCT History/Archaeology Program conducted excavation and total station survey of Bungalow Dance Hall as part of a larger site impact assessment for the 2015 Northstar Fire. Two research questions were also posed: 1) Are there spatial differences in artifact types in the dancehall? 2) Can the different uses of the dance hall through time be distinguished as distinct site components namely use as a cabin for the mining elite and later as a house of ill repute? The total station survey mapped adjacent, non-fire damaged, structures to the northeast and a historic midden associated with the dancehall and cabins. Excavation revealed the structure's foundation and differences in artifact distribution based on interior and exterior deposits, showing spatial differences. Deposits were shallow and distinct components from the two historic occupations could not be distinguished but recovered artifacts reflected both uses of the dancehall.

#### CHELSEA ROSE, SARAH HEFFNER, SHANA SANDOR, AND MARY MANIERY

Southern Oregon University and PAR Environmental Services, Inc.

#### Introducing the Chinese Material Culture Digital Database!

Southern Oregon University's Laboratory of Anthropology and Hannon Library have partnered with PAR Environmental Services, Inc. on a digital database featuring Chinese artifacts commonly found on archaeological sites across the West. The database will feature high quality photographs, accurate terminology, and list the common function for hundreds of artifacts in a searchable and peer reviewed online format. The goal is to promote accurate and consistent artifact terminology, dispel pervasive myths, and share resources with our colleagues and the interested public to promote the history of the Chinese immigrant diaspora in the West.

#### L'AWR SALO

#### U.S. Army Corps of Engineer

#### What's Goin' On -- Example from the Federal Columbia River Power System Projects

2nd Paper Abstract - This presentation shows the effect of laws that support preservation of historic properties being affected by Federal projects. Using only the example of archaeological site inventory at 14 Federal hydropower projects in the Columbia River Basin, it examines the effects of law over an 80-year span. Before 1935, 39 sites had been recorded in the project areas; as of 2015, that number had increased to 4,227. The presentation tries to show the effect of each change in law as a rough measure of effectiveness. Finally, the presentation suggests ways to examine the effects of law on archaeological and ethnographic data.

#### ROBERT LEE SAPPINGTON

#### University of Idaho

#### Are There Pre-Clovis Mammoth Sites in the Columbia Plateau?

The remains of mammoths have been reported in the southern Columbia Plateau since the 1870s. Most discoveries have been treated as paleontological finds although lithic and bone artifacts have occasionally been reported. Due to their physical size and high profile with the public, another mammoth seems to found every year somewhere in the Pacific Northwest. So far no Clovis points have been found in association with those remains and therefore the sites are generally forgotten. However, mammoth sites that were dismissed decades ago in Wisconsin and Florida have recently been re-analyzed and shown to pre-date Clovis culture. The evidence from the Manis site near Sequim, WA, and at Paisley Caves, OR, indicates that pre-Clovis populations were indeed present in the Pacific Northwest. Mammoth sites in the Plateau are now being reviewed and it seems likely that some of them will eventually demonstrate evidence of the first Americans.

#### **HEATHER SARGENT-GROSS**

#### University of Idaho

#### Ophir Creek Brewery: An Analysis of a Nineteenth Century Chinese Community

In 1862 gold was found in the Boise Basin of southern Idaho, and within eight years the population of the Boise Basin reached 3,834 individuals, 46 percent of whom were Chinese immigrants. Between 2002 and 2003, archaeologists at the Boise National Forest excavated a foundation near Placerville. This work discusses excavations at Ophir Creek Brewery, a suspected bunkhouse occupied by Chinese immigrants. Analysis of the archaeological materials recovered from the Ophir Creek Brewery adds significant information to the knowledge about Chinese communities in the Boise Basin. This work highlights the importance of working on "old" collections as well as sheds new light on how Chinese immigrants contributed to the development of mining communities in southern Idaho, and contributes to a broader understanding of Chinese life in the turn of the century American West.

#### DANIELLE SAURETTE, RAY VON WANDRUSZKA

#### **Department of Chemistry University of Idaho**

#### Historical Pigments

Historical pigments show up quite often among artifacts recovered in archaeological excavations. The identification of these materials can be quite challenging and require careful chemical analysis. The first task usually is to establish that the compounds in question, often no more than a streak on a shard or a few grains in a bottle, are in fact pigments. This goes hand-in-hand with the second task, i.e. the determination of their chemical nature. Pigments can be organic (carbon based, e.g. indigo) or inorganic (mineral based, e.g. ultramarine). The latter are chemically more stable, and tend to survive the ravages of time much better. Most pigments recovered from 19th – early 20th century period are indeed inorganic. The elucidation of their chemical nature can provide interesting insights into the customs of the people who used them.

#### WILLIAM SCHROEDER

#### University of Montana, PhD Candidate, Cultural Heritage and Applied Anthropology

#### A Clino-cladistic Look at Pull & Push Tab Patents ca. 1950-1980

Pull tabs revolutionized the way beverage cans and food containers were opened and their contents removed. Ermal Fraze is credited with this, yet he was not alone in the invention nor was he technically the first. Until recently, pull tabs were not considered diagnostic because they had not yet met the 50-year-old threshold. As of 2015, ring pull tabs entered the historic era, yet relatively little is known about these artifacts. A database with hyperlinks has been built to

provide an archival reference in order to place these artifacts in *terminus ante* and *post quem* timeframes for historical archaeologists who have located and will more frequently encounter these items of disposable material culture. This research charts the genealogy of beverage can opening patents and designs (taxa; genus), similarities (clades), and trends (clines) based on records in the United States Patent and Trademark Office filed and accepted between ca.1950 and 1980.

#### CODY SCHWENDIMAN, RORY BECKER, AMANDA WELCH

#### **Eastern Oregon University**

Restoring the Rivoli: The Public Archaeology of a Historic Theatre in Pendleton, Oregon.

The Rivoli Restoration Coalition was founded in 2010 to restore the shuttered historic Rivoli Theater in Pendleton, Oregon and transform it into a performing arts center. The coalition's goal is to use the theater to showcase excellence in arts, information and entertainment in the Pacific Northwest while preserving the building's history. Construction on the basement of the theater is slated to begin in either fall of 2017 or spring of 2018, which is necessary to support the theater's modern role as a performing arts center. The modifications include removing sediments from beneath the theater seating area. Student and public involvement in excavation of these sediments prior to construction has been a valuable opportunity for these groups to participate in archaeological assessment activities, while also increasing public awareness of local history, archaeology, and historic preservation issues in eastern Oregon.

#### **ANN SHARLEY**

#### Architectural History & Archaeology! LLC

#### Built Environment Survey of Walla Walla's Historic Volga German Neighborhood

In 2015 the City of Walla Walla was awarded a Certified Local Government (CLG) grant for reconnaissance level built environment survey of a seven-block residential area within the Walla Walla city limits. During project fieldwork and research the area was identified as the heart of Walla Walla's historic Volga German enclave. This paper briefly traces the history of the Walla Walla Volga German community and describes some of the late 19th and early 20th century buildings presently extant in the project area.

#### **ROBERT SLOMA**

# Refining where and when to look: The Zayo project an example of monitoring the installation of fiber optic infrastructure.

Cultural Resource Monitoring is a pragmatic method to identify archaeological sites when appropriate preconstruction testing is not feasible. The 200-mile long Zayo Fiber Optic Line project across Central Washington offers an example for examining the efficacy of cultural resource monitoring in the context of fiber optic installation. In 2016, the Confederated Tribes of the Colville Reservation, History and Archaeology Program, targeted archaeologically sensitive areas and monitored approximately 7% of the entire Zayo Fiber Optic Line corridor. Seven archaeological sites were newly identified and information was updated for seven previously documented sites. The monitoring plan for the Zayo project and associated field observations are discussed to refine future investigations limited to using monitoring as a form of broad-scale archaeological testing. Zayo project results also support increased use of Cultural Resource Monitoring to identify sites on large complex projects already subjected to pre-construction testing.

#### **JULIA SMITH**

#### **Eastern Washington University**

#### Terroir: from wine to coffee

The idea of terroir, "a taste of place," has spread far beyond wine to include a variety of foods from around the world. Coffee is no exception; a system of geographic indicators has been proposed to label coffee from particular regions. This paper compares the system of geographic indicators for wine to the developing system of geographic indicators for coffee, focusing particularly on Costa Rica but also other countries that emphasize the specialty coffee market. It will explore why legal definitions of coffee regions have been slow to be protected and how ideas from wine regions could help to solve some of the concerns around identifying coffee regions.

#### **PAUL S. SOLIMANO**

#### Willamette Cultural Resources Associates, Ltd.

#### Precontact Land-use in the Vicinity of Dworshak Reservoir

Willamette Cultural Resources Associates, Ltd. recently completed the reanalysis of the archaeological materials excavated in 1963 from 10-CW-1, the Bruce's Eddy Site, on the North Fork of the Clearwater River. To place the results into a broader, contemporary framework, we compiled local archaeological data, including a reanalysis of over 500 projectile points from the Dworshak Reservoir. This work suggests that after ca. 5,000 years ago large, robust structures at the river's mouth coincide with widespread, but relatively light use of the landscape upstream. Many sites are in use, including 10-CW-1, but they are not used intensively. After 2,000 years ago more intensive use of large residential sites is found. Upstream, fewer sites are in use, but use is substantially more intensive. We recommend additional work along the North Fork including more fine-grained landform analysis, examination of upstream archaeological material in collections and linking this material to ethnographic information.

#### SHANE SPARKS AND KELLY YEATES

#### **ICF-Seattle**

# Eight Years along the Puyallup— Highlights from On-Going Tacoma HOV Program Work in Tacoma, Washington

The ICF Cultural Resources Team has assisted the Washington State Department of Transportation (WSDOT) on numerous phases of work related to the Tacoma HOV Program and I-5 to Port of Tacoma Road Puyallup Bridge Replacement Projects. The work conducted since 2009 has included long-term archaeological monitoring, subsurface surveys, and data recovery excavations in or adjacent to the project APE. ICF has coordinated closely with WSDOT and the Puyallup Tribe of Indians for the entirety of the work. This poster presents an overview of the key project highlights for the completed and ongoing work which includes: the data recovery of 45PI930 – a deeply buried salmonid processing site, the recordation of historic-era Bay Street and related pre I-5 transportation network, the identification of deeply buried beach deposits which have increased archaeological potential adjacent to the Puyallup River, and the successful implementation of a GIS-based, mobile monitoring data recordation system.

#### MORGAN SPRAUL, RAY VON WANDRUSZKA

#### Department of Chemistry, University of Idaho

#### Analysis of Old Pharmaceuticals

Remnants of pharmaceuticals rank high among archaeological samples that are submitted for chemical analysis. The analyst can often a priori deduce from the shape of, and the markings on, the container that the materials under consideration are in fact pharmaceuticals. The determination of their exact nature and the manner of use, however, usually relies on chemical evidence. The older the material in question is, the more likely it is that it was directly derived from plant, animal, or mineral sources. Mineral medicines, especially, are often found in their near-original

state, because they persist for almost unlimited periods of time. Their chemistry can sometimes be confusing, because minerals have many elemental components, obfuscating the question concerning their presumed medical effects. Pharmaceuticals have always been important cultural markers and identifying them provides a window into the past.

#### SEAN STCHERBININE AND DR. PATRICK MCCUTCHEON

#### **Central Washington University**

#### Geoarchaeology of the Sunrise Ridge Borrow Pit Site (45PI408): The Origin of Buried Soils

The Sunrise Ridge Borrow Pit Site is a precontact site located in the subalpine zone of Mount Rainier National Park. Site stratigraphy consists of unaltered tephra and intercalated dark, buried soils overlying glacial drift. Precontact occupation has been split into two coarse components based partially on the ambiguity of these dark, buried soils; notably their unknown parent material, depositional environment, and relationship with contiguous strata. Grainsize, chemistry, pH, organics, and CaCO3 were measured from the strata of four excavation units, three features, and one off-site unit to determine parent material and depositional environment. Depositional environment and parent material determinations were used to discuss relationships of strata to create a better depositional history model. A more complete depositional history of the Sunrise Ridge Borrow Pit Site increases the understanding of occupational intensity and periodicity, better permitting the site's entry into discussions of precontact land use in the Cascade Range.

#### AUBREY M STEINGRABER

ASM Affiliates, Inc.

# Trestles and Tramways: Artifact Biographies from Monte Cristo, a Late 19th-Century Hard-Rock Mining Town Located in Washington's Cascade Range

In the 1890s, the town of Monte Cristo, located in the Mount Baker-Snoqualmie National Forest, promised to be one of the state's most profitable hard-rock mining towns. However, due to a series of environmental and economic hardships, the mines were not as profitable as originally anticipated. After little more than a decade, mining had mostly ceased, and the town was abandoned. In 2015, ASM Affiliates conducted archaeological monitoring during a CERCLA removal action project targeting the Monte Cristo Mining Historic District. This paper documents the archaeological work undertaken during the 2015 field season and the subsequent analysis of 385 artifacts collected from 6 different sites during the removal action. Through select artifact biographies, this paper tells the stories of some of the companies and people involved in both the international and local manufacturing networks supplying specialized mining technologies and consumer goods to Pacific Northwest mining towns in the late 1800s.

#### SARAH M.H. STEINKRAUS AND JENNIFER HUSHOUR

#### Tierra Right of Way

#### Historical Refuse Features at the Station House Lofts Project

In the winter of 2016 an emergency excavation permit was issued by DAHP for data recovery at the Station House Lofts Project in Redmond, Washington. Multiple historical refuse concentrations had been discovered during archaeological monitoring of construction for the project and after the permit was issued, these concentrations were excavated. Over 2,000 historic era artifacts were uncovered. This presentation will discuss the data recovery results.

#### FREDERICK STRANGE

#### **EWU Emeritus Professor of Anthropology**

#### Peasant Struggles for the Commons

What is the commons? Is it not the common rights of commoners? A concrete instance in the form of land claimed in common by a country village in Mexico, multi-purpose land many times lost and recovered down through the

centuries, may serve as a template for the broader shared commons that is disappearing under dominant neoliberal, "privatizing" (enclosure?) policies today. Do their struggles mirror ours? A brief history of land tenure in a peasant village raises bristling issues: will peasants survive their long-standing marginalization? How is it that their struggle for their commons never ceases? Can peasant adaptability and methods of self-organization serve as a model and inspiration for our struggles with privatization and loss of our commons?

#### CAMBRIA SULLIVAN AND KERENSA ALLISON PH.D.

#### Lewis-Clark State College

# "Asktransgender": A digital ethnography of common questions and daily challenges related to transgender communities and identity processes

Limiting our discourse to transgender bathroom access, while an important topic, blocks acknowledgement of the greater scope of challenges faced by this marginalized population. Based on analysis of over 500 text posts made to asktransgender, a division of the social media website Reddit, this project examines the unique problems faced by the transgender population in their day-to-day lives. Preliminary findings suggest that 50% of the analyzed discussions centered around the themes of appearance or identity, indicating that transgender and gender non-binary people may feel a strong pressure to fit into societal expectations about gender roles and appearance. This information is valuable in the real world because it provides a new and unique perspective about normal gender roles in society as told in the voices of those who do not identify with the roles they have been assigned at birth.

#### AJA SUTTON AND THOMAS OSTRANDER

#### **Unaffiliated, Environmental Science Associates**

#### Make No Bones About It: Practical Tips for Recognizing Human vs. Faunal Remains in the Field.

Encountering bones, human or faunal, is an inevitable part of archaeological field investigation. Discovering unidentified bones can be stressful for archaeologists inexperienced in human and/or faunal osteology; they must navigate the complex cultural and legal framework governing human remains, often without complete information. Decisions regarding issuing a "stop work" for construction, or halting an ongoing archaeological excavation are extremely time sensitive, and proper identification of osteological material is crucial. This talk will provide a structured methodology for assessing unidentified remains, and explain the ways osteologists come to their decisions. While final identification must be left to formally train osteological experts, non-experts may benefit from practical tips for identifying and differentiating between human and faunal remains in the field, as well as photographic tricks for facilitating the expert osteologist's job remotely. Content Warning: This presentation will contain photographs of and content related to human remains.

#### MOLLY SWORDS, MARGARET CLARK, AND MARK WARNER

#### University of Idaho and CH2M Hill

#### A Community Along the Tracks: An Examination of Sam Sing's Laundry in Sandpoint, Idaho

Like other western American railroad towns, Sandpoint, Idaho, saw an influx of thousands of Chinese workers during construction of the Northern Pacific rail line. Most workers moved on as construction of the railroad continued down the line. Examination of a Chinese laundry excavation provides an interesting snapshot of the lives those who stayed and made Sandpoint their home. This collection provides an opportunity to study both the private and public lives of these Chinese. The co-mingling of traditional Chinese artifacts with distinctly American artifacts coupled with newspaper articles from the time, pose questions about the cultural adaptation of the dwellers, community integration, and tolerance

#### **MARK TAFF**

#### Columbia Basin College

#### The Challenges of Teaching Human Evolution at a Community College

Introduction to Biological Anthropology is often the most popular anthropology class at community colleges. The majority of students are non-biology majors, using the class to fulfill a science requirement. One of the biggest challenges is resistance to the theory of evolution. Since evolution is central to everything discussed, the success of the class depends on helping students overcome this resistance. In this session, I discuss some strategies to help students approach the topic of evolution with a more open-mind. I have found three main sources to problems many students have with the theory of evolution. These include: resistance to evolution because of religious, personal, and political belief; misconceptions as to what evolution is and is not; and failing to see the relevance evolution has to their lives. Overcoming these barriers helps make students more receptive to the information used by biological anthropologists to understand patterns and process of human evolution.

#### **GUY L. TASA**

#### Washington Department of Archaeology and Historic Preservation

#### A Skull in the Fireplace: A Narrative of Cultural Appropriation, Identification, Deconstruction, and Repatriation.

This paper documents a skull reported to the Washington Department of Archaeology and Historic Preservation by the Samish Indian Nation in 2014. A two year investigation into those remains and the unusual circumstances surrounding their original discovery over 100 years ago and their current presentation are discussed in the context of cultural appropriation. Difficulties involved in their identification, recovery, removal, and their ultimate repatriation are summarized. Lastly, the extremely unusual find is evaluated against other such finds commonly held by the public and received by the state under Washington's human remains law.

#### JOANNE TAYLOR

#### The University of British Columbia

#### Food, Fish, and Diking Crises in the Creston Valley: An Indigenous Epistomological Solution

I critically explore food security and food sovereignty in the Creston Valley Floodplain of British Columbia, Canada. I examine processes of exclusion from the bi-lateral Columbia River Treaty (CRT) negotiations which results in the marginalization of Indigenous First Nations Ktunaxa from their traditional fishing, hunting, and gathering sites. I also analyze how the operation of one of four CRT Dams – The Libby, in Montana, upstream of the floodplain—threatens the integrity of European settlers' diking infrastructures thus perilously turning the floodplain into a food insecure area. Climate change and landscapes of monoculture cropping also decrease the security of this food producing area. While these devastating environmental impacts are calamitous to ecosystem function, ongoing expansionary tendencies and capital accumulation of hydro wealth continue to subordinate Indigenous peoples' decision making powers. However, preliminary findings from my doctoral research reveal that Indigenous epistemologies and praxis can significantly contribute to solving some of the most pressing socio-political and environmental crises in this area, if not the world.

#### **MATTHEW THOMAS**

#### **Eastern Washington University**

#### The Effects of Perceived Discrimination on LGBT+ Latinx Individuals in the United States.

Numerous studies indicate that discrimination plays a large role in the mental, emotional, and physical health of minorities. This paper describes the ways in which the health of Latinx individuals who are LGBT+ is affected by perceived and anticipated discrimination, both somatically and psychologically. Much of the literature within the topic focuses on sexual instead of gender minorities, or more specifically, MSM (men who have sex with men). This

paper argues for more research to be done on groups such as WSW (women who have sex with women), transgender individuals, bisexual individuals, etc. Based on previous research, there are obvious intersectionalities in regards to the health of LGBT+ Latinx individuals. Being LGBT+ is quite a stressor on its own, and when joined with the racism that accompanies being Latinx, the combination is quite challenging.

#### **SALLY THOMPSON**

#### **Cultural Heritage Consulting**

#### Blackfeet History from the Inside Out: Correcting the Perceptions of Nicholas Point

An unusual team of Blackfeet elders, an anthropologist, and a world-renowned community artist is assisting Blackfeet youth in learning and sharing their history from the inside out. The project 's grounding comes through critical examination of the paintings and narrative descriptions created in 1846 by Jesuit priest Nicholas Point, reflecting their lifeway before reservations. Students, working with elders, correct their history as they learn it. This five-year project will continue to explore subsequent historic content drawing on oral history, art, photography and narrative. Key events in Blackfeet history will be memorialized through public art throughout the reservation. As one student said, "Let's create reasons for people traveling to Glacier National Park to stop and learn about our history as we would tell it." This project could be a model for Northwest tribes because of Nicholas Point's visual and narrative descriptions of the Coeur d'Alene, Salish and Nez Perce.

#### ARLAND THORNTON AND LINDA YOUNG-DEMARCO

Institute for Social Research, University of Michigan

#### What Can We Learn about the Colville Reservation Indians from the United States Censuses?

United States Censuses provide information for documenting Indian life during the late 19th and early 20th centuries. These census data can be used to study literacy, English speaking ability, naming patterns, marital status, and intermarriage. In this paper we examine the 1885, 1900, 1910, and 1930 census data that Frederick Hoxie and colleagues assembled, computerized, and archived for Indians on the Colville Reservation in northeastern Washington. We investigate the usefulness and quality of the Colville data for documenting social and demographic attributes and change. We focus on the amount of missing data, over-time consistency of reporting, and consistency with theoretical expectations. We document errors, but also show that the data are quite reliable in demonstrating basic social and demographic patterns and change on the Colville Reservation. We also discuss substantial social trends documented by the data.

# SHANNON TUSHINGHAM, KOREY BROWNSTEIN, WILLIAM J. DAMITIO, JELMER EERKENS, AND DAVID R. GANG

Washington State University and UC Davis

Tobacco Use Patterns Among Tribal Communities in the Pacific Northwest: Long Term Trajectories and Implications for Modern Health Initiatives

Recent breakthroughs in archaeological residue analysis contribute to our understanding of the deep time coevolutionary relationship between humans and certain psychoactive and medicinal plants throughout the world.
Residue analysis of pipes and other materials associated with tobacco and other smoke plants, for example, can
address questions relating to the history of smoking practices and plant management/cultivation. The studies also
provide insight into the colonialization and commercialization of tobacco over the long term historical record, a
process that transformed its use from a sacred plant and sacrament used in limited contexts by Native peoples in
the Americas, to a commercialized commodity packaged and produced with multiple additives in a way that has
addicted hundreds of millions of people around the world. In this paper, we summarize our NSF funded research, our

experimental approach, and recent studies conducted in collaboration with tribal communities in the Pacific Northwest Coast, Plateau, and California.

#### MARK TVESKOV AND CHELSEA ROSE

Southern Oregon University Laboratory of Anthropology

The Ordeal and Redemption of Christina Geisel and Mary Harris: The Rogue River War and Oregon's Own Captivity Narratives

The Native American attacks upon the Harris and Geisel families anchor most narratives about the Rogue River War of 1855-56. Curious about their enduring strength to signify key elements of this colonial encounter in southern Oregon, SOULA explores these events through the lens of battlefield archaeology, ethno-history, and gender and literary studies. The stories of Mary Harris and Christina Geisel conform to the tropes of 17th century New England captivity narratives that redeem and rationalize settler colonialism through the suffering of a white woman at the hands of indigenous people, but they also innovate that trope to recast the victim in a more active way reflecting new identities informed by novel ideas of western rugged individualism. Despite this innovation, these narratives continue to excluded Indigenous actors, including women such as Betsy Brown, a Tolowa woman instrumental in freeing Mrs. Giesel from captivity.

#### DONALD E. TYLER, RYAN P. HARROD, JORDYN JONES, TED PARSONS

University of Idaho and University of Alaska Anchorage

Reassessing the Genus Homo on the Island of Java through Virtual Reconstruction

Several species of human ancestors have been found from South Africa, Ethiopia, and Flores. The discovery of Homo floresiensis has led to rethinking the phylogeny of human ancestors in Southeast Asia. Remains from Java, similar to those from Flores, seem to represent multiple taxa based on metric and nonmetric characteristics of the cranial and dental morphology. Virtual reconstruction of the casts aided in the reanalysis of each fossil. Three-dimensional models were generated using a desktop laser scanner that provided more precise measurements and high-resolution photography and photo modeling software created a denser point cloud with greater surface fidelity. The results of the analysis support the assertion that the fossil specimens from Java may represent two species, Meganthropus palaeojavanicus and Homo erectus. This is most apparent with the presence of a double sagittal ridge associated with Sangiran 31 that is different from the ridge found on the Sangiran 17 fossil specimen.

#### **DAVID VALENTINE**

**Idaho Power Company** 

Predicting the Formal Trash

Archaeologists working in and around western communities often encounter historic trash deposits. Are these deposits ad hoc dumps or the result of citizens attempting to dispose of waste in a more formal and official manner? An attempt to develop a context for Boise, Idaho trash disposal identified local newspapers as being a good way to identify formal city dumps and predict the locations of additional trash deposits. Articles in back issues of the Idaho Daily Statesman proved to be very helpful, as they give approximate locations of official city dumps starting with the first designated location in 1902. These articles also give a good idea of the trends in solid waste management that Boise adopted. This allowed the development of a map showing predicted buried trash deposits based on formal city dumps.

#### **EMILY VEITIA**

#### **Central Washington University**

Enrichment use & social interactions in a mixed-species enclosure of Sumatran (Pongo abelii) & Bornean Orangutans (P. pygmaeus) & Northern White-Cheeked Gibbons (Nomascus leucogenys)

Enrichment encourages species-specific behaviors in captive animals. In this study, enrichment use and social interactions were observed in a mixed-species enclosure at the Oregon Zoo, housing Sumatran (Pongo abelii) and Bornean (P. pygmaeus) orangutans, alternately, with white-cheeked gibbons (Nomascus leucogenys). EV conducted 15-minute focal samples from August - September 2015, totaling 180 total hours. Chi-square tests were used to determine whether subjects were equally likely to use arboreal or terrestrial enrichment. Two orangutans were equally likely to use both while another was more likely to use terrestrial enrichment. One orangutan and both gibbons were more likely to use arboreal enrichment. Another prediction was subjects would be more likely to interact with their conspecific over hetero-specifics. Both orangutans and gibbons interacted with conspecifics more and rates of aggression in the enclosure were low overall. Gradual reduction of terrestrial enrichment and increased appeal of arboreal enrichment might encourage arboreality for all apes.

#### **LIDIA VELASCO**

#### Anthropological Society, Ronald E. McNair

La lleyenda de Yobi, el Zorro con Cinco Colas/Cheonyeon-yeowoo Yeowoobi - Emotion in Translation: A Humanistic study of Translation Korean to Spanish

With the growth of globalized media, researchers have focused on how to translate across cultures and decipher emotions, especially when translating popular media. The components included in translation are not only knowledge of the language, but also knowledge of the cultural connotation expressed by a word. Using a children's animated movie named Yobi, the five Tailed Fox, I analyzed Korean-Spanish translation using theories based on emotion, cultural connotation and language. Emotions in Korean are not easily translated into Spanish because of cultural differences in emotional expression. My study showed that the word choices of the translator affects not only the story, but also the viewer's perception of the feelings from the characters. There are emotions in Korean that are not translated into another language, due to the differences of how their culture expresses emotion. In this study, Andrew Correwa the translator of this animated movie used word choices that changed and altered a scenes connotation, to make it more understandable for the Spanish viewers. Translators must make complex word choices to deal with differences between the emotions of the character as intended in the source language and the emotional expectations of the target language audience. Translators, to do a good translation, need to consciously reflect on word choice to balance these intentions and expectations.

#### JULIETTE VOGEL

#### Washington Department of Archaeology and Historic Preservation

#### Indigenous Archaeology and Human Rights: Toward a More Ethical Treatment of Human Remains.

The field of anthropology has an unsavory history as a colonial institution. A common theme in the discipline has been the objectification of subjugated cultures for their "curiosities," including material goods, cultural practices, and even human remains. This paper examines these past wrongs and explores the growing trend of remedying this history by incorporating indigenous perspectives in archaeology and physical anthropology. A special emphasis is placed on the treatment of human remains, discussing Washington State Human Remains legislation as well as recent developments in the case of Kennewick Man.

#### **PENGLIN WANG**

#### **Central Washington University**

#### Zoographic Nomenclature in Inner ASLA

The abundance of animals in the wilderness inspired early people to pursue their artistic gratification to the point of creating the so-called 'wild-animal style' in the Eurasian steppes. What was happening then was that people keeping domesticated animals and armed with rudimentary weapons and tools were gaining control of the steppes and hunting animals for food consumption and fur or skin clothing. Intimidated as the people were by the power of fierce animals such as wolves, there was little hesitation in acquiring admiration and awe toward the animals. Symbolized as a collective herd, zoographic preponderance left its marks on ethnic nomenclature. Many of the onomastic initiations were closely modeled on animal symbolism and funniness. Whereas in certain cultures a set of animals traditionally play a role in time-indication and birth symbolism, we know how various animals customarily come to serve as names for individual persons and collective groups of people.

#### MARK WARNER

University of Idaho

The Search for Relevance: Archaeology in Public in Idaho

Mark Warner, University of Idaho

Idaho has a long and vibrant record of interesting archaeology. Yet that array of work has only sporadically reached wider audiences in the state. Doing such work can be frustrating but it is essential for helping people realize the educational and cultural significance of archaeology to our state's heritage. This work presents some of the recent efforts that have been undertaken by the University of Idaho to engage the citizens of the state. It also acknowledges the profound impact that Pricilla Wegars has had on Idaho archaeology and how her works have grown the field of historical archaeology nationally.

#### **STACY WARREN**

#### **Eastern Washington University**

#### Capitalism in the Sky- The Jetson's and the Culture of the Future

What is perhaps the most well recognized urban cultural landscape of the future is not the product of professional architects, experienced planners, social scientists, or any sort of academic. Instead, widely viewed and still remembered by millions of people, "Orbit City"-- the home of the Jetson's in the animated television series of the same name- set the stage for our expectations about daily life in the city of the future. Its basic features were presented in 24 weekly episodes that began in 1962 and purported to characterize life in 2062. This paper describes and critically examines the class, gender, and race conditions, the infrastructure of Orbit City, the social-cultural features of urban life, and the technology available for urban life 100 years in the future. The analysis finds little that is visionary, logical, or based of adequate or accurate data, but a great deal that has become part of popular cultural discourse about future expectations.

#### **SHAWN WATSON**

#### **Eastern Washington University**

#### The Role of Arc of Spokane in Disability Advocacy

Disabled rights have been largely under-researched in the United States (Scotch 2009:7). Although provisions are in place to protect the disabled population, they continue to face discrimination and exclusion from society at large. This discrimination affects their quality of living and segregates the disabled from the society at large. This impact study is based on a series of interviews, focus groups, and participant observation with the leadership of the Arc of Spokane and, with the disabled themselves. The paper presents how organizations such as the Arc of Spokane work to protect

the disabled population. The paper presents the effect these organizations have on the affected disabled, society at large, and the government organizations they communicate with. Through better understanding of how the Arc of Spokane operates, we will be able to bring better awareness to an overlooked population. In addition, this is important to the fields of public and medical anthropology with a focus on disability studies because the impact study works to answer how the cultural phenomenon of stigmatization and social exclusion is especially prevalent within the context of disability.

#### **DEAN WEAVER**

#### **Washington State Department of Transportation**

...One of the most disturbed spots in all of Spokane: Lessons from a Buried Cemetery.

The inadvertent discoveries of two burials under Division Street in Spokane offer clues to the early history of Spokane Falls and illustrate the challenges of urban Cultural Resource Management. Learn how WSDOT, the Spokane Tribe of Indians, and the City of Spokane have dealt with this site and how it continues to factor into land use planning at this increasingly crucial intersection.

#### **DEAN WEAVER**

#### **Washington State Department of Transportation**

#### Covote, the Sisters, and the Falling Rocks

Even though a road project may be small in scale, its cultural implications can be large. WSDOT is designing a rock fall prevention project near Wallula Gap, where freeze-thaw cycles are causing basalt boulders to break free and fall onto the highway and railroad below. This presentation will describe the rich and occasionally tragic history of this area, the development of this project, and the realities and challenges of sensitively managing archaeological and traditional resources while improving traveler safety.

#### WENDY WEGNER

#### University of Idaho

#### Opening Doors in Anthropology: Ethnographic Exploration of Collections as Field Sites

In the summer of 2016, I participated in the Smithsonian Summer Institute in Museum Anthropology. This four week, intensive fellowship allowed for anthropology students to take a closer look at material culture from collections. Each cabinet door opened to a variety of objects with a story to tell and a multilayered social life. While not widely utilized, collections exploration by anthropologists is an emerging and beneficial addition to ethnographic work. A close look at objects allows the researcher to enter the world of the maker, better understand material and process. Using examples from my experience in several collections since SIMA, I will highlight the ins-and-outs of collections navigation, how collections management has evolved, and the benefits of looking and "listening" to objects as they tell their story. As this field expands, so do the possibilities of re-connecting source communities with their cultural heritage.

#### **MISTY WEITZEL**

#### Western Oregon University

## A Ten-Year Study of Soil Bacterial Communities Associated with Cadaver Decomposition in the Pacific Northwest.

Decomposing human remains are a vital disruptor of the

ich and diverse soil ecosystem. Bacteria in soil, neighboring organisms, and the cadaver form a complex community structure that could have profound implications for estimating the postmortem interval (PMI) long after remains are skeletonized. Samples were collected from soils associated with two domestic pigs decomposing over a period of ten

years in the Pacific Northwest. DNA was extracted from soil samples and high-throughput DNA sequencing was used to characterize bacterial communities. Bacterial communities in soil under the decaying pig changed dramatically over time, whereas communities adjacent to the pig remained remarkably similar over ten years. Understanding gravesoil ecology could be an invaluable tool for long-range time since death estimations in forensic investigations.

#### **GARY WESSEN, THOMAS JAY BROWN**

Wessen & Associates, Inc. and University of British Columbia

Western Washington Shell Midden Chronology: Demographic Information

1,025 calibrated radiocarbon dates from 224 shell midden sites in western Washington are considered as a possible proxy for prehistoric population levels in this region. Summed probability distributions suggest fluctuating population levels during the last 4,000 years, including a sharp population rise beginning ca. 800 years ago and an equally steep decline ca. 500 years ago. The latter, if real, is consistent with ideas about a possible continent-wide smallpox epidemic during the 16th Century. Caution is appropriate, however, as some characteristics of the individual site assemblages raise questions about what is actually represented in this data.

#### **GARY WESSEN**

Wessen & Associates, Inc.

#### Western Washington Shell Midden Chronology: Antiquity

1,025 calibrated radiocarbon dates from 224 shell midden sites in western Washington indicate that nearly all of these sites represent the last 4,000 years and no site appears to be older than ca. 6,100 years. This temporal range is more limited than that for similar sites on other portions of the west coast of North America and begs the question: Is the use of shellfish resources more recent here or do environmental factors account for the apparent absence of older sites? Consideration of how these sites are distributed in the landscape argues that the sample of known sites is strongly influenced by changing sea levels during the Holocene. It is therefore likely that older shell midden sites are present in this region, but they are unlikely to be encountered in the places where western Washington archaeologists have traditionally emphasized.

#### KIM WESSELER

#### **Oregon State University**

#### A Historical and Archaeological Overview of Fort Yamhill's Hospital (35PO75)

During the summer of 2016, Oregon State University conducted preliminary excavations of the hospital at Fort Yamhill, Oregon (35PO75). Fort Yamhill (1856-1866), has been a focus of OSU's field schools for over a decade, offering glimpses into garrison life through the view of the officers and the enlisted men. However, up until recently, little was known about how the Army Medical Department operated within Fort Yamhill's system. Extensive archival research was conducted in order to create an understanding of military hospital operation and medical practices of this era and was combined with detailed information regarding fort medical staff to produce an image of the hospital and its operation throughout Fort Yamhill's occupation. Archaeological excavations were used to provide insight into the hospital's construction and medical practices. Additionally, hospital records were used in conjunction with contemporary diaries to offer discussion on the condition of enlisted men at Fort Yamhill.

#### ADAM WESTERMANN

#### **Central Washington University**

#### The Means, Moment, and Materialization of Gender in Dating

My research will analyze expectations in a date or dates. The purpose of my research is to better understand social change in American culture through dating scripts or expectations, including gender roles. I will explore these subjects through individual interviews. There are four models I'll be using to define and examine the interviews. The first is attachment theory, specifically romantic adult attachment. The next three are dating as an economic exchange, social exchange, and as agapic love, as suggested in "Agapic Love" (Belk and Coon, 1993). Preliminary research in the scholarly literature suggests that current dating scripts haven't changed notably over the past 35-40 years (Eaton and Rose, 2011). Through my research I expect to find solid evidence in support and clarification of this finding.

#### **IDAH WHISENANT**

#### University of Idaho

#### Preliminary Research for Testing at a Steamboat Landing Settlement in Idaho

The specific area of research for my thesis and this presentation concentrates on historic Pend Oreille City located on a small spit of land at the most southwestern section of Lake Pend Oreille in Northern Idaho. Presentation on this 1866 settlement site now overtaken by vegetation explores the preliminary research for testing to be conducted in the summer of 2017. Pend Oreille City is regarded as the first Euro-American settlement in north Idaho and a waypoint for gold-seeking travelers going east to Montana and British Columbia desiring an easier route by steamboat across Lake Pend Oreille. In preparation for archaeological investigation, the methodology and a comprehensive history of the diversity of cultures in frontier life in the broader area will be reviewed, which includes a native presence, early Idaho history and daily life, all the way to the second largest naval training station in WWII.

#### **EMILY L. WHISTLER**

#### **Washington State University**

#### Addressing Prehistoric Bird Usage: An Analysis of Avian Material from San Juan Islands Archaeological Sites

This poster will discuss the preliminary findings of a research project into the human-bird interactions on the San Juan Islands. I analyzed avian remains from three collections held at the Burke Museum excavated from sites located on the San Juan Islands. Fisherman's Bay (45-SJ-254) is located on Lopez Island and yielded a total of 27 bones of which were identifiable to at least the family level. English Camp (45-SJ-24) is located on San Juan Island yielded a total 210 bones identifiable to family. Lastly, Mud Bay (45-SJ-278) is located on Lopez Island had a total of 187 bones identifiable to family level. Members of the Anatidae family were the most common species identified followed by members of Laridae and Alcidae. Overall diversity and equitability will be addressed as well as the ecological information of the species present. A discussion of the regional ethnographic use of birds will also be undertaken.

#### ALEXANDRA WILLIAMS-LARSON

#### Archaeological Investigation Northwest, Inc.

#### Cache and Carry: Examining Site 35wn93's Role in The Northward Trade of Obsidian Cliffs Toolstone

Obsidian artifacts from a small lithic scatter site (35WN93), located in Washington County, Oregon, reflect a lithic technology emphasizing the manufacture and refinement of mid- to late-stage bifaces. Produced from Obsidian Cliffs toolstone from the Cascade Mountains, the artifacts date between 490 and 3,240 years before present. These dates coincide with a regional increase in the use of Obsidian Cliffs toolstone beginning 3,500 years ago. This obsidian has been recorded at sites across the northwest. The Dittman Biface Cache site (35MA375) near Salem, Oregon, provides

an example of a cache linked to the northward trade of obsidian. Evidence shows that bifaces similar to those identified from the cache were transported to the northern Willamette Valley, where they were reduced further before export. This analysis examines the role of site 35WN93 as an important link in the trade of obsidian bifaces to groups to the north and west.

#### **SCOTT S. WILLIAMS**

#### **Washington State Department of Transportation**

"It Was Necessary to Destroy the Village in Order to Save It": Winning The Battle but Losing the War with The McMillin Bridge Project.

The McMillin Bridge in Pierce County is a unique concrete through-truss bridge that is literally the only one of its type in the world. The functionally-obsolete but still structurally-sound, the bridge was scheduled for replacement with a new bridge in 2008, but local and national historic bridge preservationists advocated for its preservation and continued use, despite objections from WSDOT. In 2015, WSDOT abandoned plans to demolish the bridge and left it standing, but it is now cut off from vehicle and pedestrian access and lacks any interpretive signage or context to inform the public of its historical and engineering significance. The bridge was saved, but at what cost to future preservation efforts? What happens if the bridge becomes a graffiti-covered eyesore, or even worse, when someone is injured by falling off or through the deteriorated bridge sidewalks?

#### TERESA WRISTON AND GEOFFREY M. SMITH

#### Desert Research Institute and Gbpru/University of Nevada, Reno

The History of Lake Warner and the Clovis and Western Stemmed Point Lithic Assemblages Left Along Its Shore

The shore of Lake Warner was a hub of Paleoindian activity before ca. 12,000 cal yr BP. Lake Warner filled Warner

Valley, Oregon from ca. 30,000 to 10,300 cal yr BP, but its level fluctuated in response to varied precipitation and
evaporation levels during the onset and decline of the last ice age. When people arrived carrying Clovis or Western

Stemmed Tradition (WST) projectile points, the lake had receded to one-third of its highstand elevation. After ca.

10,300 cal yr BP the lake shrank onto the valley floor and people using WST points followed. By the time Mazama
tephra fell ca. 7,600 cal yr BP, the once large lake was divided into a series of small lakes, ponds, and sloughs that
continued to attract people to their abundant resources of endemic fish and marsh plants.

#### **DIANE ZENTGRAF**

#### **Oregon State University**

#### A Database Collection Form for Clay Smoking Pipes

Material culture is commonly found by archaeologist in small fragments. The provenience of these artifacts is aided with reference tools and comparative collections. One artifact type frequently found at historic sites are clay smoking pipes. Manufacture of these pipes varies in distinct and subtle ways by date, country and maker. Information assembled from clay pipes can help to date a site, inform on historical use of tobacco, health, trade routes, geo-archaeological context, economic, cultural and social milieu. The analysis of the pipe collections from mid-19th century Fort Yamhill and Fort Hoskins, Oregon, is in progress. A data sheet for cataloging was developed utilizing Bradley's (2000) field guide and Sudbury's (2009) methods for data collection. This data sheet is being used to assemble relevant information as well as to organize and build a database to assist with the final analysis.

#### JENNIFER M. ZOVAR

#### Whatcom Community College

#### Making a Difference to Our Students: Addressing a Variety of Wants and Needs in the Classroom

One of the challenges of teaching at the community college level is that in a single classroom, you often have declared majors with focused research goals paired with students who had no idea what 'anthropology' was when they signed up for the class. Students may have signed up because they needed a writing requirement, because it fit into their schedule, or simply because they signed up alphabetically. A recent student survey at WCC asked students about their expectations and goals for the anthropology class experience as well as how they expected the anthropological concepts they learned would be relevant outside the classroom and in their future careers. Better understanding of student motivations can help instructors craft class activities that are relevant and engaging for all students – and which help students see the value of anthropology in a variety of 'real world' contexts!





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N Y 11 1 6 16 11 2 11 26 10 5

-Galileo Galilei

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-Wernher von Braun

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Research is what I'm doing when I don't know what I'm doing.

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#### Our Resources, Our Stories: A Decade of Sharing

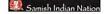
The 2017 Cultural Resource Protection Summit marks the tenth anniversary of our gathering. Since its inception, the primary goal in organizing the annual Summit has been to facilitate amongst all affected parties an open, frank discussion about the intersection between cultural resources and land use. The Summit is designed to promote collaborative cultural resource planning as an effective means of finding resolution to issues before they escalate into emotionally-charged, divisive, and expensive stalemates or law suits.

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.

- -Early Bird Registration Now Open Visit www-theleadershipseries-info for special rates and to register online! (Special Rate Ends April 24, 2017)
- -Students: Email Mary Rossi at 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



















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